

Rethinking integration: Paradoxes as systemic tensions in thesis-based work-integrated learning

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Abstract

Work-integrated learning (WIL) is frequently framed as integration of theory and practice through collaboration between higher education and workplace organisations. This article examines practice-based bachelor's and master's theses as a demanding form of WIL, where workplace relevance and academic assessment must be coordinated around a shared student project. Drawing on 17 semi-structured interviews with academic staff and workplace representatives in Norwegian higher education in business administration and cultural industries, the study analyses how tensions concerning belonging, learning and organising shape the conditions for collaboration in thesis-based WIL. The findings show that collaboration can be experienced as meaningful and workable even when integration remains partial. Integration unfolds less as full alignment than as translation, coordination and adjustment across different academic and organisational criteria. The study shows that the coupling between higher education and workplace organisations is asymmetrical: academic criteria of validity remain central, while organisational relevance must be translated into academically assessable knowledge. Responsibility for managing these tensions is often shifted to individual actors, particularly students and supervisors. Thesis-based WIL is therefore both productive and vulnerable, as it depends on local coordination, individual commitment and informal solutions. The article contributes by conceptualising thesis-based WIL as a loosely coupled arrangement rather than seamless integration.

Keywords: Academia–workplace collaboration, Paradox, Practice-based theses, Systemic tensions, Work-integrated learning

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Introduction

Work-integrated learning (WIL) is promoted to strengthen students' employability and professional relevance. Across different formats, it seeks to connect academic learning with authentic work-related experiences. This article addresses the conditions for such collaboration in practice-based bachelor's and master's theses as a form of WIL. It focuses on the tensions that arise when workplace practice and academic assessment meet around a student project.

Practice-based bachelor's and master's theses represent a particularly concentrated and demanding form of WIL (Derinöz et al., 2025a). Students are expected to produce work that simultaneously fulfils academic requirements and addresses organisational needs, often in close collaboration with external practitioners. Unlike internships or shorter project-based activities, practice-based theses bring academic institutions, workplace organisations, and students into sustained interaction around a shared, high-stakes outcome (Dahlquist & Inal, 2022). This makes the thesis a critical site where workplace practice and academic assessment must be coordinated, and where the ambitions of WIL to integrate theory and practice are put to the test (Hattinger et al., 2014). Although the actors involved may share an interest in collaboration, they may understand the thesis, its purpose and its value in different ways.

WIL is widely associated with the language of "bridging", "integration", "collaboration", and "partnership" between academia and workplaces. Yet research indicates that these ambitions are difficult to realise in practice (Derinöz et al., 2025a; Piper et al., 2023). As Björck and Willermark (2025) note, the integration of on-campus and off-campus learning experiences into a cohesive whole is an intended, but not always realised, outcome. The practical realisation of such integration often proves fragile, uneven, or partial (Sunnemark et al., 2024), even though the rhetoric of integration suggests alignment and mutual understanding (Gellerstedt et al., 2015). This difficulty is further reinforced by the fact that universities and organisations operate under different logics, value systems, and performance criteria (Hattinger et al., 2014; Rook & McManus, 2016). Universities typically emphasise scientific rigour, methodological transparency, and theoretical contribution, while organisations prioritise applied relevance, actionable insights, and timely outcomes (Derinöz et al., 2025b). In practice-based theses, these differences do not disappear through collaboration; rather, they shape expectations regarding purpose, quality standards, roles, and responsibilities throughout the process.

Following Billett (2025), integration in WIL can be understood not only as a matter of students' individual learning, but also as dependent on organisational arrangements designed to support such learning. The article focuses on the latter: the conditions for collaboration between higher education institutions and workplace organisations. The aim is to problematise practice-based bachelor's and master's theses as a form of WIL organised at the intersection of workplace practice and academic assessment, where the distinct system logics of higher education and workplace organisations must be coordinated within one shared student project.

Against this backdrop, the paper addresses the following research question: How do tensions concerning belonging, learning, and organising shape the conditions for collaboration in practice-based theses as a form of WIL? To answer this question, the study draws on interviews with academic staff and workplace representatives involved in practice-based theses in Norwegian higher education. The analysis examines how tensions are interpreted and managed in thesis projects within bachelor's and master's programmes in business administration and cultural industries.

Theoretical perspective

Practice-based bachelor's and master's theses occupy a distinctive position in higher education WIL by organising academic work around workplace-based problems (Dahlquist & Inal, 2022; Derinöz et al., 2025a). The thesis becomes a shared object of coordination, placing students, supervisors, and workplace actors within a demanding set of expectations concerning responsibility, assessment, and relevance. These expectations are shaped by different criteria for what counts as valid knowledge, useful contribution, and legitimate participation. Practice-based theses do not only require students to connect theory and practice; they also bring research practice, workplace relevance, and assessment criteria into the same educational arrangement.

The relation between theory and practice cannot be reduced to a simple binary between academic and workplace knowledge, because students move within a context where academia and working life are separate yet intertwined, and where workplace-oriented knowledge production is also subject to academic reflection and assessment (Piper et al., 2023).

In a political science undergraduate programme, structured thesis supervision can function as a form of cognitive apprenticeship, supporting students' development of epistemological skills, critical thinking, problem solving, co-working and project management (Dahlquist & Inal, 2022). In work-study master's programmes in strategic communication, management sciences, and accounting and tax expertise, the value of the thesis depends on its relevance to concrete business needs. At the same time, organisational involvement may create obstacles related to topic alignment, confidentiality, and overly theoretical outputs (Derinöz et al., 2025a). Bjørkvold's (2024) study of an entrepreneurial master's thesis format in primary and lower secondary teacher education shows that students may be expected to use research actively to develop and test a didactic product in schools, rather than merely reproduce existing research. Similarly, in a master's programme in WIL with a focus on Political Studies, Piper et al. (2023) describe a thesis model in which research reports written for host organisations are combined with academic analysis of the learning process and knowledge production involved. Together, these perspectives point to thesis-based WIL as boundary crossing: a two-sided interaction between educational and workplace settings, rather than a simple transfer from education to work (Gellerstedt et al., 2015). This also positions workplace organisations as more than sites of application. Ferns et al. (2025) describe partner organisations as co-educators in WIL, as they may provide direction for students' learning, feedback, and in some cases input into assessment. In practice-based theses, however, this co-educative role is shaped by the continued authority of academic criteria: workplace representatives may provide access to organisational problems, contextual knowledge and practical feedback, while academic supervisors remain responsible for methodological standards and academic assessment (Piper et al., 2023).

Hattinger et al. (2014) argue that workplace learning and organisational learning operate at different levels and according to different priorities, which may limit the integration of academic practices in workplace settings. Sunnemark et al. (2024) similarly problematise WIL as a process of rearticulation, where academic programmes must make disciplinary and theoretical traditions relevant to workplace contexts and external demands for employability and usable knowledge. Together, these perspectives suggest that integration in WIL is not a straightforward connection between compatible domains, but a negotiated process shaped by different institutional purposes, knowledge forms and evaluative criteria. Rook and McManus (2016) also show that WIL is shaped by the university ecosystem in which it is embedded: stakeholders may share a general commitment to WIL while differing in how they understand graduate attributes, employability, academic purpose and industry relevance. They also show how academic cultures described as bureaucratic, rigid and traditional may constrain course design and collaboration with industry. Studies of boundary crossing emphasise that collaboration across institutional contexts involves discontinuity that actors must actively manage (Gellerstedt et al., 2015). Thesis-based WIL therefore brings together actors who may share a commitment to collaboration while working with different criteria for quality, usefulness, legitimacy and learning.

This article approaches these tensions through a paradox perspective (Smith & Lewis, 2011). In organisational theory, paradox refers to persistent tensions between interdependent demands that appear contradictory yet remain active over time (Schad & Bansal, 2018). Such tensions are often experienced as competing goals, conflicting interpretations, or incompatible frames of reference that require sensemaking and ongoing adjustment (Braathen, 2016). The paradox perspective is useful for this study because it shifts attention from implementation failure to the conditions under which organised collaboration becomes possible. In thesis-based WIL, these tensions become visible when academic institutions uphold standards of assessment, methodological rigour, and disciplinary legitimacy, while workplace organisations value contextual usefulness, operational relevance, and situated judgement. Consequently, the tensions are not merely implementation problems; they are systemic and constituted through organising activities. Misalignment between academic and workplace expectations indicates that thesis-based WIL depends on coordinating demands that cannot be fully harmonised. These demands can be made workable in practice, but they do not collapse into a single evaluative order.

Furthermore, universities and workplace organisations can be understood as differentiated complex adaptive systems that maintain coherence through their own routines, categories, and evaluative criteria (Rook & McManus, 2016). From such a perspective, tensions are not temporary disturbances but persistent features that must be continuously balanced as systems respond to internal and external complexity (Braathen, 2016). A complexity-informed systems perspective helps explain why such tensions persist rather than disappear (Heylighen, 2011). External demands are interpreted through these internal structures rather than simply absorbed as shared meaning. Concepts such as learning, quality, and relevance may therefore circulate across academic and organisational settings while carrying different meanings and practical implications. As universities and organisations participate in such ongoing practices, internal logics and boundaries are maintained as dynamically stable structures even when actors are committed to collaboration. Thus, tension, contradiction,

and paradox are not exceptional outcomes of organising under complexity, but normal and persistent features of it (Schad & Bansal, 2018). Organisations interpret external events through internally generated logics and translate them into system-specific understandings that help preserve organisational coherence (Braathen, 2016).

The resulting paradoxes therefore arise as systemic properties of organising activity, generated by simultaneous demands to perform functions that are logically incompatible yet practically inseparable. From this perspective, paradox is inseparable from organising in itself, not a failure of design or coordination, nor a temporary disturbance to be eliminated (Smith & Lewis, 2011). Paradoxes persist because systems must continue operating in self-referential ways despite contradictions. Rather than being resolved, they are rendered workable through ongoing adjustments that sustain viability.

Applied to thesis-based WIL, this means that different systems become coupled around a shared student project. The thesis provides a common object of coordination, while the criteria used to define its value remain differentiated. Academic supervisors, workplace representatives, and students may all contribute to the same project, yet their contributions and expectations are shaped by different organisational logics. The central issue of this study is therefore how collaboration is made workable under the distinct system logics of higher education and workplace organisations. On this basis, the paradox framework is used to examine how academic supervisors and workplace representatives describe the expectations, responsibilities and forms of coordination that surround students' thesis work. More specifically, the study focuses on three paradoxes: belonging, learning, and organising (Smith & Lewis, 2011). The paradox of belonging concerns how students may be recognised as legitimate participants while remaining partly external to organisational and academic cores. The paradox of learning concerns how practice-based learning may be valued in organisational settings while methods and formal assessment remain tied to academic criteria. The paradox of organising concerns how thesis-based WIL requires designed structures while depending on local adjustment, informal coordination, and emergent practice. Belonging, learning, and organising direct attention to how collaboration is described, maintained, and constrained in thesis-based WIL and to how actors navigate tensions that arise when academic and organisational rationalities intersect.

Research methodology

To examine how tensions concerning belonging, learning and organising shape the conditions for collaboration in practice-based bachelor's and master's theses, the study analyses qualitative interviews with academic supervisors and workplace representatives involved in thesis-based WIL in Norwegian higher education. The unit of analysis is not students' learning experiences or collaboration as directly observed practice, but academic and workplace actors' accounts of how practice-based thesis collaboration is understood, organised and evaluated. The analysis therefore focuses on how these actors describe expectations, responsibilities and forms of coordination when the distinct system logics of higher education and workplace organisations meet in students' thesis work.

The empirical material consists of 17 semi-structured interviews: 10 with academic staff and 7 with workplace representatives (see participant overview in the Appendix). 12 interviews were conducted in April and May 2025, and the remaining 5 in November and December 2025. The academic informants were academic staff involved in bachelor's and master's thesis supervision, course coordination or programme responsibility at six Norwegian universities and university colleges. Students were not interviewed, as the study does not examine students' learning experiences directly. The student perspective is included only indirectly, through supervisors' and workplace representatives' accounts of the thesis process.

Participants were recruited through purposive and snowball sampling. Initial contacts were identified through the authors' professional networks and knowledge of programmes involving thesis-based collaboration with external organisations. Participants were selected because they had direct experience with practice-based bachelor's or master's theses, either as academic staff or workplace representatives. Additional participants were recruited through recommendations from earlier interviewees. Workplace representatives were primarily identified through established collaborations with higher education institutions and through organisations that had previously hosted or collaborated with thesis students.

The academic and workplace informants were connected to practice-based thesis work within two broad knowledge areas: business administration and cultural industries. Business administration includes programmes and projects related to marketing, crisis management and business economics. Cultural industries include programmes and projects related to media and communication, journalism, video production, performing arts and other creative-sector

contexts. The workplace informants represent private companies in industry, technology and consumer-oriented markets, as well as cultural organisations and smaller independent actors. The organisations vary in size and degree of formalisation, ranging from resource-constrained units to larger enterprises operating under stronger commercial or public value pressures. This variation allows for analysis of how thesis-based collaboration is understood and managed under different organisational conditions.

The interviews were conducted via Microsoft Teams and lasted approximately 45 minutes on average. With the participants' consent, the interviews were audio-recorded solely for transcription purposes and subsequently transcribed. The recordings were stored using a secure, encrypted application and were accessible only to two of the authors. They were not stored locally on personal phones or computers. Because the study involved processing personal data in the form of audio recordings and interview transcripts, the project was reported to Sikt, the Norwegian Agency for Shared Services in Education and Research. Sikt is a Norwegian government service provider that delivers national services for the education and research sectors (<https://sikt.no/en/about-sikt>).

To ensure research ethics and responsible data management, oral informed consent was obtained before each interview. Participants received oral information about the purpose of the study, how the data would be collected, stored and used, the voluntary nature of their participation, their right to withdraw, and how their confidentiality would be protected. No special categories of personal data were intentionally collected. Identifying information was removed or generalised during transcription and reporting, and neither participants nor institutions are identified in the article. The audio files will be deleted upon completion of the project.

The semi-structured interview guide began with questions about the participants' roles, relevant experience, and involvement in bachelor's and master's theses. The main part addressed current thesis formats, collaboration between higher education and workplace organisations, the perceived benefits and challenges of such collaboration, and the institutional arrangements supporting practice-based theses. Participants were also asked about students' roles, responsibilities, initiative and learning, as well as differences between traditional and practice-based thesis formats. The final part invited broader reflections on how practice-based bachelor's and master's theses and collaboration between higher education and working life could be further developed. Follow-up questions were adapted to the participants' roles and experiences.

Two researchers analysed the interview material through a theory-informed interpretive reading. The analysis followed an abductive logic, moving iteratively between the theoretical framework and the empirical material (Timmermans & Tavory, 2012). Rather than treating the paradoxes of belonging, learning and organising as fixed categories to be confirmed, they were used as sensitising concepts. They guided attention towards tensions, contradictions and recurring patterns in how informants described thesis-based WIL, while leaving room for empirical variation and unexpected accounts. The findings were therefore neither developed through a purely inductive procedure nor read as straightforward confirmations of the theoretical framework. Instead, repeated readings of the interviews were used to examine how responsibilities, expectations, supervision, relevance and assessment were described across academic staff and workplace representatives. Particular attention was paid to accounts that complicated the initial theoretical concepts, and the material was revisited to assess the plausibility of the emerging interpretation. In this way, the material was used to refine and nuance the understanding of paradoxes in thesis-based WIL.

Results

The empirical material spans different institutional and disciplinary contexts. Practice-based thesis work was described differently across programmes, institutions, and fields. In creative and production-oriented programmes, informants often described practice-based work as compatible with existing educational traditions, where production, iteration, and reflection through practice already played a central role. In more traditionally structured programmes, informants placed greater emphasis on academic thesis conventions, methodological requirements, and assessment criteria. This variation is important for understanding the findings. Practice-based theses were not organised through a single shared model but shaped by local programme traditions, institutional arrangements, and disciplinary expectations.

Across this variation, three recurring tensions were identified. These tensions concern belonging, learning, and

organising. The following analysis presents these as three paradoxes that illuminate how thesis-based WIL becomes workable despite persistent differences between academic and workplace expectations.

The paradox of belonging: recognition and conditional participation

The paradox of belonging concerns how students are recognised as legitimate participants (Smith & Lewis, 2011). As such, belonging is not described primarily as social inclusion, but as conditional participation shaped by different academic and organisational expectations. The material indicates that students are often positioned as partial rather than fully integrated participants in organisational contexts. Several informants described students as contributors to projects or organisational activities without necessarily being incorporated into central organisational processes or long-term structures. This was not always presented as a problem by the informants themselves, but rather as a practical condition of short-term collaboration formats. One workplace representative described integration as an ambition, but not as something that could be assumed:

“For me, it is very important that they are as integrated as possible. So, it varies somewhat. A lot also depends on personality type. [...]” (16).

By contrast, another informant viewed the students as external to the organisation:

“they were not here; they just retrieved data” (14).

From this perspective, belonging appears less as a stable relational achievement and more as a situational and structurally conditioned form of participation.

Academic and organisational actors often referred to shared categories such as quality, value and relevance, while attaching different meanings to them. One organisational informant stressed this as a difference in goals:

“We are looking for a result [...] What have the students found out? What is the result? What are their recommendations? [...] while the university’s goal, as I understand it, is really that the students demonstrate that they have understood the curriculum and have been able to use the curriculum” (13).

Another informant stated:

“I don’t think the academic requirements meet the company’s needs. At all. [...] It quickly becomes theoretical” (14).

From the organisational side, value is linked to whether the investment in students returns something useful:

“the time we invest in the students returns, so that they at least deliver enough value” (15).

From the academic side, practical problems must still be made into academically valid work:

“it is a practical problem that you solve, but you use a science-based, scientific approach to the way you solve the problem” (4).

Another academic informant similarly stressed that:

“academic method is not only an exercise in itself, but also part of a broader skill that can be useful in the industry” (12).

Academic legitimacy is tied to methodological rigour and theoretical articulation, whereas organisational recognition is tied to contextual usefulness and practical value. These criteria are internally coherent within each system but difficult to reconcile across them. Students may conduct their theses within a workplace context, but their belonging remains shaped by the academic structures through which the thesis is assessed. This suggests that the academic system and the workplace do not mutually adapt to one another but remain governed by different evaluation structures.

The divergence between academic and organisational expectations does not appear as episodic breakdown but as a normalised condition. One academic informant described working:

“very much with this bridging” and with showing students that academic and practice-oriented strands are not “two opposing strands competing with each other,” while also noting that “it does not always work” and that “not everyone understands this” (12).

From the workplace side, belonging depends on whether the collaboration can be connected to ordinary organisational activity. As one informant put it:

“the balance for us as an employer is that we find something they can deliver to us, which makes them a natural part of our everyday work” (10).

Students may also be described as:

“completely external actors” who “just retrieved data,” yet the collaboration is still considered successful (14).

Organisational engagement is often temporally limited and resource constrained. A company “exists to make money” as one informant (16) noted, and student collaboration is evaluated according to its contribution to organisational priorities rather than inclusion as such. What emerges is not failed integration, but a stabilised arrangement in which external positioning is accepted as normal. Actions that strengthen legitimacy within one framework may weaken recognition in the other. Belonging is therefore structured by enduring distinctions between academic and organisational logics rather than by temporary coordination problems.

Although misalignment is structurally produced, it is managed at the level of individuals. Students must calibrate involvement and distance and contribute organisational value while maintaining academic independence. As one practitioner noted:

“The company needs to see and understand the business value of such a collaboration. It is the student’s task to demonstrate that value.” (2).

At the same time, supervisors emphasise the need to preserve academic autonomy. This also means that supervisors may guide and challenge students but should not take ownership of the project or the external contact. As one academic supervisor explained:

“I have a thousand research questions that are interesting, but the ownership must always remain with the students” (7).

The same supervisor linked this to workplace collaboration:

“If you want collaboration with a company, you send the right signals if you take the initiative yourself” (7).

The burden of integration is thus redistributed rather than resolved.

Rather than creating fully aligned structures, students and supervisors must continuously navigate shifting expectations between organisational participation and academic requirements. In some cases, workplace actors expect students to produce practical outputs, while the programme has primarily given them a theoretical orientation rather than formal production training (8). One organisational informant noted that:

“the expectations of the university and the company are not always completely aligned” (16).

The same informant further explained that toward the end of the collaboration, students “could not deliver value” to the

organisation anymore because “they had to finish writing their thesis” (16).

Overall, the interviews suggest that tensions related to participation, legitimacy, and recognition do not disappear in thesis-based WIL arrangements. Several informants described ongoing mismatches between academic expectations and organisational needs yet still presented the collaborations as meaningful or workable in practice. Rather than being resolved, these tensions appear to be managed through adjustments, selective participation, and shifting expectations across contexts. From this perspective, the paradox of belonging does not explain WIL as a whole but helps illuminate some of the conditions under which thesis-based WIL becomes workable despite persistent misalignment. Belonging is therefore not a stable status that actors either achieve or lack, but something continuously negotiated within systems that recognise different forms of value and legitimacy.

The paradox of learning: translation and assessment

The paradox of learning concerns how practice-based learning is valued in organisational settings while formal assessment remains tied to academic criteria. Across the material, informants described practice-based theses as valuable because they expose students to concrete problems, organisational realities, and forms of judgement that are difficult to learn through coursework alone. At the same time, this learning must be translated into an academic thesis that can be assessed through established criteria such as method, theory, analytical clarity, and written argumentation. This creates a tension between exploratory participation and assessable academic output. Students are encouraged to engage with open-ended organisational problems, but they must also stabilise these experiences into a coherent thesis within a limited timeframe. As one supervisor stated:

“We still hold that the theses must be ordinary bachelor theses; they must include method, and they must include theory” (4).

Practice may broaden what students learn, but academic assessment continues to depend on whether this learning can be articulated in recognised scholarly forms.

Several informants emphasised learning by doing as central to practice-based thesis work. As one academic informant put it:

“I believe that learning by doing is something you often learn much better from than only taking in knowledge through a book or other things, but I also believe in the combination” (9).

In production-oriented formats, this combination was described as a relation in which:

“the theoretical part and the practical part should mirror each other” and create “a reciprocal relation between the theoretical and the practical” (6).

Another informant similarly described practice-based thesis work as inquiry grounded in students’ own practice, while still requiring them to “show that they master scientific theory” (11).

The material also shows that workplace actors value forms of competence that are not always easily captured in formal academic assessment. One external collaborator argued that students may demonstrate that they have understood and used the curriculum and methods correctly, while the practical outcome may still be weak (13). Informants repeatedly emphasised initiative, operational ability, contextual judgement, and the capacity to contribute in real organisational settings. As one informant explained in relation to journalism students:

“If you sit in a morning meeting in a newsroom and you don’t take initiative and don’t have a single idea, then you might as well find another profession to work in” (9).

Similarly, one external collaborator stressed that small organisations depend on employees who can contribute operationally from the beginning:

“We are result-oriented and performance-driven,” and “everyone must have billable hours” (10).

Selective visibility further contributes to this pattern. Forms of learning that align with institutional categories, such as analytical reasoning, methodological reflection, and theoretical articulation, are foregrounded, while other forms of learning remain less visible within formal assessment regimes. Organisational understanding, practical operational competence, adaptability, and situated problem-solving may be developed through WIL, yet these dimensions are not always easily translated into academically recognised forms. One workplace informant described work experience as “perhaps the most important” form of learning for young people, because it can give students a sense that:

“I have value, I can do anything” and make them “confident that you can be in a job” (10).

This tension was expressed by several informants. One industry representative stated that:

“the expectations of the university and the company are not always completely aligned” (16).

Another explained:

“But then we fail in the way we manage to integrate the two worlds” (13).

Under these conditions, students are often expected to reconcile organisational relevance and academic legitimacy on their own. The paradox of learning therefore does not concern a complete failure to integrate theory and practice, but the limits of transformation within established evaluative regimes. Learning may occur across multiple dimensions in thesis-based WIL, while only some forms are consistently recognised within institutional assessment structures.

The paradox of organising: coordination and responsibility

The paradox of organising concerns how practice-based thesis collaboration depends on formal structures, while also requiring local adaptation. Thesis-based WIL must be organised through curricula, supervision models, assessment criteria, and agreements with external partners. At the same time, much of the collaboration takes shape through situated judgement, informal coordination, and adjustments that cannot be fully specified in advance. The tension is therefore not simply between good and poor organisation, but between what can be designed in advance and what must be handled as the collaboration unfolds.

In this light, the issue is not insufficient coordination but the limits of design under complexity. Attempts to institutionalise flexible, practice-integrated formats encounter different constraints across local organisational conditions. For some informants, the central challenge concerned formal structures and procedures. One supervisor explained:

“We want to develop a practice-based thesis format, but the institutional structure is so rigid. We don’t get support for it in the system” (12).

Here, the tension was described as one of institutional rigidity, where existing structures limited the development of alternative thesis formats.

Other informants emphasised a different challenge. Rather than describing formal resistance, they pointed to changing organisational priorities and resource allocation. One informant noted that practice-oriented initiatives had previously received substantial institutional support, but that this support had weakened over time:

“There was a time when this kind of activities had strong support [...] But now we’re in a different financial situation” (8).

In this case, practice-based formats appeared vulnerable not because they lacked legitimacy locally, but because they depended on shifting organisational priorities and available resources.

While these experiences differ, both illustrate how practice-based initiatives remain dependent on institutional conditions that are often beyond the control of individual supervisors and students. Organising therefore does not move towards structural resolution. Instead, adjustments are made within existing institutional parameters. Where institutional

support is limited or uneven, coordination is often individualised. Several informants described practice-based thesis formats as relying on substantial additional effort from supervisors and practitioners. One supervisor explained that practice-based formats required following students through both practical production and academic reflection:

“Now we must follow them through both the film production and the academic reflection. It’s a lot more work for us” (11).

Similar descriptions appeared in other interviews, where informants highlighted the administrative work involved in maintaining partnerships and coordinating external collaborations.

The interviews also pointed to variation in how practice-based approaches were accommodated within local programme structures. Rather than indicating a consistent distinction between bachelor’s and master’s levels, informants described different institutional arrangements. One informant stressed that the practical master’s thesis was clearly distinguished from a traditional academic format and therefore required a shorter written component (9), while another described master’s programmes that explicitly offered both theoretical and practice-theoretical thesis formats (5). Together, these examples suggest that opportunities for practice-based work were shaped by local programme arrangements rather than by a single shared model.

A further pattern concerns the relationship between formal structures and local adaptation. As one informant observed, practice-based theses were formally presented as an option, yet “the course description is very traditional” (12). Rather than suggesting a complete absence of support, this points to a gap between formal programme descriptions and the ways practice-based work is organised in everyday educational settings. Practice-based initiatives were often made possible through local adaptations, informal coordination, and individual commitment rather than through fully developed institutional structures.

Temporal dynamics further reinforce this pattern. Practice-based initiatives may receive support for a period, yet remain vulnerable to changing priorities, leadership decisions, or resource constraints. The discontinuation of practice-oriented courses despite positive evaluations illustrates how innovation can be accommodated temporarily without necessarily becoming embedded in core institutional structures. Over time, organising proceeds through ongoing adjustment rather than structural transformation.

The paradox of organising helps illuminate how thesis-based WIL is shaped by the interaction between formal structures and emergent local practices. The interviews do not suggest a single form of organisational constraint. Rather, informants described different challenges related to institutional rigidity, resource allocation, and supervisory capacity. Across these contexts, practice-based initiatives are sustained through local adaptation and ongoing negotiation rather than through fully stabilised organisational arrangements.

Discussion: from integration to loose coupling

The analysis answers the research question by showing that collaboration in thesis-based WIL is shaped by persistent tensions between academic and workplace expectations, practices, and evaluative criteria. These tensions do not disappear through closer alignment. Rather, collaboration becomes workable through three recurrent processes: translation, coordination, and adjustment. Organisational relevance must be translated into academically evaluable knowledge; roles and expectations must be coordinated locally; and thesis topics, supervision, outputs and deadlines must be adjusted as academic and organisational conditions change. The findings therefore suggest that thesis-based WIL is a loosely coupled arrangement in which higher education institutions and workplace organisations remain partly distinct while still enabling collaboration.

This interpretation nuances a central assumption in the WIL literature. WIL is frequently framed through the language of bridging, partnership, and integration, with emphasis on closer alignment between higher education, workplaces, and wider society (Ferns et al., 2025; Gellerstedt et al., 2015; Hattinger et al., 2014; Sunnemark et al., 2024; Zegwaard & Pretti, 2023). Billett (2025) argues that integration in WIL must be specified rather than assumed, including how educational arrangements are organised to support connections between educational and workplace settings.

The findings in this study contribute to the discussion by showing how integration is made workable through

translation, coordination and adjustment. Translation concerns the reformulation of organisational relevance into academically evaluable knowledge. Coordination concerns the local work of keeping students, supervisors and workplace representatives sufficiently connected around roles, expectations and timeframes. Adjustment concerns the ongoing calibration of thesis topics, outputs, supervision and deadlines as academic and organisational conditions change during the process.

Translation is necessary because organisational problems do not automatically become valid academic topics. From a business perspective, Derinöz et al. (2025a) show that master's theses are valued when they address concrete organisational needs, but that such collaboration is constrained by tutor workload, topic misalignment, confidentiality concerns and the perception that theses may become too theoretical. This study extends the argument by showing that such obstacles are not merely practical barriers to better integration, but expressions of a more persistent tension between organisational relevance and academic evaluability.

In a related study, Derinöz et al. (2025b) argue that work-study master's theses require a shared understanding of objectives, constraints and deliverables. The present study supports the need for such clarification but also suggests that shared understanding is not sufficient to remove the underlying differences between academic and organisational criteria. This also resonates with Sunnemark et al.'s (2024) account of WIL as a process of rearticulation, where academic traditions are adjusted in response to external demands for employability and usable knowledge. In practice-based theses, such rearticulation becomes visible when organisational problems must be made researchable, arguable and assessable within academic standards.

Coordination concerns the work required to keep students, supervisors and workplace representatives sufficiently aligned around roles, expectations, timeframes and responsibilities for the thesis process to continue (Piper et al., 2023). This is consistent with Billett's (2025) emphasis on educational arrangements, and with Dahlquist and Inal's (2022) account of structured thesis supervision as supporting not only epistemological development but also co-working and project management. It also qualifies the idea of workplace partners as co-educators in WIL (Ferns et al., 2025). In practice-based theses, workplace representatives contribute to students' learning by providing access to real problems, situated knowledge and practical feedback. Yet their co-educative role remains partial, because academic supervisors retain responsibility for methodological standards and assessment criteria. Compared with the more formalised WIL thesis model described by Piper et al. (2023), where students are guided by both a workplace supervisor and a university supervisor, the findings in this study suggest that practice-based theses are often coordinated through looser and more locally negotiated arrangements.

Adjustment reflects the fact that thesis collaboration unfolds under changing organisational needs, academic deadlines, supervisory capacity and assessment criteria. Derinöz et al. (2025b) point to the need for clearer or more flexible thesis formats that can handle differing methodological expectations while maintaining academic integrity. Bjørkvold (2024) similarly shows that profession-oriented theses can combine practice orientation and research-based work when practical development is made researchable and arguable. This study supports the need for adaptable formats but suggests that adjustment is not a one-off design solution. It is an ongoing process through which actors calibrate thesis topics, outputs, supervision, participation and deadlines as the project unfolds. This is also consistent with Hattinger et al. (2014), who emphasise that workplace learning is shaped by organisational conditions and strategic priorities.

Taken together, these mechanisms connect to Hattinger et al.'s (2014) distinction between workplace learning and organisational learning as operating at different levels and according to different priorities. In thesis-based WIL, academic and organisational criteria are not gradually brought into one shared logic. They remain partly separate but are connected through local arrangements that allow collaboration to continue. What is described normatively as "integration of theory and practice" unfolds through translation, coordination and adjustment. Organisational relevance must be reformulated into academically evaluable knowledge; workplace problem-solving must be rendered methodologically transparent; and roles and expectations must be coordinated locally. The coupling is therefore asymmetrical: systems interact, but do not dissolve their boundaries.

From a complexity perspective, this pattern reflects how differentiated systems maintain operational autonomy even under conditions of interdependence. Academic and organisational criteria remain internally coherent and only partially align through local adjustments. Alignment is provisional; misalignment is rendered workable rather than eliminated. This interpretation also aligns with Sunnemark et al.'s (2024) account of WIL as an uneven meeting field between academic traditions and external demands for employability and usable knowledge. They argue that the concrete implementation of WIL involves processes of rearticulation through which universities partially maintain their traditional

tasks, foci and priorities while adjusting them to external expectations. In practice-based theses, this uneven meeting field becomes visible in the need to make organisational problems academically assessable. Workplace relevance is not simply added to academic work; it requires translation between different criteria for value, usefulness and legitimacy. This supports the argument that integration in thesis-based WIL is not a stable bridge between already compatible domains, but a complex and asymmetrical process of coordination across differentiated systems.

Paradox scholarship has largely conceptualised tensions as experienced contradictions requiring managerial sensemaking or strategic balancing (Smith & Lewis, 2011). While such perspectives illuminate how actors interpret competing demands, they tend to locate paradox at the level of cognition or organisational design (Rook & McManus, 2016). The present study suggests that paradox in thesis-based WIL is more deeply embedded. Belonging is structured by system-specific criteria of recognition. Learning is filtered through established regimes of evaluability. Organising oscillates between formal design and emergent coordination without resolving their interdependence. These tensions persist not because actors fail to manage them effectively, but because they are constitutive of how organising occurs under complexity. Paradox is not a temporary disturbance but a systemic property of differentiated reproduction. Rook and McManus (2016) show how WIL develops in university contexts marked by change, uncertainty, rigid structures and competing expectations around course design and industry collaboration. The analysis presented here resonates with this view but suggests a more modest form of change. In thesis-based WIL, complexity does not necessarily open a broad “space of possibilities”; rather, it produces conditions in which collaboration must be continuously made workable across distinct academic and organisational logics.

Across the three paradoxes, a recurring pattern emerges: responsibility for managing systemic tension is frequently displaced onto individual actors, particularly students. Students are expected to demonstrate organisational relevance while preserving academic independence, to translate situated practice into academically assessable form, and to navigate institutional rigidity through personal initiative. This individualisation of coordination performs a stabilising function. By positioning students as boundary-spanning agents, systems maintain their evaluative criteria while allowing limited cross-system interaction. What appears in WIL literature as enhanced self-regulation and employability can, in this light, also be understood as the capacity to operate within incompatible evaluative frameworks. Students develop not only adaptive skills, but the ability to navigate systemic plurality.

However, this arrangement also reveals structural fragility. Because coordination depends heavily on individual initiative, relational goodwill, and informal negotiation, thesis-based WIL remains vulnerable to shifts in resources, institutional priorities, or supervisory capacity. What appears as successful collaboration at the project level may therefore coexist with weak institutional embedding at the structural level. Stronger institutional embedding of practice-based theses might stabilise expectations and reduce fragility. Yet deeper institutionalisation would likely standardise interaction patterns and narrow local flexibility. In systemic terms, institutional reform would reconfigure rather than eliminate paradox.

The design question is therefore not whether to integrate, but how to calibrate coupling conditions without undermining the operational autonomy of participating systems. Institutional responsibility lies not in eliminating difference, but in making its consequences visible, manageable, and pedagogically productive. Thesis-based WIL may thus be less a bridge between academia and work than a structured site of exposure. Its value lies in creating conditions in which tensions between academic and workplace expectations can be encountered, navigated, and made pedagogically productive.

Conclusion

This paper asked how tensions between academic and workplace expectations, practices, and evaluative criteria shape the conditions for collaboration in practice-based bachelor’s and master’s theses as a form of WIL. The analysis shows that collaboration is shaped less by progressive integration than by the need to make persistent differences workable. Academic and workplace actors may share an interest in collaboration, but they operate with different criteria for purpose, quality, relevance, and responsibility. In practice-based theses, these differences are not removed through collaboration. They are managed through translation, coordination and adjustment.

The first contribution of the article is to show that practice-based theses are better understood as a loosely coupled

form of WIL than as a fully integrated model of collaboration between higher education institutions and workplace organisations. Organisational relevance must be translated into academically evaluable knowledge, while academic standards remain central even when workplace relevance is foregrounded. The coupling between higher education institutions and workplace organisations is therefore asymmetrical. The systems interact, but they do not dissolve their boundaries. This pattern helps explain why collaboration can be valued as successful even when integration remains partial.

The second contribution concerns how responsibility for managing tensions is distributed. Across the material, supervisors and workplace representatives describe collaboration as dependent on local judgement, informal coordination, and individual initiative. Academic supervisors are primarily associated with safeguarding academic quality, methodological transparency, and assessment criteria, while workplace representatives are associated with access to organisational problems, contextual knowledge, and practical relevance. Students appear in these accounts as central actors who must connect academic and workplace expectations within the thesis project. Since students were not interviewed, however, the study cannot assess how students themselves experience this position.

The third contribution concerns the fragility of this form of WIL. Collaboration therefore appears productive but weakly institutionalised, as it often relies on local judgement, individual initiative, and informal coordination. Stronger institutional support may therefore be needed, but such support should not assume that tensions can be eliminated.

The theoretical and practical implications are distinct but closely connected. Theoretically, paradox theory and a complexity-informed perspective show that WIL should not only be understood through the language of integration, but also through the tensions that make integration partial and difficult to stabilise. In practice-based theses, these are not temporary obstacles to integration, but persistent conditions shaped by different understandings of relevance, quality, and responsibility. Practically, this means that institutions cannot simply design such tensions away. Instead, thesis formats should clarify how workplace relevance can be translated into academically evaluable knowledge. Supervision arrangements should specify the roles and responsibilities of academic supervisors, workplace representatives, and students. Assessment criteria should make explicit how practical relevance, methodological quality, and theoretical reflection are to be balanced. Such arrangements also need to be adapted to programme context, thesis level, and disciplinary traditions, since practice-based theses are not organised through a single shared model. The task is therefore not to remove tension from practice-based WIL, but to provide structures that help students and supervisors recognise, discuss, and handle these tensions during the thesis process.

Limitations and future research

The study has three main limitations. First, it is based on interviews with academic supervisors and workplace representatives and therefore captures how these actors interpret the conditions for collaboration at a particular point in time. It does not include students' own perspectives, nor does it examine collaboration as directly observed practice. The findings therefore illuminate interpreted conditions for collaboration rather than students' learning experiences or the interaction between students, supervisors, and workplace representatives as it unfolds in practice. Since the study is not longitudinal, it also cannot examine how these conditions and tensions develop, stabilise, or change over time.

Second, the empirical material is unevenly distributed across bachelor's and master's levels. Several participants, particularly the workplace representatives, discussed their experiences primarily in relation to bachelor's theses. The findings therefore provide a stronger empirical basis for understanding practice-based bachelor's theses than practice-based master's theses, and conclusions concerning the latter should be interpreted with greater caution.

Third, participants were recruited through professional networks and snowball sampling. This provided access to participants with relevant experience and detailed knowledge of practice-based thesis collaboration but may also have resulted in an overrepresentation of actors who are particularly interested in or committed to WIL. Perspectives from actors who are less engaged, more sceptical, or who have chosen not to participate in such collaborations may therefore be less visible in the material.

The study was also conducted within Norwegian higher education and across a limited number of programmes and disciplinary settings. Institutional arrangements and disciplinary traditions may shape how practice-based theses are organised, which limits the transferability of the findings to other programmes, disciplines, and higher education systems. The findings should therefore not be understood as representing a single model of thesis-based WIL, but as identifying

tensions and organising conditions that may take different forms across contexts.

Future research could include students' perspectives, compare bachelor's and master's theses more systematically, and use longitudinal, observational, and comparative designs to examine how these tensions are experienced, negotiated, stabilised, and changed over time.

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References

- Billett, S. (2025). Constituting integration in work-integrated education and learning. *Studies in Continuing Education*, 47(3), 513-530. <https://doi.org/10.1080/0158037X.2024.2363262>
- Björck, V., & Willermark, S. (2025). Where is the 'WIL' in work-integrated learning research? *Studies in Continuing Education*, 47(3), 531-545. <https://doi.org/10.1080/0158037X.2024.2378718>
- Björkvold, T. (2024). En profesjonsrettet og forskningsbasert masteroppgave. [A professionally oriented and research-based master's thesis]. *Uniped*, 47(4), 268-282. <https://doi.org/10.18261/uniped.47.4.4>
- Braathen, P. (2016). Paradox in organizations seen as social complex systems. *Emergence: Complexity and Organization*, 18(2), 1-15.
- Dahlquist, K., & Inal, T. (2022). Bachelor thesis as practice-based WIL education and the role of supervision. In *International Conference on Work Integrated Learning: Abstract Book. Paper presented at WIL'22 International Conference on Work Integrated Learning, 7-9 December 2022, University West, Trollhättan, Sweden*. pp. 68-69. University West.
- Derinöz, S., Lambotte, F., Poncin, I., & Provost, A. C. (2025a). Bridging the science-business gap in work-integrated learning through students' master theses: A business perspective in French-speaking Belgium. In J. Fleming & K. E. Zegwaard (Eds.) *Refereed Proceedings of the 24th WACE World Conference on Cooperative and Work-Integrated Education, 2024, Bahçeşehir University, Istanbul, Turkey*. WACE-IRS-Proceedings-2024.pdf. 28 May 2025, pp. 28-32.
- Derinöz, S., Lambotte, F., Poncin, I., & Provost, A. C. (2025b). Reinventing master's theses as work-integrated learning: A multi-stakeholder approach. In K. Areskoug Josefsson, P. Assmo, U. Lundh Snis, A.K. Olsson, P. Lauvås & A. Thon (Eds.), *Proceedings of Wil'25: The 3rd International Conference of Work-Integrated Learning, 22-24 September 2025. Kristiania University of Applied Sciences, Oslo, Norway*. University West, pp. 230-233.
- Ferns, S. J., Zegwaard, K. E., Pretti, T. J., & Rowe, A. D. (2025). Defining and designing work-integrated learning curriculum. *Higher Education Research & Development*, 44(2), 371-385. <https://doi.org/10.1080/07294360.2024.2399072>
- Gellerstedt, M., Johansson, K., & Winman, T. (2015). Work integrated learning: A marriage between academia and working life. *Journal of Systemics, Cybernetics and Informatics*, 13(6), 38-46.
- Hattinger, M., Eriksson, K., Malmsköld, L., & Svensson, L. (2014). Work-integrated learning and co-creation of knowledge: Design of collaborative technology enhanced learning activities. In A. Ghazawneh, J. Nørhjerg, & J. Pries-Heje (Eds.), *Proceedings of the 37th Information Systems Research Seminar in Scandinavia (IRIS 37)*, pp. 1-15.
- Heylighen, F. (2011). Self-organization of complex, intelligent systems: An action ontology for transdisciplinary integration. *Integral Review*, 134(6), 1-39.
- Piper, L., Dahlquist, K., Sunnemark, F., & Assmo, P. (2023). Rethinking WIL for an academic discipline: The model of Work Integrated Political Studies (WIPS). *Cogent Education*, 10(1), 2191397. <https://doi.org/10.1080/2331186X.2023.2191397>

- Rook, L., & McManus, L. A. (2016). *Viewing WIL in business schools through a new lens: Moving to the edge of chaos with complexity theory*. <https://hdl.handle.net/102.100.100/559800>
- Schad, J., & Bansal, P. (2018). Seeing the forest and the trees: How a systems perspective informs paradox research. *Journal of Management Studies*, 55(8), 1490–1506. <https://doi.org/10.1111/joms.12398>
- Smith, W. K., & Lewis, M. W. (2011). Toward a theory of paradox: A dynamic equilibrium model of organizing. *Academy of Management Review*, 36(2), 381–403. <https://doi.org/10.5465/amr.2009.0223>
- Sunnemark, L., Sunnemark, F., Dahlquist, K., Gahnström, E., Assmo, P., & Piper, L. (2024). Bridging theory and practice through work-integrated learning (WIL): Critical perspectives on the conceptualisations of WIL at a university in Sweden. *Critical Studies in Education*, 65(4), 403-420. <https://doi.org/10.1080/17508487.2023.2294462>
- Timmermans, S., & Tavory, I. (2012). Theory construction in qualitative research: From grounded theory to abductive analysis. *Sociological Theory*, 30(3), 167-186. <https://doi.org/10.1177/0735275112457914>
- Zegwaard, K. E., & Pretti, T. J. (2023). Future directions for advancing work-integrated learning pedagogy. In K. E. Zegwaard & T. J. Pretti (Eds.), *The Routledge international handbook of work-integrated learning*, pp. 593–606. Routledge. <https://doi.org/10.4324/9781003156420-42>

Appendix

Table 1: Overview of interview participants, roles, and educational contexts

Informant no.	Knowledge area	Informant role	Perspective	Educational context
1	Business administration	Academic staff	Emphasizes practice-oriented projects and the integration of professional experience into thesis work.	Bachelor
2	Business administration	Business representative	Focuses on employability, initiative, operational skills, balance between theory and practice.	Bachelor
3	Business administration	Academic staff	Emphasizes academic rigor and empirical data collection.	Bachelor
4	Business administration	Academic staff	Supports both theoretical and practical approaches to bachelor's theses.	Bachelor
5	Cultural industries	Academic staff	Offers theoretical, practical, and hybrid thesis options.	Bachelor and master
6	Cultural industries	Academic staff	Combines theoretical reflection with practical creative work.	Bachelor and master
7	Business administration	Academic staff	Many students collaborate with companies through real-life case projects.	Bachelor
8	Cultural industries	Academic staff	Extensive experience with practice-based formats and external partnerships.	Bachelor
9	Cultural industries	Academic staff	Emphasizes internships, practical learning, initiative, and learning by doing.	Bachelor and master
10	Cultural industries	Business representative	Collaborates with students on real-world projects and values operational competence.	Bachelor
11	Cultural industries	Academic staff	Uses performative methods and self-reflection as central pedagogical components.	Bachelor and master
12	Cultural industries	Academic staff	Focuses on interdisciplinary collaboration and project-based learning.	Bachelor
13	Business administration	Business representative	Values student collaboration but highlights gap between academic work and practical needs.	Bachelor
14	Business administration	Business representative	Highlights tensions between narrow theoretical problems and organizational complexity.	Bachelor
15	Cultural industries	Business representative	Emphasizes workplace integration, organizational culture, and learning through participation.	Bachelor
16	Business administration	Business representative	Interested in experimentation, innovation, and applied project work.	Bachelor
17	Cultural industries	Business representative	Emphasizes situated learning, participation in artistic processes, and organizational immersion.	Bachelor