

Signature Pedagogy and Assessment: A Further Education Dual Professional's Exploration of Teaching Technical Level qualifications in England

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Abstract

This paper outlines the UK government's introduction of Technical Level (T-Level) qualifications. The study focuses on the narrative of an Early-Career Practitioner (ECP) within Further Education (FE). An interpretative phenomenological approach is taken to capture the participants' lived experience. The study draws on the ECP's dual professional status and how this influenced their pedagogical choices. Furthermore, the study illustrates how Shulman's [1] concept of Signature Pedagogy and Pitt and Quinlan's [2] Signature Assessment and Feedback model is evident within different disciplines. Finally, the study documents the ECP teaching journey of the T-Level curriculum in the UK.

1. Introduction

The present study is exploratory and aims to draw on the UK government's recent reforms in Level 3 T-Level qualifications. The new two-year T-Level qualification commenced in September 2020, which now sits alongside the existing A-Level and Apprenticeships routes for post-16 learners [3]. The T-Level curriculum design is based on other successful international models, such as the dual education system in Germany and the Netherlands. Furthermore, T-Levels include mandatory work placements in addition to classroom-based learning, which is aligned with Switzerland's Technical Vocational Education and Training (TVET) provision that encompasses both classroom-based and workplace learning [4].

The UK government has emphasised that hiring highly skilled dual professionals is essential to the T-Level qualification to ensure that learners are taught current skills [4]. This was further echoed in the Sainsbury Review [4] suggesting that,

"College principals have told us that recruiting technical education teachers with well-developed pedagogical skills, mastery of their field, and up-to-date industry experience can be a significant challenge in the competitive labour market" [p.66].

However, Hanely and Orr [5] argue that the UK government failed to acknowledge the difficulty FE institutions face in hiring and retaining dual professionals to preserve the existing provision. Moreover, the ECPs in FE who enter the teaching profession, often develop and discover their dual professional identity, as both a subject specialist and classroom practitioner [6], [7]. Furthermore, due to their rich occupational background ECP's can provide specialist feedback [8] and address misconceptions [18]. However, despite the need and demand for dual professionals, the mandatory training for ECPs in FE was withdrawn in 2012 by the UK government. The Lingfield Report [10] viewed this as an opportunity to remove obstacles to recruit and retain a more diverse FE workforce. To compound matters further, a later review by Esmond and Wood [11] argued that this led to the introduction of lower-level teaching awards. They suggest that,

"The generic entry routes offered by awarding bodies, including short courses and 'assessor' qualifications for work-based learning, have provided little focus on specialist curriculum or pedagogy" [p. 9]

According to Esmond and Wood [11] occupational practices and expertise often take precedence, thereby constraining the development of innovative pedagogical approaches. Perhaps the most problematic feature of the dual professional is that many view themselves primarily as a specialist, whereas students see them first and foremost as a teacher [6]. There is, however, a dearth of literature on the ECP perceptions and experiences in FE. Therefore, this study explores ECPs in FE during their teaching journey of the T-Level curriculum within two diverse curriculum areas: Education and Early Years and Health Science.

2. Literature Review

If the UK government's introduction of T-Levels is to prove viable, ECPs will need to successfully learn the art and craft of vocational teaching [9], [12], [13].

To Shulman [1] ECPs will need to embrace a ‘Signature Pedagogy’ which is outlined in three dimensions: (a) the surface structure; the operational act of teaching and learning (b) the deep structure; pedagogical strategies best suited to deliver the subject area and (c) the implicit structure which reflects the professional values, attributes, and cultures of the related field. Historically, the dimensions above contribute to addressing previous recommendations for pedagogy. Freire [14] suggests a move beyond a ‘banking concept’ of teaching which focuses on a monologic approach towards a more collaborative model of learning. Whilst Stenhouse [15] argues pedagogy should focus on a reflective and inquiry-based approach. An example of signature pedagogy offered by Shulman [1] refers to teaching the law curriculum to engage learners in critical thinking through the application of Socratic questioning to stimulate classroom dialogue. Critically, however, Brooks, McIntyre and Mutton [16] argue that ECPs would struggle to apply,

“Shulman’s three fundamental elements of the signature pedagogy of professional work, ‘to think, to perform, and to act with integrity’” (p.7)

Furthermore, in relation to technical education, Hobley [17] argues that Shulman failed to offer distinctive links to vocational learning. Which Hobley [17] suggests is evident in the work of Lucas, Claxton, and Spencer’s [13] with their metaphor of ‘expansive education’. To Hobley [17] ECPs should focus on real-world learning through problem-based learning and collaboration to enhance metacognition. Yet, Bathmaker [18] points out that theoretical knowledge is not given the same attention as practical skills, suggesting a greater balance is needed within TVET. This point is further echoed by Hobley [17], who argues that Claxton’s [19] metaphor of ‘epistemic apprenticeship’ illustrates how learners acquire new knowledge.

It has been argued that much of the scholarly literature on pedagogy focuses on social, cultural, and political context within schooling. Yet this is contested by Black and Wiliam [20], who suggest that Assessment for Learning (AfL) should be situated as a theory of pedagogy. Critically Black and Wiliam argue that pedagogy has been narrowly interpreted in the existing literature with less attention given to assessment. They define AfL as follows:

“The term ‘assessment for learning’ is then used to describe the process by which teachers use assessment evidence to inform their teaching and ‘assessment for learning’ refer to the use of assessment to determine the extent to which students have achieved intended learning outcomes” [p.533]

They conclude by calling for more scholarly focus on the relationship between pedagogy and assessment. Further consideration has been suggested by Pitt and Quinlan [2], that ECPs need to develop signature assessment and feedback that is tailor-made for their learners. For instance, Pitt and Quinlan [2] argue that signature pedagogy should embrace authentic assessment practices. In their reconceptualisation of Shulman’s metaphor, they refer to signature pedagogy as an apprenticeship to facilitate specialist activities and formative practices. Drawing on Vygotsky’s Social Learning Theory and Black and Wiliam’s [20] concept of AfL, Pitt and Quinlan [2] propose a model for ‘signature assessment and feedback’. They outline the model as a taxonomy for signature assessment that consists of: conceptual, epistemological, social, material, and moral aspects of the discipline. Furthermore, they describe signature feedback as an extension of AfL, to promote opportunities for timely feedback. The theoretical bases of Signature feedback draw extensively on socio material theory Fenwick [21] and Black and Wiliam [20] domains of self and peer assessment.

Within a TVET context, ECPs often draw on their rich occupational specialist knowledge and expertise to inform pedagogical decision-making [22], whilst offering learners constructive feedback [6]. A more striking finding was found in a Nigerian TVET study by Okeria et al [23] who conceptualised vocational pedagogy as ‘guided pedagogical principles’ to facilitate learning, reporting that the most frequent approaches focused on craft-based skilled demonstrations, problem-based learning, and formative questioning. In contrast a recent project into vocational pedagogy in England’s FE sector was carried out by Hagen et al [13], describing feedback as a powerful pedagogy referring to the relationship formed with the expert and the novice receiving feedback. Furthermore, indicating that individualised feedback proved most effective for praise and recognition. Therefore, Pitt and Quinlan’s [2] model of signature feedback, although developed for Higher Education (HE), appear to be consistent with vocational pedagogy. Although a more extensive review of signature pedagogical approaches is beyond the scope of this paper, this offers some insight into the key pedagogies available to ECPs, who deliver T-Level qualifications in the UK.

3. Methodology

Phenomenology was the overarching methodological approach taken in this study to capture the ECPs perceptions and views, as they developed their unique signature pedagogy within their T-Level subject area. This study adapts a hermeneutic phenomenological approach, which was initially set out by Heidegger and adopted by van

Manen [24]. The epistemological stance taken in this study is described by Bevan [25] as a post-modern approach within the interpretive paradigm. The study was mapped against van Manen's six methodological steps as this allowed me to check for consistency in each phase of the study consisting of (a) turning to a phenomenon that seriously interests us and commits us to the world (b) investigating experience as we live it rather than conceptualizing it (c) reflecting on the essential themes that characterize the phenomenon (d) describing the phenomenon through the art of writing and rewriting (e) maintaining a strong and oriented

pedagogical relation to the phenomenon (f) balancing the research context by considering parts and whole. A purposive sampling approach was used in this study [26], to recruit specialist dual professionals who were new to the FE teaching profession [27]. Participants were approach based on their rich, lived experiences of the T-Level curriculum [28]). Furthermore, participants were recruited through a university consortium of 22 FE colleges in the North of England, all of which deliver specialist Initial Teacher Training for FE teaching professionals (see Table 1).

Table 1. Sample Plan

Name	Teaching Experience	Subject Qualification	T-Level	College
Annie	7 years	BA Hons Early years and Education	Early Years Educator	A
Kelly	2 years	BA Hons Education	Assisting Teaching	B
Kim	2 years	BA Hons Mental Health Nursing	Adult Nursing	B
Julie	2 years	BA Hons Psychology	Therapeutic Pathway	C

Following ethical approval, data was generated from multiple interviews, observations and field notes. The study consisted of three phases, with each phase offering a further level of complexity to uncover participants lived experience. In the first phase of the study, participants took part in an in-depth phenomenological interview. For the second phase of the study, participants shared a video recorded lesson; this was used in a stimulated recall interview to capture participants' reflective commentary on their use of pedagogical approaches. In the third and final phase of the study, participants took part in a reflective interview to evaluate and reflect on their experience of the two-year T-Level qualification. To facilitate van Manen's [24] concept of 'reflecting on essential themes', I utilized Braun and Clarke's [29] approach to thematic analysis. This provided a practical and useful approach to defining and refining my final themes and subthemes. Furthermore, I utilized the following software packages: NVivo; Microsoft Teams; and Express Scribe. Once final themes had been created, I was able to engage in what van Manen [24] refers to as 'the art of writing and rewriting'.

4. Findings and Discussion

4.1. Dual Professionalism

In this study, participants articulated their understanding and application of pedagogy from different perspectives, which reflect their subject

specialism. This appears to be influenced by participants' dual professional identity, which is consistent with the existing literature [7], [11], [12]. Throughout the study participants articulated their responses from two perspectives. Firstly, participants used pedagogical approaches to elicit learners' responses to check learners' technical knowledge, to reflect workplace behaviours. Secondly, participants used pedagogical approaches to check learners' knowledge and understanding to meet the curriculum demands of the qualification. Throughout the study participants pedagogical discussion making was greatly influenced by their dual professional status. However, this did prove problematic as Julie suggests,

"With Health Science it's a lot different than other academic courses you've got to have certain skills to deliver and you need a clinical background. But then you also need to understand the qualification specification and be able to teach. So that's been a bit problematic at times. For example, just getting familiar the exam spec and getting more clarity on the depth and breath of coverage I need to cover in the theory lessons"

On the other hand, Annie notes within Education and Early Years,

"it's not just about teaching for knowledge they need to develop that skills set to apply that knowledge in practice"

Here Julie articulates that dual professionals need certain skillset, and rich clinical background is

consistent with the existing literature [4], [11]. Julie's interpretation of the T-Level specification further highlights the point raised previously that ECP's need time and support during their development as FE practitioners [4], [11], [12]. On the other hand, Annie's suggestion on the importance of developing the learners' skills in addition to teaching for knowledge is consistent with existing literature of dual professionalism [7], [11], [12].

A key finding in this study was ECP's consistent efforts to reinforce theory-to-practice consolidation to help prepare learners for work placements. Kim suggests,

"Not only are we teaching them about the theory, but those values and attributes of the health care professional".

Interestingly, Kim articulates how theory-to-practice consolidation is intertwined within the Health Science curriculum. Kim's insistence that specialist expertise in discipline is essential for the successful delivery of T-Levels, further aligns with Esmond and Wood [11] research which highlighted the FE dual professionals need to continue to update their industry expertise. Furthermore, Kim draws on her specialist background to stimulate classroom dialogue [6], [23]. Therefore, and acknowledged previously in the Sainsbury Review [4] on the need to recruit dual professionals with up-to-date occupational and pedagogical skills is indeed a cause for concern [5]. Moreover, the ECP's in the study expressed concerns over the complexity and pedagogical challenges they faced in the delivery of the T-Level curriculum.

4.2. Subject Specialist Pedagogy

The extract above by Annie further illustrates Shulman's [1] surface and deep dimensions of signature pedagogy for disciplines. Whilst Kim's comments on values and attributes is further aligned with Shulman's [1] suggestion that signature pedagogy should extend to the values and culture of the discipline being taught. Julie refers to pedagogy within the therapeutic pathway curriculum. As learners cover multiple occupational roles, Julie refers to her pedagogical decision-making based on the diverse demands of the curriculum. Julie appears to advocate strategies associated with expansive education [13]

"I like to use case studies and get students into small groups to solve problems and come up with a solution. But we do this from a multidisciplinary perspective, so for example, one group will look at the scenario from the role of a speech therapist, while another group will look at it from an occupational therapist's view"

Julie's example further illustrates strategies referred to by Okolie [22] as 'guided pedagogical principles' to support TVET learners. Furthermore, Julie's emphasis on creating strategies based around the multidisciplinary scenario further address Shulman's [1] call for deep and implicit structure is consistent with the approach described by Julie. On the other hand, Kelly delivers a curriculum that offers students a blended work placement model, with two days on placement as a classroom assistant and three days at college. To engage learners in critical thinking and reflective practice, Kelly links the learners' placement experience to theoretical content. Furthermore, Kelly draws on her occupational background to model examples,

"Well, we need to cover a lot of theory and look at different educational theorists, so I like to link those theorists to what they are doing on placement. For this qualification, learners need that hands-on experience to understand these theories and how to apply them; otherwise, they would struggle. So, for example, we covered cognition last week, when I introduced it, I gave them a definition and gave an example. Then I asked them to share their experience from placements to help them make those links and connections. I did this first in pairs and then as a whole group"

Here Kelly illustrates what Shulman [1] describes as a pedagogy that bridges theory and practice. Furthermore, Kelly's efforts to engage learners in problem-based learning strategies based on their lived experience encompass the key features of pedagogical approaches discussed in the literature such as expansive education [13], epistemic apprenticeship [7] and guided pedagogical approaches [22]. The emphasis on classroom dialogue further addressed suggestions raised by Freire (14) to co-create knowledge with learners. In summary, the findings from this study illustrate how ECPs choice of pedagogy prefigures the cultures [1] of the profession within the T-Level curriculum.

4.3. Signature Assessment and Feedback

Annie delivers the Early Years Educator pathway for learners who plan to become primary school teachers,

"I like to use a lot of microteach presentations; the learners want to be primary teachers, so getting them to stand up in front of their peers and receive feedback is very relevant to the qualification. Not only are they getting my feedback, but there's that peer assessment in their two, and they do offer each other

constructive feedback. So, it's very useful to observe them deliver a session to gauge where they're at and how their confidence is growing'.

The example shared by Annie further relates to the Pitt and Quinlan [2] model of signature feedback as learners self-reflect, collaborate and critically review feedback. This further aligns with Black and Wiliam's [20] dimensions of AfL which offers learners an opportunity to engage in self and peer assessment as well as receiving specialist oral and written feedback from the tutor [8]. Furthermore, the extract above features what Hagen et al [23] describes as a 'powerful pedagogy' due to the oracy and interaction with learners. A further consideration is how Pitt and Quinlan's [2] dimensions of signature assessment are applied in practice, this is illustrated below in an example where Kelly supported learners through an employer set project,

*"So, for the employer set project, I would role play a patient, and the learner is given a patient scenario, they do get some time to prepare for the project. They need to assess the patient and decide how they are going to treat them (**Conceptual**). They would have carried out some initial research before (**Epistemological**) so this would help them decide for instance what type of dressing they are going to use to treat a wound (**Material**). It also shows how they are forming a relationship with the patient (**Social**) and are they respecting the patient's wishes. Or maybe how they dealt with a patient who was less willing at first, so it's making it as realistic as possible (**Moral**)"*

Interestingly the above extract demonstrates how Pitt and Quinlan's [2] model could potentially be applied in practice within an FE setting with vocational learners. Moreover, this approach is consistent with Stenhouse's [15] suggestion to promote an inquiry-based approach to learning. Therefore, in addition to the HE sector where it originates, the findings from this study contribute to the gap in knowledge in this emerging domain [2]. Although caution should be noted due to the sample size, and the lack of comparative research, this study offers a new and novel understanding in this emerging field.

5. Conclusion

This study offers a novel understanding of how ECPs might interpret signature pedagogies within different disciplines. The findings from this study offer new insights into ECPs' perceptions as they learn to navigate their way through a new curriculum.

Furthermore, this study illustrates how ECPs adopt pedagogy to reflect the skills, abilities, and attributes associated within their subject area. The findings also demonstrate how FE practitioners' interpretations of signature assessment and feedback are greatly influenced from the occupational specialisms. With limited research in this emerging field, this study lays the groundwork for further research into Pitt and Quinlan's [2] model within the FE sector. Moreover, the findings from this study address Black and Wiliam's [20] call for more scholarly research into the relationship between assessment and pedagogy. A more striking finding emerging from the study was the differences in signature pedagogy in the opposing curriculums. Thus, in summary, it would appear from this study how essential Shulman's [1] concept of signature pedagogy is within different disciplines in FE. Finally, this study contributes to the existing literature relating to FE dual professionalism.

6. References

- [1] Shulman, L. S. (2005). Signature Pedagogies in the Professions. *Daedalus* (Cambridge, Press), 134(3), 52–59. DOI: 10.1162/0011526054622015.
- [2] Pitt, E., and Quinlan, K.M. (2021). Signature assessment and feedback practices in the disciplines. *Assessment in Education: Principles, Policy, and Practice*, 28 (2), 97-100. DOI: 10.1080/0969594X.2021.1930444.
- [3] Lewis, J., and P. Bolton. (2023). Technical Education in England: T Levels. House of Commons Library Research Briefing. <https://researchbriefings.files.parliament.uk/documents/CBP7951/CBP-7951.pdf> (Access Date: 12, October 2023).
- [4] Sainsbury, D. 2016. Report on the Independent Panel on Technical Education, London: DfE. (Access Date: 1, June 2024).
- [5] Hanley, P. and Orr, K. (2020). The recruitment of VET teachers and the failure of policy in England's further education sector. *Journal of Education and Work*, 32 (2), 103–114. DOI: 10.1080/13639080.2019.1617842.
- [6] Misselke, L. (2021). What will T levels change? The portrayal of technical and vocational education in England: tensions in policy and a conundrum for lecturers. *Journal of Vocational Education & Training*, 74(4), 708. DOI: 10.1080/13636820.2022.2118948.
- [7] Orr, K. & Simmons, R. (2010). Dual identities: the in-service teacher trainee experience in the English further education sector. *Journal of Vocation Education and Training* 62 (1), 75-88. DOI: 10.1080/13636820903452650.
- [8] Ewing, B. (2017). An exploration of assessment approaches in a vocational and education training course in Australia *Empirical Research in Vocational Education and Training* (2017) 9:14. DOI: 10.1186/s40461-017-0058-z.

- [9] Looney, J. (2020) Assessment for Learning in Vocational Education and Training (VET) Europe Training Foundation, European Institute of Education and Social Policy.
- [10] Lingfield, R. (2012) Professionalism in Further Education Final Report of the Independent Review Panel Established by the Minister of State for Further Education, Skills and Lifelong Learning.
- [11] Esmond, B. and Wood, H. (2017). Skills for life teachers: Dual professionals or professional dualities? University of Derby. <https://derby.openrepository.com/handle/10545/621508>.
- [12] Hanely, P., and Thompson, R. (2021). Generic pedagogy is not enough': Teacher educators and subject specialist pedagogy in the Further Education and Skills sector in England. *Teaching and Teacher Education* 98 1-14. DOI: 10.1016/j.tate.2020.1032330742- 051X/.
- [13] Lucas, B., G. Claxton and E. Spencer (2012). How to Teach Vocational Education: A theory of vocational pedagogy. DOI:10.13140/2.1.3424.5928.
- [14] Freire, P. (2009). Chapter 2 from "pedagogy of the oppressed". *Race/ethnicity: Multidisciplinary Global contexts*, 2(2), p. 163-174.
- [15] Stenhouse, L. (1975). *An introduction to curriculum research and development*. London: Heinemann.
- [16] Brook, C. McIntyre, J. and Mutton, T. (2023). Learning to think, perform and act with integrity: Does teacher education have a signature pedagogy, and why does this matter? *London Review of Education*, 21 (1), DOI: 10.14324/lre.21.1.01.
- [17] Hobley, J. (2021). Cultivating learners who 'think like vocational professionals': signature pedagogies, technology, and vocational learning. *Research in Post Compulsory Education*, 26:1, 38-58. DOI:10.1080/13596748.2021.1873407.
- [18] Bathmaker, A-M. (2013). Defining 'knowledge' in vocational education qualifications in England: An analysis of key stakeholders and their constructions of knowledge, purposes, and content. *Journal of Vocational Education & Training*, 65:1, 87-107. DOI: 10.1080/13636820.2012.755210.
- [19] Claxton, G. (2014) School as an epistemic apprenticeship. The case of building learning power, *Infancies and Aprendizale: Journal for the Study of Education and Development*: 37 (2), 227-247. DOI: 10.1080-02103702.2014.929863.
- [20] Black, P. and Wiliam, D. (2018). Classroom Assessment and Pedagogy. *Assessment in Education Principles, Policy & Practice*, 25:6, 551-575. DOI: 10.1080/0969594X.2018.1441807.
- [21] Fenwick, T. (2016). Social media, professionalism and higher education: A sociomaterial consideration, *Studies in Higher Education*, 41 (4), 664-677. DOI: 10.1080/03075059.2014.942275.
- [22] Okolie, U.C. Ogwu, E.N., Osuji, C.U. Francisca Ngozi Ogba, F.N., Igwe, P.A. O. Obih.S. (2021). A critical perspective on TVET teachers' pedagogical practices: insights into the guiding pedagogical principles in practice, *Journal of Vocational Education & Training*, 75:3, 439-458' DOI: 10.1080/13636820.2021.1894221.
- [23] Hagen, P. et al. (2025). Department for Education, *Powerful Pedagogy: Effective practice*. https://assets.publishing.service.gov.uk/media/67d2d3da2348f8d0cc51cbb5/Powerful_Pedagogy_-_Effective_Practice_-_March_2025.pdf.
- [24] van Manen, M. (2016). *Phenomenology of Practice: Meaning-Giving Methods in Phenomenological Research and Writing*. London and New York, Routledge.
- [25] Bevan, M. T. (2014). A method of phenomenological interviewing. *Qualitative Health Research*, 24(1), 136144. DOI:10.1177/1049732313519710.
- [26] Bryman, A. (2016). *Social research methods* (Fifth edition.). Oxford University Press.
- [27] Cohen, L., Manion, R., and Morrison, K. (2018). *Research Methods in Education*. 8th ed. London: Routledge.
- [19] Matthew, B. and Ross, L. (2010). *Research Methods: A Practical Guide for the Social Sciences*, Person Ltd., Essex, England.
- [29] Braun, V. and Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, 3(2), 77101. DOI: 10.1191/1478088706qp063oa.