Opinion

Do Synoptic Assessments Lead to Authentic Learning? A Critical Perspective on Integration and Intentionality in Higher Education Assessment Design

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Abstract

Synoptic assessment has gained prominence in higher education as a way to bridge fragmented curricula by enabling students to synthesize knowledge across modules. However, structural integration through assessment does not automatically produce authentic learning. Drawing on theoretical analysis and three reflective case studies from UK undergraduate programmes, this paper offers a critical practitioner perspective on how synoptic assessment and authentic learning intersect in practice. We argue that integration and authenticity represent distinct pedagogical imperatives that require deliberate alignment. Through comparative analysis of successful, partially successful, and unsuccessful implementations of assessment strategies, we demonstrate that authentic learning emerges not from integration per se, but from intentional design embedding real-world relevance, developmental scaffolding, clear purpose, and student agency. Our case studies reveal that without such intentionality, synoptic assessments risk becoming structurally coherent but pedagogically hollow exercises that fail to engage students meaningfully. Key challenges include inconsistent staff understanding, inadequate contextual framing, and insufficient attention to progressive capability development. We propose practical design principles grounded in practitioner experience: embedding authenticity through professional relevance, scaffolding complexity appropriately, enabling open-ended student responses, and establishing strong programme-level leadership with authority over assessment strategy. The core contribution of the paper is to articulate these design principles for embedding authenticity within synoptic assessment at programme level, particularly in increasingly modularised and flexible curricula, such as those designed to enable lifelong learning. By positioning integration as necessary but insufficient for authentic learning, we advance critical understanding of assessment reform and address emerging tensions between programme coherence and increasingly modularized curricula serving diverse learner pathways.

Keywords: authentic learning; synoptic assessment; authentic assessment; assessment design; curriculum design; higher education; programme coherence; intentionality; scaffolding; modularization

1. Introduction

Recent reforms in higher education assessment reflect growing interest in two pedagogical movements: synoptic assessment, which promotes holistic integration across modules (Southall & Wason, 2016; Constantinou, 2020), and authentic learning, which emphasizes meaningful engagement with real-world contexts (Herrington & Oliver, 2000; Gulikers et al., 2004; Ashford-Rowe et al., 2014). Both aim to counter fragmented curricula and surface-level learning by fostering deeper, more connected understanding. While synoptic assessment encourages synthesis and programme coherence (Patrick, 2005), authentic learning—grounded in constructivist and situated learning theories—prioritizes contextualized application of knowledge through realistic tasks. Authentic assessment, as the evaluative expression of authentic learning, challenges students to demonstrate capability through complex, relevant performances (Wiggins, 1990; Ashford-Rowe et al., 2014). At the same time, many higher education systems are experiencing increasing modularisation, diversification of learner pathways, and the growth of microcredentials and other flexible forms of provision to support lifelong learning. These developments risk exacerbating curriculum fragmentation unless programme-level assessment design is used deliberately to hold together students' learning across modules and experiences. Situating synoptic assessment and authentic learning within this landscape highlights the need for intentional design that preserves coherence and depth in the context of a more asynchronous learning landscape designed to facilitate student flexibility and choice.

Despite their shared goals, integrative approaches to assessment at programme level are often conflated with authentic learning in practice. Curriculum redesign may assume that integration guarantees authenticity, overlooking the distinct design imperatives each requires. Synoptic assessment focuses on breadth and synthesis; authentic learning demands depth, relevance, and situated action. Emerging critiques caution against treating authenticity as an inherent feature of certain task types, arguing instead that it arises through intentional design and contextual responsiveness (Ajjawi et al., 2024; Quinlan et al., 2024). This has implications for synoptic assessment: integration does not automatically yield authenticity, and without deliberate design, integrated learning tasks risk becoming tokenistic, coherent in structure but disconnected from meaningful practice. Furthermore, if either synoptic assessment or authentic learning becomes seen uncritically as pedagogical panaceas (Fawns et al., 2025) at the level of individual modules or tasks—without careful coordination and planning—then authentic learning across a whole academic programme may be compromised.

This paper offers a critical practitioner perspective on the relationship between synoptic assessment and authentic learning, drawing on case examples from our institutional context. We argue that authenticity must be intentionally embedded within integrated assessment design and does not necessarily result from it. Our aim is not to reject synoptic assessment, whose potential to promote coherence and integrative thinking we affirm (Quinlan et al., 2024; Villarroel et al., 2017), but to advocate for more mindful design practices that distinguish between structural integration of learning and assessment at programme level, synoptic assessment where this is useful, and authentic learning experiences.

We explore this relationship through three lenses: (1) conceptual analysis of the intersections and divergences between synoptic assessment and authentic learning; (2) reflective case studies highlighting design tensions and opportunities for using these concepts when designing assessment strategies across degree programmes taught by 15–40 academic staff; and (3) practical principles for assessment design that preserve the benefits of integration while cultivating authentic learning experiences. In doing so, we contribute to a more nuanced understanding of assessment reform, one that recognizes both the promise and the complexity of aligning synoptic and authentic pedagogies.

2. Conceptual Framing: Synoptic Assessment and Authentic Learning: Complementary but Distinct

2.1. Synoptic Assessment and Programme Integration

Synoptic assessment refers to holistic evaluation across modules or programme stages, requiring students to synthesize knowledge from multiple domains into coherent responses (Southall & Wason, 2016; Constantinou, 2020). It aims to counter curriculum fragmentation by promoting integrative thinking and programme-level coherence (Patrick, 2005). In this paper, integration denotes both the structural coordination of assessment across a programme and the cognitive synthesis expected of students when they construct responses that cut across individual modules.

Synoptic assessment, therefore, foregrounds breadth and synthesis. Its core design questions concern how students can be supported to bring together disparate elements of their learning—concepts, methods, perspectives—into more holistic understandings and performances. Typical examples include capstone projects, synoptic examinations, or programme-level coursework tasks that require students to mobilize learning from multiple modules in a single piece of work. When successfully designed, such assessments can foster coherence, cumulative learning, and a sense of programme identity.

2.2. Authentic Learning, Authentic Assessment, and Educational Authenticity

Authentic learning, by contrast, is rooted in constructivist and situated learning theories (Herrington & Oliver, 2000), emphasizing meaningful engagement with knowledge in realistic or professional contexts. It centres on tasks that resemble, in form and consequence, the kinds of activities students might undertake in future professional, civic, or disciplinary roles. Authentic assessment is the evaluative expression of this approach: tasks that mirror real-world complexity, demand contextualized application of skills and invite students to exercise judgement rather than merely reproduce taught content (Gulikers et al., 2004; Ashford-Rowe et al., 2014).

Recent work has attempted to distinguish between "real-world authenticity" and "educational authenticity", arguing that what matters is not perfect replication of professional practice but the extent to which tasks are experienced by students as meaningful, consequential, and worthy of effort within an educational setting (Quinlan et al., 2024; Ajjawi et al., 2024). Authentic learning, therefore, foregrounds depth, relevance, and situated action. Its design questions concern who or what the task is for, what kind of situation it simulates, and how students can be supported to engage with complexity without being overwhelmed. Scholarship on technology-enhanced scenario-based assessment and scenario-based learning reinforces this view, emphasizing that authenticity emerges through carefully designed, situated tasks that invite meaningful engagement rather than through simple imitation of professional practice (Darzhinova, 2025; Mohamed, 2025).

2.3. Integration and Authenticity as Complementary but Distinct Dimensions

Although synoptic assessment and authentic learning share an ambition to deepen learning and foster transfer across contexts, they represent distinct design dimensions with different primary emphases (Constantinou, 2020; Villarroel et al., 2017). Synoptic assessment prioritizes breadth and synthesis across modules and stages; authentic learning prioritizes depth, relevance, and meaningful engagement in situated contexts. A synoptic exam might integrate content across modules without engaging students in realistic practice, while an authentic task might immerse students in a plausible scenario without requiring wide synthesis across subjects. Integration and authenticity are not synonymous, and achieving one does not guarantee the other.

At the same time the two approaches can be powerfully complementary. Both challenge surface learning and modular isolation, encouraging students to connect, apply, and adapt knowledge. Both require programme-level design thinking: synoptic assessment demands coherence across modules, and authentic learning calls for experiences that prepare students for real-world practice. When integration serves meaningful purposes, such as constructing scientific arguments or presenting research findings, synoptic design can enhance authenticity. Conversely, authentic contexts can provide the relevance and complexity that make integration pedagogically powerful.

The central challenge for educators (and especially education leaders tasked with ensuring the coherence and ambition of whole programmes) lies in intentional design. Without deliberate attention to context and purpose, synoptic tasks risk becoming tokenistic: formally integrated but pedagogically hollow. Similarly, authentic tasks that ignore broader programme connections may miss opportunities for synthesis. Effective assessment design must navigate these tensions between breadth and depth, structure and context, aligning integration and authenticity so that programme-level synoptic assessment genuinely supports transformative learning.

Table 1 illustrates this relationship by contrasting the primary focus, design questions, and risks associated with synoptic assessment and authentic learning, and by indicating how they can be aligned as complementary design dimensions.

Table 1. Aspects of synoptic assessment and authentic learning to be considered for assessment design and their complementarity.

Aspect	Synoptic Assessment	Authentic Learning	Complementarity
Primary focus	Breadth, synthesis across modules or stages; programme-level coherence	Depth, relevance, situated action in meaningful contexts	Integration can provide the structural backbone for authentic learning
Typical design questions	"How can students connect and synthesise what they have studied?"	"How can students apply knowledge in realistic, consequential situations?"	Both require intentional programme-level design and alignment
Evidence of success	Coherent narratives, cross-module reasoning, integrated responses	Contextual problem-solving, professional-style performances, meaningful engagement	Authentic contexts can make integrative tasks more engaging and purposeful
Risks when isolated	Superficial "mash-ups" of content; coherence without meaning	Isolated "real-world" tasks with weak links to wider curriculum or capabilities	Assuming that integration automatically produces authenticity, or vice versa
Design implication	Structure assessments to support cumulative synthesis	Embed tasks in valued contexts with clear purpose, audience, and consequences	Treat integration and authenticity as distinct design dimensions to be aligned

3. Methodological Framing: Reflective Practitioner Case Studies

This paper adopts a reflective practitioner approach rather than a formal empirical research design. The three case studies presented draw on the authors' long-standing involvement in programme leadership, curriculum design, quality assurance oversight and teaching across the described undergraduate degrees at a single UK university. The institutional context for this work is a medium-sized, multicultural campus university serving around 13,000 students from more than 140 countries, providing a diverse setting in which issues of programme coherence, authentic learning, and modular flexibility are acutely visible. The analysis is grounded in a combination of programme documentation (including programme specifications, assessment briefs, and internal review reports), anonymised student evaluation summaries, informal feedback from students and staff gathered through routine quality enhancement processes, and the authors' accumulated experiential knowledge of synoptic assessment implementation over time.

The case studies are therefore illustrative rather than statistically generalisable. Their purpose is to illuminate conditions under which synoptic assessment does and does not support authentic learning, and to derive design principles that may be informative for programme teams working in similar contexts. The epistemological stance is interpretive and practice-oriented: the cases are used to interrogate and refine conceptual distinctions between integration and authenticity, rather than to test hypotheses or measure outcomes systematically.

Ethical considerations are addressed through the level of abstraction at which evidence is presented. No individual students or staff are identifiable, and examples are reported at programme level using aggregated or anonymised feedback. At this institution, the analysis and descriptive presentation of aggregated, anonymised student data does not require separate ethical approval. The cases draw on existing institutional quality assurance data and reflective practice rather than bespoke data collection, and as such do not require separate formal ethical approval within the authors' institutional framework. Nonetheless, the analysis seeks to represent student and staff perspectives respectfully and to foreground the pedagogical implications of programme-level assessment design.

4. Reflective Case Studies

4.1. Case Study A: Integrating Synoptic Assessment with Authentic Learning

4.1.1. Context and Rationale

Programme A, a science-based undergraduate degree, underwent a major assessment redesign in 2011 to address curriculum fragmentation and promote deeper learning. The traditional modular structure led to over-assessment, compartmentalized knowledge, and limited opportunities for integrative thinking, challenges widely documented in higher education literature (Southall & Wason, 2016; Constantinou, 2020). The redesign introduced a fully integrative, synoptic assessment model in which teaching remained embedded within discipline-specific study blocks, but summative assessment was reorganized into synoptic assessment blocks at programme level. This structural consolidation of assessment, rather than a separation of learning and assessment, enabled more holistic learning experiences supported by fewer, more integrated summative tasks aligned with programme outcomes.

4.1.2. Assessment Design and Scaffolding

Synoptic assessments were structured to increase in complexity across the three years of study, with tasks designed to promote reflection, integration, and application of knowledge. Authenticity was embedded through tasks that mirrored professional practices, such as presentations, data analysis, and written reports, consistent with frameworks for authentic assessment (Ashford-Rowe et al., 2014; Gulikers et al., 2004).

Scaffolding was central to the design. We will illustrate oral communication as an example:

- Year 1: Group presentations and poster creation introduced students to disciplinary communication in a low-stakes, collaborative format.
- Year 2: Students worked in smaller teams to analyze data and defend posters in live sessions, increasing both cognitive demand and individual accountability.
- Year 3: Students delivered individual presentations on independent research, demonstrating autonomy and professional readiness.

This progression reflects principles of constructive alignment (Biggs, 1996) and supports capability development through authentic, developmentally appropriate tasks (Villarroel et al., 2017).

Written assessments followed a similar trajectory, requiring literature reviews and data interpretation with increasing independence. These tasks demanded critical thinking and contextual application, aligning with constructivist views of authentic learning (Herrington & Oliver, 2000).

4.1.3. Student Engagement and Learning

Students responded positively to tasks that clearly connected academic work with professional contexts. The poster presentation event in Year 2, structured as a conference-style session, was particularly well received. The individual presentations were explicitly introduced as practice for job interviews. The formats of both provided a meaningful setting for students to communicate findings, reinforcing the value of authentic engagement.

One notable feature of the programme was the pre-released synoptic exam, which gave students a week to prepare integrated responses across multiple modules. This format transformed the preparation for exam into an authentic learning experience, prompting students to construct coherent narratives and synthesize knowledge meaningfully, a hallmark of integrative thinking (Constantinou, 2020). Open-ended questions allowed students to tailor responses to their interests, enhancing authenticity and ownership of learning (Ajjawi et al., 2024).

4.1.4. Reflections and Design Insights

This case illustrates that authentic learning can be fostered through pedagogical integration but that it must be intentionally designed into assessment tasks and supported through developmental scaffolding. The success of Programme A's approach lay in aligning synoptic integration with authentic contexts that demanded meaningful application of knowledge.

Importantly, the assessments were not only integrative but also developmentally appropriate, allowing students to engage authentically without being overwhelmed. The pre-released exam and staged presentation tasks exemplified how synoptic formats can serve authentic learning when designed with purpose and sensitivity to student readiness.

4.2. Case Study B: Partial Success and Design Tensions

4.2.1. Context and Rationale

Programme B, an interdisciplinary, science-based undergraduate degree at the same UK university, sought to embed authentic learning within a mixed modular and synoptic assessment framework. The programme team aimed to move beyond fragmented module-level assessments by also designing tasks that required students to integrate knowledge across domains while engaging with realistic, discipline-relevant challenges. While the initiative showed promise, it also revealed design tensions and uneven authenticity that limited its full impact.

4.2.2. Assessment Design and Scaffolding

Like Programme A, the programme also introduced a series of synoptic coursework tasks that increased in complexity across the years. These included scenario-based reports, data interpretation exercises, and reflective commentaries, all designed to simulate professional decision-making and problem-solving. Authenticity was embedded through the use of real-world datasets, policy contexts, and stakeholder perspectives, aligning with the principles of situated learning (Herrington & Oliver, 2000) and authentic assessment (Ashford-Rowe et al., 2014).

Scaffolding was carefully planned:

- Year 1: Students completed structured tasks with clear guidance, focusing on foundational skills and basic integration.
- Year 2: Tasks introduced ambiguity and required students to navigate competing priorities, encouraging deeper engagement and contextual reasoning.
- Year 3: Students undertook independent projects involving open-ended problems, requiring synthesis of knowledge and reflective judgement.

This progression supported capability development and mirrored authentic professional trajectories (Villarroel et al., 2017).

4.2.3. Student Engagement and Learning

Student engagement with synoptic tasks was mixed. Some students appreciated the relevance and complexity of scenario-based assessments, particularly when tasks were clearly framed and connected to real-world issues. However, others struggled to see the purpose of integration, describing some tasks as "just combining things" or "not really about anything." This suggests that authenticity was unevenly realized, and that contextual framing was critical to student engagement (Quinlan et al., 2024; Gulikers et al., 2004).

The most successful tasks were those that simulated professional challenges and allowed students to apply knowledge in meaningful ways. In contrast, assessments that lacked a clear purpose or realistic context tended to feel artificial, undermining motivation and learning depth. This reflects a broader risk in synoptic assessment: when integration is not anchored in authentic practice, it can feel contrived and pedagogically thin (Ajjawi et al., 2024).

4.2.4. Reflections and Design Insights

Programme B demonstrates that synoptic assessment can support authentic learning, but only when design is intentional, contextually grounded, and clearly communicated. The programme's scaffolding strategy was a strength, enabling students to build capability progressively. However, the inconsistent authenticity of tasks and variable student engagement highlight the importance of framing assessments within meaningful contexts.

Key lessons include:

- Authenticity must be consistent: Even within a synoptic framework, not all tasks will automatically feel real or relevant. Design must ensure that each assessment simulates purposeful, situated practice.
- Student understanding matters: Without a clear rationale for integration, students may perceive tasks as administrative rather than educational. Transparency in design can enhance engagement.
- Design clarity is essential: Staff must share a coherent vision of what synoptic and authentic assessment mean in practice. In Programme B, this was emerging but not fully realized.

4.3. Case Study B: When Synoptic Assessment Lacks Authentic Learning

4.3.1. Context and Rationale

Programme C, a science-based undergraduate degree at the same UK university, adopted synoptic assessment as part of a broader curriculum reform aimed at enhancing coherence and integrative thinking. The intention was to move beyond modular fragmentation and encourage students to synthesize knowledge across domains. However, despite structural integration, the programme struggled to deliver authentic learning experiences, revealing critical tensions between synoptic design and meaningful engagement.

The programme introduced synoptic coursework tasks across all levels, including reflective commentaries, scenario-based reports, and cross-module analyses. These were intended to promote synthesis and application, but in practice, they lacked real-world context or clear relevance to professional practice. The tasks were framed in abstract terms, requiring students to combine content without a compelling purpose or audience, a design flaw that undermined authenticity (Ashford-Rowe et al., 2014; Ajjawi et al., 2024).

4.3.2. Assessment Design and Scaffolding

Unlike Programmes A and B, Programme C did not scaffold authentic learning effectively. Students were expected to engage in complex integrative tasks from early stages without sufficient developmental support. There was limited progression in task complexity or clarity about how assessments aligned with professional capabilities. This absence of scaffolding left students uncertain about expectations and ill-equipped to engage meaningfully, a missed opportunity to apply principles of constructive alignment (Biggs, 1996) and capability development (Villarroel et al., 2017).

Staff engagement with the synoptic model was also uneven. Many lecturers were reluctant to mark assessments they hadn't designed, and some resisted the idea of cross-module integration altogether. This led to inconsistent implementation and confusion about assessment criteria. While the programme technically achieved integration, it lacked the pedagogical coherence needed to support authentic learning.

Moderation and calibration processes were introduced to address these issues, but they were often reactive rather than embedded. Staff struggled to develop a shared understanding of standards, and students received mixed messages about what constituted quality work. This fragmented experience further eroded the potential for authentic engagement.

4.3.3. Student Engagement and Learning

Student feedback revealed widespread disengagement. Many found the synoptic tasks confusing and disconnected from their disciplinary interests, considering them a mash-up of subject matter with little applicability. These responses reflect a broader issue: integration without authenticity can feel contrived and demotivating (Quinlan et al., 2024; Herrington & Oliver, 2000).

The lack of contextual framing meant students were rarely asked to apply knowledge in realistic or purposeful ways. Tasks focused on combining content rather than solving meaningful problems or simulating professional scenarios. As a result, students often approached assessments as compliance exercises rather than opportunities for growth. The absence of authentic challenge limited the development of transferable skills and critical thinking.

Even when tasks were intended to be authentic, such as scenario-based reports, they were often underdeveloped or poorly contextualized within the larger programme of study. Students were given fictional briefs without clear links to real-world practice, and the complexity of the scenarios did not reflect professional ambiguity or decision-making. This diluted the authenticity and reduced the potential for deep engagement.

4.3.4. Reflections and Design Insights

Programme C serves as a cautionary example of how synoptic assessment can fail to foster authentic learning when design lacks intentionality. Structural integration alone is not enough; without meaningful context, developmental scaffolding, and clear purpose, assessments risk becoming tokenistic.

Key lessons include:

- Authenticity must be embedded in task design, not assumed through integration. Tasks should simulate real-world complexity and provide opportunities for students to apply knowledge in situated, purposeful ways (Ashford-Rowe et al., 2014; Gulikers et al., 2004).
- Scaffolding is essential. Students need support to develop the skills and confidence required for authentic performance. Without it, integrative tasks can overwhelm rather than engage (Biggs, 1996; Villarroel et al., 2017).
- Staff alignment matters, but pedagogical clarity is more important than structural consensus. Even with resistance, a clear rationale and coherent design can support authentic learning if tasks are well framed and developmentally appropriate.

Ultimately, Programme C highlights the risks of conflating integration with authenticity. When synoptic assessment is implemented without attention to context, purpose, and student experience, it may achieve formal coherence but fail to deliver meaningful learning. This case underscores the need for critical, mindful design practices that treat integration and authenticity as distinct but interdependent pedagogical goals.

Table 2 below summarizes how authentic learning was realized, or not, across the three programmes, highlighting differences in real-world connection, student agency, scaffolding, and staff understanding of authenticity.

Table 2. Comparative analysis of authentic learning through synoptic assessment across three undergraduate programmes. This table examines how authentic learning was realized (or not) across three programmes implementing synoptic assessment, focusing on the conditions that supported or hindered authentic learning experiences.

Dimension	Programme A: Successful Integration	Programme B: Partial Success	Programme C: Integration Without Authenticity
Authentic learning realized?	Strong; consistent, practice-linked tasks	Mixed; authenticity uneven across tasks	Weak; abstract, low-relevance tasks
Real-world connection	Clear professional links (conference-style events, interview-style tasks)	Real datasets and policy contexts; purpose not always evident to students	Fictional/scenario tasks with weak or unclear professional relevance
Student ownership & agency	High; open-ended synoptic exam and tasks allow tailoring to interests	Variable; some meaningful choice, some prescribed/ administrative tasks	Low; tasks experienced as compliance rather than genuine engagement
Contextual framing	Consistent; explicit links to professional capabilities	Inconsistent; some tasks "just combining things" with no clear purpose	Poor; abstract briefs, limited explanation of audience or purpose
Scaffolding for authentic performance	Strong; clear progression across levels, developmentally appropriate tasks	Present; generally progressive, though not always tied to authenticity	Limited; complex integrative tasks set without adequate preparation
Authentic assessment design	Professionally oriented tasks (poster defence, research presentations, synoptic exam with preparation time)	Scenario-based reports, data interpretation; uneven implementation	Underdeveloped scenarios; limited ambiguity or realistic decision-making

Table 2. *Cont.*

Dimension	Programme A: Successful Integration	Programme B: Partial Success	Programme C: Integration Without Authenticity
Integration–authenticity alignment	Integration serves authentic purposes (e.g., constructing arguments, presenting research)	Partial; sometimes enhances authenticity, sometimes feels forced	Misaligned; structural integration without clear pedagogical meaning
Student engagement	High; valued real-world connections and meaningful formats	Mixed; higher when context clear, lower when purpose unclear	Low; tasks confusing, disconnected from interests
Staff understanding of authenticity	Shared understanding of integration for professional preparation	Emerging; some uncertainty about what counts as authentic assessment	Weak; resistance to cross-module marking and limited pedagogical clarity
Transformative potential	High; synoptic formats transform preparation into authentic learning	Moderate; strong tasks, but missed opportunities elsewhere	Low; limited development of transferable skills or critical thinking
Key factors/gaps	Clear relevance; strong scaffolding; open formats; student ownership; consistent framing	Real-world contexts; progressive complexity; some well-framed scenarios; gaps in consistent purpose and framing	Missing meaningful context, scaffolding, professional links, and compelling purpose
Primary lesson for design	Integration can support authentic learning when tasks are situated, progressive, and purposeful	Authentic learning requires consistent contextual framing; integration alone is insufficient	Structural integration does not produce authenticity; authenticity must be intentionally designed into tasks

5. Discussion

5.1. When Does Integration Support Authentic Learning?

This paper has explored the complex relationship between synoptic assessment and authentic learning, arguing that while these approaches share pedagogical goals, such as promoting integrative thinking, deeper engagement, and transfer of learning, they are conceptually distinct and must be deliberately aligned in curriculum design. The assumption that integration alone produces authenticity risks superficial coherence without meaningful engagement, a concern echoed in recent critiques of authenticity as a designable property (Ajjawi et al., 2024; Nachtigall et al., 2024; Quinlan et al., 2024). Indeed, the "authenticity dilemma" (Nachtigall et al., 2024) highlights inherent tensions between creating authentic contexts and providing appropriate scaffolding, tensions that become particularly acute when synoptic integration is introduced without careful attention to authentic learning principles.

Through the exploration of three case studies, we have shown that authentic learning emerges not from structural integration per se, but from the intentional design of tasks that simulate real-world complexity, are developmentally scaffolded, and are framed with a clear purpose. As synthesized in Table 1, Programmes A, B and C differed systematically in the strength of their real-world connections, scaffolding, and integration–authenticity alignment, which shaped student engagement and the transformative potential of synoptic assessment. Programme A demonstrated how synoptic assessment can successfully support authentic learning when assessments are situated, progressive, and open-ended, allowing students to construct personally meaningful responses and engage with pro-

fessional practices (Ashford-Rowe et al., 2014; Biggs, 1996). Programme B revealed the importance of consistent contextual framing and student understanding, with some tasks fostering genuine engagement while others felt contrived or unclear. Programme C illustrated the risks of integration without authenticity, where assessments lacked relevance, students disengaged, and learning outcomes were compromised (Herrington & Oliver, 2000; Lombardi, 2007).

Across these cases, several conditions consistently supported authentic learning: tasks that reflected professional relevance and complexity; scaffolding that enabled students to build capability over time; and assessment formats that allowed for flexibility and ownership (Rule, 2006). Conversely, shared challenges included staff resistance, inconsistent design clarity, and student confusion when integration was not anchored in authentic contexts. These findings reinforce the view that synoptic assessment must be more than a structural solution; it must be a pedagogical strategy grounded in situated, purposeful learning experiences rooted in constructivist principles (Brown et al., 1989; Lave & Wenger, 1991) and aligned with what we know about authentic learning design (Quinlan et al., 2024; Villarroel et al., 2017). The emphasis on progressive capability development and authentic, scenario-based tasks aligns with work that frames assessment as part of a broader project of lifelong learning, where students rehearse forms of action and judgement that extend beyond the immediate programme and into future professional or civic roles (Mohamed, 2025).

5.2. Design Principles for Authentic Learning Through Integration

From practitioner experience, several design principles emerge. Authenticity must be embedded in the fabric of learning and assessment tasks, not assumed through task type or structural coherence (Meyers & Nulty, 2009). Scaffolding is essential to support students' development toward independent, authentic performance, though as Nachtigall et al. (2024) note, finding the right balance between authentic complexity and appropriate support represents an ongoing design challenge. Open-ended formats enhance engagement by allowing students to bring their own perspectives and interests to bear (Stein et al., 2004). Above all, clarity of purpose communicated to both students and staff is critical to ensuring that synoptic assessment fosters rather than frustrates authentic learning. This must be aligned with strong leadership of programmes by a team of academic staff who are given significant authority over the programme-level assessment strategy and have the personal leadership qualities required to ensure that modular silos are not allowed to be reconstructed.

These principles can be articulated more explicitly as a set of interrelated design commitments:

- Intentional alignment of integration and authenticity: Synoptic assessments should be designed to serve clearly articulated, authentic purposes (such as informing stakeholders, simulating professional decision-making, or constructing scientific arguments) rather than simply aggregating content from multiple modules.
- Clear articulation of real-world relevance: Students need to understand who or what their work is "for"; framing tasks around plausible audiences and consequences supports meaningful engagement and highlights the value of integrative thinking beyond the classroom.
- Developmental scaffolding of complexity: Authentic synoptic tasks should increase in cognitive and practical demand across programme stages, with early, lower-stakes opportunities to rehearse key skills and later tasks requiring greater independence, judgement, and integration.

- Structured opportunities for reflection and metacognition: Embedding reflective activities (such as commentaries, debriefs, or peer feedback), which help students recognize how integrated tasks contribute to capability development and professional identity.
- Collaborative educational approach: Academic staff need to be willing to give up some individual agency in assessment design while retaining ownership and accountability for educational outcomes.
- Programme-level leadership and staff alignment: Effective, authentic synoptic assessment depends on coherent programme-level leadership with real authority over assessment strategy, and on ongoing dialogue with staff to develop shared understandings of both integration and authenticity in practice.

Taken together, these principles reinforce that authentic learning through synoptic assessment is not an automatic consequence of structural integration, but the outcome of deliberate programme-level design that foregrounds purpose, progression, and student experience.

5.3. The Leadership Dividend: From Synoptic Integration to Authentic Learning

From our positions leading such programme-level design and implementation, we have observed a "leadership dividend" in this work: achieving both synoptic coherence and authentic learning is not a "buy one, get one free" proposition, but it may represent something closer to "buy one, get one half price." Once programme teams embrace integrated learning and move beyond module-centric thinking, developing authentic learning and assessment becomes considerably easier. The cultural shift from viewing modules and their assessments as "owned" by individual academics to a programme-level perspective is substantial, but once achieved, it opens possibilities for embedding authenticity more systematically. Programme leaders who successfully challenge modular ownership find that staff become more receptive to innovations, including authentic task design that spans traditional subject boundaries and creates opportunities for students to engage in legitimate peripheral participation within disciplinary communities (Lave & Wenger, 1991).

This leadership is not merely administrative; it requires vision to articulate coherent pedagogical rationales and interpersonal skills to build consensus among diverse teams (some of whom experienced a very traditional 'chalk, talk, exam' approach in higher education themselves). As our case studies illustrate, programmes lacking such leadership struggle to deliver meaningful learning experiences even when structural changes are implemented. The success of Programme A depended on sustained commitment from a leadership team that could articulate clear purposes, respond to staff concerns, and maintain momentum through implementation challenges. Such programme-level leadership thrives in conditions with a clear institutional-level education strategy and a well-articulated framework for implementation, as well as supportive local academic management.

5.4. Looking Ahead: Authentic Learning in an Era of Re-Modularisation

However, an emerging tension warrants careful consideration: how can we preserve these hard-won benefits of programme-level integration and authentic learning in an increasingly modularised higher education landscape? The push toward lifelong learning, microcredentials, and flexible study pathways (driven by legitimate desires to widen participation and support diverse learner needs), necessarily involves a re-modularization that risks greater curriculum fragmentation (e.g., Brennan, 2021). Not all learners can or should follow linear three-year degree programmes, and modularisation enables access for students balancing work, family, and study commitments. Yet this very fragmentation risks re-establishing the silos that synoptic assessment and authentic learning seek to dismantle.

If students construct their own pathways through disconnected modules, how can we ensure they experience the integrative thinking and authentic challenges we have identified as crucial for deep learning? This is not a hypothetical concern but an active design challenge as institutions develop credit frameworks, stackable credentials, and more flexible programme structures. Several strategies may help navigate this tension. First, "core integration modules" or capstone experiences could serve as compulsory touchpoints for synthesis, regardless of students' chosen pathways, explicitly scaffolded to accommodate learners with diverse prior learning (Harvey & Tree, 2025). Second, authentic assessment tasks could be designed with built-in flexibility, allowing students to draw on whichever modules they have completed while still engaging with realistic professional scenarios: treating integration not as prescribed content coverage but as a skill in connecting available knowledge to situated problems (Lombardi, 2007).

Third, programme teams might need to shift from designing for a single cohort following a fixed pathway toward designing "integration architectures": frameworks that support synthesis across multiple possible routes through the curriculum. This represents a more sophisticated understanding of programme coherence, one that accommodates diversity in student journeys while maintaining pedagogical rigor and demands that leadership teams think systemically about how different module combinations create opportunities for authentic, integrated learning within communities of practice that may themselves be more fluid and diverse (Lave & Wenger, 1991). This area represents fertile ground for future conceptual and pedagogical development.

5.5. Limitations and Future Directions

As a reflective practitioner inquiry rooted in a single institutional context, this work has inherent limitations. The three cases were selected as illustrative, contrasting examples rather than as part of a systematic sample, and the evidence base draws on the authors' experiences, existing programme documentation and evaluative data rather than bespoke data collection. The insights offered are therefore interpretive and contextually situated, intended to inform conceptual understanding and practice in similar settings rather than to generate generalisable claims. Future empirical research across diverse institutional contexts, including systematic student and staff perspectives, would be valuable in further testing and refining the principles proposed here.

6. Conclusions

The challenge is substantial but not insurmountable. Just as we have argued that authenticity must be intentionally designed rather than assumed, so too must integration be deliberately scaffolded in modular contexts. The principles we have articulated—contextual framing, developmental scaffolding, clear purpose, and situated practice—remain vital, but their application must evolve to suit more flexible learning environments. This distinction matters because uncritically equating synoptic assessment with authentic learning carries tangible risks: the risk of superficial integration, where students are asked to "combine" content without a compelling purpose; the risk of misallocated effort, as programme teams invest in structural redesign without addressing contextual framing and scaffolding; and the risk of student disillusionment when synoptic tasks are experienced as confusing or irrelevant despite their integrative intent. As higher education continues to diversify its provision, the insights from our experiences with synoptic and authentic assessment can inform the next generation of curriculum design, ensuring that flexibility and access do not come at the cost of coherence and depth. For programme leaders and institutions, we urge that synoptic assessment should be framed not as a technical fix but as part of a broader assessment philosophy in which structural integration and authentic learning are

treated as distinct design dimensions to be intentionally aligned. The design principles distilled from our case studies—intentional alignment of integration and authenticity, clear articulation of real-world relevance, developmental scaffolding of complexity, structured reflection, and strong programme-level leadership—offer a pragmatic starting point for this work. The future of assessment reform lies in maintaining our commitment to authentic, integrative learning while embracing the complexity of learners' varied pathways through higher education.

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