From Learning to Impact: Research Dissemination Habits Among Chartered Manager Degree Apprentices in the United Kingdom

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Background

Disseminating research is not optional, it is fundamental to the research process. As Singhal and Kalra (2021, p.65) assert, "research conducted has to be published or documented; otherwise, it is considered not done." Fanguy et al. (2025) similarly emphasise that teaching research writing must include preparing students to share their findings. Without dissemination, research risks being invisible and its value unrealised. This study responds directly to that imperative by exploring how Chartered Manager Degree Apprentices (CMDAs), as higher- and degree-level apprentices (HDAs) and a form of work-based learning, engage with research dissemination in practice. Research dissemination is the process of sharing research findings in an effort to link research and practice (Freemantle and Watt, 1994). Costley et al. (2014) make an insightful distinction between traditional academic research and research produced within a work-based learning context. They argue work-based learning research is 'mode 2' knowledge, produced and valued outside the university and is not discipline specific. Helyer et al. (2020) call this 'performative knowledge', meeting the needs not just of individual professionals but also their professional contexts and organisations.

By engaging in dissemination, researchers and practitioners have the opportunity to increase the visibility of their findings by engaging with the public to positively impact society (Marin-Gonzalez et al., 2017). Dissemination as a discipline, often referred to as dissemination and implementation (D&I), is relatively young and little explored (Brownson et al., 2012); with the little research that is available tending to focus upon D&I training and design (Chambers et al., 2017), and the role of mentors and the wider community (Padek et al., 2018). D&I is, however,

becoming of increasing importance as underpinning research practices are changing - with Newell (2021) noting the nature of research is moving away from traditional methods as new methodologies emerge. As this happens, interdisciplinary working and networking is becoming of significant importance (Gibbons et al., 1996). This is common in work-based learning.

The predominant portion of the population focused upon in the little D&I research available is early career researchers (ECRs), a bracket which includes PhD students, post-doctoral researchers, and junior faculty members in academia (Shinkafi, 2020), however, there has been no concrete interest, in terms of D&I, in the emerging population of higher- and degree-level apprentices (HDAs) who Rowe et al. (2016) note have flocked to institutions since the introduction of work-based learning HDA programmes in the UK in 2014. HDAs often include a work-based project involving action research, which may be embedded in the end-point assessment (EPA) process (Pan and Rebin, 2022). This paper posits that there is insufficient opportunity for HDAs to disseminate their often impactful findings, and subsequently aims to find out more about HDA experiences of existing dissemination habits. The aim therefore was to understand the varied practices of dissemination among students navigating academic and professional contexts. In achieving this aim, the following questions were explored:

- Does a HDA's 'community' present an opportunity for informal dissemination, and how?
- Do HDA community members, such as project supervisors, act as co-authors and advise on disseminations?
- Do HDAs regularly transition by contributing their findings to the community's knowledge?
- How accessible is dissemination for HDAs i.e. are they given time to engage in dissemination, whether this is embedded in the programme, and what methods are utilised?
- What funding is available to apprentices to support dissemination, and the extent of utilisation of accessible local university services (such as careers information, advice and guidance (CIAG)), events and journals?

The case and context

The research questions were explored within a single case. The case study focuses on students of a specific CMDA in Professional Management, at a UK based university, with students from a

range of UK-based public and private sector organisations (the case). The final module, as part of the CMDA, is a work-based learning project, common in work-based learning programmes (Costley et al., 2014; Helyer et al., 2020). The Chartered Management Institute (CMI, n.d.) defines the CMDA as an apprenticeship that delivers a quality degree, on-the-job experience and a professional pathway for future development. The CMDA standard, which is employer-led, focuses on specific employability knowledge, skills and behaviours (Gerhardt & Montgomery, 2025). Degree apprenticeships such as the CMDA started in England in 2016, combining 80% at-the-workplace experience with 20% technical classroom training (Hughes & Saieva, 2019).

Literature review

Apprentice as insider researcher

Work-based learning (WBL) has evolved into an internationally recognised higher education model, with the United Kingdom and Australia leading much of its development (Bezerra et al., 2021). Institutions such as Middlesex University and Monash University have pioneered frameworks that formalise WBL as a legitimate academic route through the integration of assessed work-based projects. The Middlesex framework, for example, provides a systematic approach to credentialing experiential learning across all qualification levels, including honours, master's, and doctoral degrees (Bravenboer & Workman, 2016). Despite this progress, WBL projects have sometimes been perceived as less credible than traditional dissertations because of their applied and context-specific nature. Unlike ECRs, whose trajectory is typically into academic or research positions, HDAs conduct research while remaining in employment, embodying the 'pracademic' role that bridges scholarly inquiry and professional practice (Horackova et al., 2024).

Research in the Australian context reinforces the academic rigour of these projects, showing that work-based and insider research can satisfy the five principles of scientific inquiry - systematic exploration, use of models, objectivity, testability, and applicability (Fergusson et al., 2020). This evidences the robustness of work-based pedagogies such as project-based learning (PBL) and action research (AR). PBL engages learners in solving real-world problems over extended periods (Serin, 2023), while AR integrates theory and practice through problem identification, data collection, reflection, analysis, and action taking (Coghlan & Brydon-Miller,

2014). Such approaches are evident in the apprenticeship end-point assessment (EPA), which frequently features a substantial project. For instance, Level 4 Associate Project Manager apprentices produce a report on a real project; Level 6 CMDA apprentices complete a business-focused project; and Level 7 Senior Leader apprentices submit a strategic business proposal addressing an organisational challenge (IfATE, 2024).

Within this paradigm, apprentices engaged in WBL become insider researchers - practitioners studying their own work environments (Sanders, 2014). As Treadwell (2010) observes, this dual identity demands both participation and critical distance. Costley et al. (2014) emphasise the importance of situatedness, reflexivity, and ethical sensitivity when researching one's practice, alongside the transformative potential for organisational and personal learning. These learning dynamics, as Helyer et al. (2020) and Stewart et al. (2019) note, are increasingly influencing mainstream higher education, where applied projects and placements mirror the apprenticeship model's integration of research, practice, and reflection.

Research identity and relationships

While much of the literature on research identity derives from studies of ECRs, this is only partly transferable to HDAs, whose projects are embedded in the workplace rather than academia (Horackova et al. 2024). Whereas ECRs transition into research roles within academia, HDAs typically remain within industry, applying inquiry to organisational improvement rather than academic progression (Shinkafi, 2020). This positioning somewhat aligns with emerging literature on 'pracademics' - professionals who engage in academic research within their practice environment (Costley et al., 2014). A 'culture of impact' has emerged in apprenticeships thanks to the post-September-2019 Ofsted Inspection Framework (EIF) (Naz, 2021), and in academia, which is producing the first generation of scholars geared towards the value of academic research beyond academia (Wroblewska et al., 2024). Fueled by this evolution and the 'publish or perish' culture, there are now more opportunities than ever for researchers to share their ideas, meaning dissemination has come more accessible (Ross, Colthup, and Jenkins, 2024) and is "accessible to all the levels of society" (Gownaris et al., 2022: p2).

Tied to identity is relationships. Han and Wang (2024) find the passion and respect towards scientific inquiry of faculty members, in particular their supervisor, is key in inspiring students. In

traditional supervisor-researcher relationships the dynamic is two-way, but Ibidunni et al. (2021) note that, in WBL, a tripartite relationship exists between apprentice, training provider, and workplace; framed by SECI (knowledge creation) theory and LMX (leader-member exchange) theory. While this relationship previously yielded criticism for being incomplete or inconsistent in terms of mentoring and reflective practice (Evans and Cloutier, 2023), it has now developed to a point of general effectiveness crucial to making the learning/work interface operate fully, subsequently highlighting the role of the employer in the research process for HDAs.

While collaboration refers to co-creation of knowledge within the workplace or learning network, a separate term 'community' becomes relevant, denoting the wider professional or academic audience to whom findings may be disseminated. Community is a much discussed concept in WBL, with Helyer (2017) referring to the concept of community learning in WBL, and MacQueen and Aiken (2020) providing an example of this in the form of HDA peer groups which have a direct link to pass rates. However, this can stretch beyond a HDA's immediate cohort to a wider learning community of practice (CoP) (Gerhardt, 2023; Nottingham, 2017) - although there remains a gap as to how these directly impact research as a stand-out feature of the HDA learning journey. Whether this results in co-production and shared dissemination also requires confirmation (Talbot and Lilley, 2014).

Dissemination methods

For apprentices, dissemination often begins internally - within the organisation - through project reports and presentations, whereas external dissemination may involve academic publication or sector conferences, representing a less common but growing practice (Asanov et al., 2024). Such Dissemination methods can be categorised as formal or informal. Formal methods include publications in journals, conference presentations, and reports to funders (Nieuwland, O'Mara, and Mackenbach, 2024). Meanwhile, informal methods include conversations, discussions, and informal publishing platforms such as social media (Nieuwland, O'Mara, and Mackenbach, 2024).

It is noted that dissemination methods may be embedded into the learning journey, for example, viva voce, However, Rodriguez (2014) is critical of such methods, noting most dissertations, if presented at all, are only ever done so in front of a very small group of people and subsequently end up 'gathering dust on shelves.' Asanov et al. (2024), on the other hand, values

mandated dissemination, referring to the example of cumulative doctoral dissertations, consisting of several publications, which received on average three-times more citations compared to their traditional counterparts.

A potential barrier to HDA research dissemination is time. Many full-time researchers spend less than 10% of their time on dissemination (Brownson et al., 2013), and given apprentices face the challenge of balancing work, study, and personal life (Smith et al., 2023), with many noting high workloads (Cook et al., 2024), fitting it in may be difficult. However, Pathak et al. (2023) note a solution for busy professionals - virtual conferences and symposia which bridge dissemination accessibility, particularly for geographically dispersed researchers.

Research information, advice, and guidance

For those pursuing research, professional development advice and mentoring are of utmost importance and extend beyond just the provision of basic training (Bateman and Kinmonth, 2001). Hence, much of the literature on research training looks at this through the lens of career information, advice, and guidance (CIAG) (Larsen et al., 2024). This means responsibility for dissemination guidance does not just sit with the supervisor, but with wider stakeholders (Flores, 2011). Choi et al. (2024) note CIAG functions may possess technology and systems to aid support, referring to the example of the eMPACT system which tailors training based on analysis of task competencies. This is of relevance to prior learning assessment which takes place in apprenticeships, to allow for tailoring of the training programme (GOV.UK, 2024a).

Policy and practice

Policy plays an important role in ensuring academic discoveries are shared for practical application; however, policies tend to focus on research production, with little focus on dissemination and associated strategies (Armstrong, 2012). While literature thus far suggests that HDAs engage in research as developmental practice, the HDA context is distinctly complex, for example compared to typical ECRs, due to not only academic requirements, but the requirements of the apprentice's employer. This creates a necessity for forms of dissemination that balance

organisational confidentiality with academic transparency - an area under-researched in current scholarship.

A key challenge associated with dissemination is cost (Deora et al., 2021). This source calls for boosts to funding for research projects with monies coming from private firms as well as government initiatives - in the apprenticeship context this could mean the employer. However, additional funding, or changes to Apprenticeship funding rules, may help too. An example of cost-related challenges is the high fees of attending conferences and the associated travel costs (Rallo et al., 2023) - events which apprentices may wish to disseminate via. Ultimately, non-attendance of such events limits knowledge exchange and networking, and makes dissemination a privilege afforded only by parts of society (Gownaris et al., 2022). At present, Apprenticeship funding rules (GOV.UK, 2024b) influence dissemination opportunities, as travel and event attendance costs are ineligible, constraining participation in external scholarly activities. In particular, the 2024 to 2025 apprenticeship funding rules (GOV.UK, 2024b) possess three lines of relevance: travel costs (97.2.2), trips to professional events (97.2.13), and time spent supporting or mentoring apprentices where this is not delivering training required as part of the apprenticeship (97.2.14). However, these are all 'ineligible costs' described by the rules as coming out of the surplus (profits) of providers.

Methodology

This research was conducted in accordance with the ethical guidelines of the British Educational Research Association (BERA, 2024) and the institutional research ethics committee. The study adopted a qualitative methodology to explore how a specific degree apprenticeship cohort (the case) disseminated the findings of their work-based projects (undergraduate dissertation equivalent). As the research centres on participants' interpretations of the value, use, and dissemination of their research, a qualitative design is aligned with the study's interpretive aims. The researchers do, however, acknowledge the interpretivist paradigm produces subjective meanings (Bryman, 2016), hence the aim is not to generalise, but to understand the varied practices of dissemination among these students navigating academic and professional contexts. The study adopts a case study design - as stated by Saunders et al. (2012, p.179), "a case study explores a research topic or phenomenon within its context". This design enabled a deeper understanding of

how these apprentices' work-based inquiries intersect with organisational dynamics and influence how project findings are shared or implemented. Semi-structured interviews were used as the data collection technique.

Data collection

Interviews were conducted with a consenting convenience sample of 24 former or current apprentices of a specific CMDA in Professional Management, from a range of UK-based public and private sector organisations (the case). The semi-structured interviews involved a set of predefined guiding questions around intended audiences, perceived barriers, organisational receptivity, and follow-up actions, while allowing space for participants to elaborate, introduce new topics, reflect and respond in their own terms (Kallio et al., 2016). The semi-structured format also allowed the researchers to probe when deeper insight was needed, follow up on significant remarks, and adapt to the participant's professional and cultural context, which was important given the diversity of sectors represented in the sample. This adaptability aligns with the interpretivist paradigm underpinning the study, prioritising meaning-making and co-construction of knowledge (King & Horrocks, 2010). Furthermore, three researchers were deployed to support methodological triangulation and enhance the study's trustworthiness (Denzin, 2012).

The interviews were conducted via Microsoft Teams video conferencing software, enabling participation from geographically dispersed apprentices and allowing for logistical flexibility. Each interview lasted between 45 and 60 minutes and was audio-recorded with participant consent. The interviews required careful preparation, active listening, and reflexivity on the part of the researchers, capturing depth and variation in participants' experiences and perceptions (Longhurst, 2016).

Collaborative data analysis

Transcripts were produced, anonymised and later coded as part of data reduction and thematic analysis (Punch, 2005). Data was analysed using thematic analysis due to its flexibility, following the six-phase framework developed by Braun and Clarke (2006). For clarity and manageability, this was adapted into five stages: familiarisation, initial coding, theme development, review, and

write-up. To ensure dependability, transparent auditing of the research design and execution was maintained (Lincoln and Guba, 1985). The three researchers acted independently in the initial coding process. Each researcher conducted a first-cycle analysis of transcripts, generating initial codes inductively based on recurring patterns and significant statements. This independent analysis helped mitigate individual researcher bias and encouraged diverse interpretative insights to strengthen credibility (Lincoln and Guba, 1985). After the initial round of coding, the researchers met to compare and discuss their interpretations. Thematic overlap allowed the construction of a preliminary coding framework, while areas of divergence prompted further discussion and reflexivity, a key aspect of confirmability (Lincoln and Guba, 1985).

Following agreement on the provisional codes, researchers applied the shared framework, refining themes iteratively as new insights emerged. Regular peer debriefing sessions were held to review developing categories, challenge assumptions, and ensure that interpretations remained grounded in participants' accounts (Lincoln and Guba, 1985). Finally, providing a rich description of the research setting (the case), allowed the reader to judge the applicability of findings to other settings with which they are familiar, and so satisfying transferability (Lincoln and Guba, 1985).

Findings

Research output and identity for apprentices

Project based and action research methodologies were used by apprentices through learning modules such as Work Based Project and Organisational Strategy. These modules were the main opportunities for apprentices to produce inquiry and research outputs. However, several apprentices did not appreciate the opportunity for sharing or publishing their work. Two typical comments included: *"Yeah, I had no plans whatsoever to share" (R1)* and *"I didn't know that there was a possibility of it ever getting published" (R15).*

Other findings indicated minimal awareness of dissemination and sharing pathways and a lack of confidence in doing so or acknowledgement of their identity as researchers. Several apprentices seemed uncertain about the ownership, accountability, purpose, or potential impact of their work.

Integration and contextualisation of knowledge

Generally, apprentices demonstrated a robust preference for summarising and simplifying their findings into practical opportunities for their workplace use. They wanted to produce bite size, shorter, more accessible materials, for example presentation or display type slides, summaries, or brief reports: *"I wanted to present some… overview" (R8), "Produce maybe a slide or a couple of slides" (R9), "Maybe I could summarise the outcomes rather than share the actual work itself" (R1).*

This approach generally seemed to demonstrate a tendency to want to disseminate and communicate findings informally within departments within their organisations that they are familiar with and confident in talking to. Common preferred formats included: email summaries, written and verbal presentations, and short briefings. Time was often cited as a limiting factor due to operational issues within the workplace: *"Having the time to do it" (R13)* and *"The longer it goes on then the momentum gets lost" (R13).*

Knowledge systems and organisational processes

Apprentices talked about different internal mechanisms for sharing and discussing their findings. These included: official, formal structured reporting systems and informal communication channels and pipelines. Some examples included: *"Part of the project for me is actually, yes, going to be fed back to my manager, to our board" (R3), "Monthly operating reviews… with the higher executives" (R8), "Lessons learned register" (R10), "Lunch and learn sessions… knowledge sharing sessions" (R2).*

Technological systems ("hard" mechanisms) and interpersonal relationships ("soft" mechanisms) were used by the apprentices to share knowledge. There were many positive experiences and these were often attributed to having supportive mentors and managers: *"I had an excellent line manager and mentor" (R9)* and *"My chain of command… were really open to it" (R10).* Contrastingly there were some reports of a lack of support from their senior leaders: *"I don't know whether I would have senior management backing" (R1).*

In organisations with a multinational component, apprentices described internal communication and dissemination that spanned global contexts, the apprentices still perceived these as "local": *"I've got a team spread out between the US, India, Berlin, Germany" (R8).*

Challenges, resistance and barriers to knowledge use

Three main barriers to sharing research have been identified: lack of time, lack of relevance and lack of interest. These seem to have hindered the dissemination of the research. The culture of the organisation was thought to be inextricably linked to these barriers: "*I think the barriers to sharing will be lack of interest, lack of relevance for some people, and lack of time" (R6), "The culture here is… not good" (R1), "I don't think my organisation particularly encourages that" (R13), "It hasn't been accepted greatly" (R3).*

On the occasions and situations where dissemination was encouraged, some apprentices spoke of strong networks and established forums: *"We have a few different forums where we kind of share best practice" (R5), "Great support network in the marketing team" (R5).* Contrastingly, workplaces that were felt to be less supportive led to low confidence and professional self consciousness: *"I can't possibly let anybody at work see what I've done because it… will highlight the failings" (R1), "There's a little bit of embarrassment" (R3), "I'm not very good at self-promotion" (R4).* Some apprentices also noted low levels of peer interaction or weak cohesion within their groups. In some cases this led to a lack of unity and disconnect.

Sharing the findings externally

There was minimal external dissemination demonstrated in the findings. Most apprentices acknowledged that they only shared their work internally: *"Only to an internal audience" (R14)* and *"It's very unlikely that anything will then be disseminated… externally to the organisation" (R2).* However, many expressed an interest in sharing more widely and with an external element: *"Published… would be quite a cool thing" (R10), "I love the idea of publishing… it does quite excite me" (R5), "Having more opportunities to disseminate this publicly and speak" (R14).*

The main reasons for non-dissemination were: Time, confidentiality, and organisational restrictions. *"There's a lot of cost information… budgetary information… IP technology" (R2)* and *"I am probably going to be heavily critical of my employer… I don't think it would look good." (R1).* Some apprentices referred to the need for anonymisation or legal clearance, this was linked to the type of employment area: *"Obviously we have to be completely anonymised if we just go to external" (R7)* and *"It depends on how anonymous… we've got legal teams… that dictates what we can and can't [say]" (R2).*

There are limited examples of the external sharing of information and learning included dissemination with regulators or professional bodies: *"We have CQC… everything has to be fed*

back to them" (R3), "External working groups" (R4), "Engineering institute… knowledge transfer or knowledge gaining sessions" (R8).

Long term impact of knowledge sharing

Evidence of sustained knowledge use was apparent where project outcomes were clearly embedded into organisational systems or training profiles: *"So my part of the project is complete… it's now part of this training syllabus" (R20), "There'll be a review… we can now push it out to other countries" (R21), "This… will definitely be used… for the foreseeable future" (R21).*

Apprentices described some projects that generated measurable social or operational impact: *"There's also very much the social impact of… the families who are moving on" (R1)* and *"So there's a blackout… we're trying to interconnect the grids" (R8).* Senior Colleagues supported the dissemination and impact in some cases: *"A diluted version of what I produce will be passed further up the chain" (R2)* and *"If it comes from a [senior leader], it's going to get a lot more buy in" (R17).*

Discussion

This discussion explores and interprets what our research findings reveal about the evolving role of work-based inquiry and dissemination within higher and degree apprenticeship (HDA) programmes at one UK University. Specifically, it examines the implications for (1) apprentice learners, (2) employer organisations, and (3) training providers.

Apprentices, in congruence with Beverra et al (2021) view that work based learning is a recognised higher education model, largely demonstrated the capacity and interest in the undertaking of meaningful, context-driven inquiry through project-based and action research methodologies. They demonstrated a pragmatic approach to their knowledge development, keen to draw a link between their findings and their professional role. This chimes with what Taylor-Smith (2019) found in that the identity as an apprentice is heavily influenced by their professional role or the position or status they hold within the organisation. Our research findings highlight structural, cultural, and practical learning factors that are both enabling and constraining at the same time, in particular when translating their learning into wider professional and organisational knowledge and across external contexts. The responsibility for ensuring effective translation and

dissemination sits across the whole stakeholder group rather than merely with the apprentice (Flores 2016).

Implications for apprentices

Developing research identity and confidence

The data from this research reveal a disconnect between apprentices' engagement in research activity and their self-perception as researchers. That this self-perception would seem to reflect their identity as researchers alludes to Marvasi et al (2019) view that engaging in authentic research itself fosters an identity as a researcher. However, the disconnect in our apprentices appears to arise from limited understanding of dissemination opportunities and uncertainty about who owns the research or how it might add value beyond assessment requirements. Findings about lack of plans to share and not knowing about publishing opportunities highlight a conceptual gap between completing assessed projects and seeing these as valid contributions to professional or disciplinary knowledge.

The results highlight important consequences for apprentices' professional growth and their engagement in lifelong learning. This could be interpreted for our apprentices in terms of embracing the notion of a community of learning (Helyer 2017). In the absence of clear recognition of their ability to conduct and apply research, apprentices may treat inquiry as a box-ticking exercise instead of a skill that fosters evidence-based practice and innovation in their organisations. Similar patterns have been noted by Marvasi et al. (2019) and Nieuwland et al. (2024), who argue that limited research ownership constrains the development of professional identity. The apprentices are therefore missing the opportunity to develop their professional profile across the organisation. Potential internal or external promotion opportunities might therefore be overlooked.

Confidence, belonging, and peer influence

The involvement and potential benefit of research dissemination with others was overlooked particularly in terms of: peer discussion, feedback, and validation. Asanov et al (2024) argue that for apprentices, dissemination begins internally via internal mechanisms specific to the organisation and less so, via external means. Where this was often underdeveloped in the

apprentices' experience, it created feelings of embarrassment or self-consciousness. This suggests that without an affirming peer culture or credible role models, apprentices' confidence to share knowledge remains fragile and underdeveloped. This has the potential for apprentices to conceal their developing knowledge and hide any new skills, a situation that is in conflict with the concept of the apprenticeship learning model, this chimes with the views of Quew-Jones (2024) who argues in favour of a distinct identity for degree apprentices where the sharing of learning experiences, belonging and peer engagement are fundamental to the success of the learning journey.

Training providers and employers could play a more significant role in creating learning spaces and environments in which apprentices feel psychologically safe. Pathak et al (2023) suggest for professionals engaged in apprenticeships, virtual conferences and symposia bridge accessibility gaps and create spaces for the dissemination of new knowledge. This could lead to a greater degree of dissemination of their learning and findings through, for example, peer review opportunities, or co-presented showcases. Such learning spaces can strengthen both confidence and belonging, activating the early stages of Quew-Jones' (2024) DAI model of development.

Workload and competing pressures

Apprentices repeatedly cited time constraints and operational workload as major barriers to sharing findings. These pressures are inherent to the multiple roles that apprentice learners adopt. As well as being employees and students, may have family, social and caring responsibility to consider. The tendency for apprentices to summarise research into short, workable presentations or emails reflects adaptive behaviour rather than disengagement, an attempt to make dissemination compatible with professional responsibilities. However, when reflection and communication are continually deprioritised, learning risks becoming transactional rather than transformative. Monogue (2022) argues that those creating new knowledge, which is arguably our apprentices, guidance and support on how to do so and how to share new understandings may be necessary.

Implications for employers

Organisational culture and knowledge ecosystems

The findings highlight significant variation across employer organisations in how apprentice generated knowledge is perceived and accepted. In more supportive contexts, these tend to be

often project-based or learning-oriented organisations, mechanisms such as lessons learned registers, lunch and learn sessions, and internal discussions and presentations were reasonably well-established. In others, apprentices described cultures of disinterest or defensiveness, where knowledge sharing was viewed as unnecessary, risky, or politically sensitive. Schein's (2010) concept of organisational culture can help make sense of this in terms of how environments where learning and inquiry are valued artefacts, dissemination becomes routine. Where they are not, apprentices' outputs are often lost or underutilised.

Leadership support and mentorship

Where the apprentices reported positive and impactful experiences of dissemination, this was consistently linked to proactive and supportive leaders, mentors or line managers. These individuals facilitated the translation of findings to decision-making forums and legitimised the apprentice's voice. Conversely, a lack of managerial engagement or endorsement from senior leaders or mentors discouraged sharing and undermined confidence. For employers, this highlights the importance of integrating mentoring and research development into apprenticeship frameworks. Line managers who actively engage with apprentice research not only enhance local problem-solving but also cultivate innovation capacity within their teams. This has the potential to positively impact internal learning programmes and create the identity of a learning organisation. Secondary to this is the potential for enhanced recruitment and retention improvement.

Barriers and risk perception

Where organisations were reluctant to engage in the sharing of research externally, this often stemmed from confidentiality concerns or the apprentice's awareness of potential reputational risk due to the original position prior to the project's impact. While such caution is understandable in some contexts, excessive control can suppress valuable learning that might otherwise contribute to organisational improvement. Rodriguez (2014) argued that when various methods of dissemination are embedded in the learning journey, the sharing of new knowledge is more effective. Establishing clear anonymisation and approval protocols may help balance the need for discretion with the benefits of transparency and shared knowledge across the dissemination process.

Long-term impact and knowledge retention

Encouragingly, in some cases research outputs were embedded into organisational practice through training curricula, process improvements, or international replication. These examples show that when dissemination is structurally supported, apprentices can act as genuine agents of organisational learning, and in some cases, agents for change. For employers, embedding research-informed practices into operational systems represents a sustainable route to continuous improvement and innovation and could offer useful opportunities for organisational change and innovation.

Implications for training providers

Training providers play a pivotal role in shaping how apprentices conceptualise and develop research. The findings suggest that while modules like the Work-Based Project effectively develop inquiry skills, they may not always provide sufficient information and support for dissemination as an expected or achievable outcome. Apprentices' surprise at the idea of publishing indicates a pedagogical gap between conducting research and communicating it. This is in congruence with Armstrong`s (2012) view that the discovery of new knowledge tends to focus on the research procedure itself rather than the dissemination of the new understandings.

Providers could better embed dissemination literacy into curricula - through workshops on knowledge translation, guidance on publication or presentation formats, and collaborations with professional bodies. These activities not only enhance employability but also reinforce apprentices' sense of contributing to their field. Training providers could host events and knowledge exchange opportunities where apprentices and employers could share experiences and develop dissemination pipelines. For apprentices geographically distanced, these opportunities could be via virtual means (Pathak et al 2023).

Building cohort and peer communities

Several apprentices noted weak cohort cohesion or limited peer interaction. This undermines collective learning and the sharing of diverse workplace insights - two of the most distinctive strengths of degree apprenticeships. Providers could therefore invest in structured cohort networks, digital platforms, or showcase events where apprentices can present, discuss, and celebrate their findings. Such spaces can act as incubators for confidence, identity formation, and cross-sector learning, aligning with the DAI model's emphasis on affirmation and interaction as drivers of development (Quew-Jones, 2024).

Cross-cutting themes

Informal dissemination as a valid mode

The emphasis of informal sharing through: conversations, internal presentations, and short summaries, suggests apprentices naturally gravitate toward pragmatic, contextually relevant communication. Rather than viewing this as a deficit compared with formal publication, training providers and employers could recognise it as a legitimate form of knowledge mobilisation aligned with workplace practice.

The need for structural enablers

Across all three stakeholder groups, a recurring theme is that dissemination and impact are strongest when they are embedded, expected, and institutionally supported rather than left to individual initiative. Structural enablers include time allocation, recognition frameworks (e.g., awards or CPD credits), digital knowledge repositories, and formalised mentoring structures.

Conclusion and recommendations

This study has revealed that while CMDAs often produce impactful work-based research, apprentice ability to disseminate it, particularly externally, is frequently restricted by lack of time, confidence, and unsupportive institutional and organisational cultures. Apprentices lack research identity and are simply unaware of dissemination as a practice and associated pathways; resulting in underutilised outputs and missed opportunities for wider impact. To address this, training providers must embed more action research and project-based pedagogies to help apprentices develop research skills incrementally. Additionally, dissemination could be taught proactively as a standalone unit or module. This could cover both formal and informal methods, spanning ‘hard’ mechanisms like publishing platforms and ‘soft’ ones such as peer and professional networks.

Employers have a role in shaping a culture which embraces dissemination. By celebrating and circulating apprentice projects internally, they can normalise sharing and reduce barriers such as fear of scrutiny or irrelevance. Professional bodies and membership organisations could also extend their influence by creating spaces for apprentices to build research identity. This could include developing short-form dissemination outlets suited to their time constraints, and forums or working groups that support collaborative peer-to-peer project sharing and validation. This is because where professional bodies were engaged, apprentices demonstrated more confidence and clearer pathways to impact. Furthermore, the wider academic research community must also re-evaluate its role. There is a need for more journals, or special issues within existing ones, that embrace situated, work-based research. Lowering the barrier to entry by allowing minimal

modification of internal project reports could significantly increase dissemination without compromising quality.

A range of future research is suggested to test these findings more broadly but also expand on its works. Firstly, there is an opportunity to expand on Quew-Jones's (2024) excellent Degree Apprentice Identity (DAI) model to include a research identity 'stem' and then use this for quantitative studies to track how this develops across different settings. Secondly, a limitation of this study has been its small sample size, particularly its small number of project-based organisations. While findings indicate PBOs may offer better internal dissemination support, this requires verification across a wider population. Thirdly, the role of the institutional project supervisor also remains underexplored, future work could assess their effectiveness in supporting dissemination. Finally, longitudinal studies could investigate the sustained organisational impact of apprentice projects to determine whether they continue to deliver value long after completion.

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