

Rethinking the Criminology Curriculum: A Review of Inquiry-Based, Problem-Based, Challenge-Based and Related Andragogy in Contemporary Higher Education.

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Abstract

This article reviews the evidence base for a range of contemporary, student-centred curriculum design methodologies, including inquiry-based learning (IBL), problem-based learning (PBL), project-based learning (PjBL), challenge-based learning (CBL), place-based learning and competency-based education (CBE), and considers their applicability to the design of a contemporary undergraduate criminology degree. Drawing on systematic reviews, meta-analyses and recent empirical literature, the article evaluates theoretical underpinnings, andragogical benefits and structural limitations. It situates these findings within the requirements of the Quality Assurance Agency for Higher Education Subject Benchmark Statement for Criminology (QAA, 2022), which explicitly positions research and critical enquiry as foundational to the discipline and calls for curriculum designs that embed equality, diversity and inclusion, education for sustainable development, and professional partnership. The article argues that no single methodology is sufficient on its own, and that a principled hybrid model, drawing on the selective strength of each approach, offers the most coherent and evidence-informed basis for criminology curriculum design. Implications for degree revalidation, staff development, assessment design and partnership are discussed.

Keywords: *Criminology curriculum design; Problem-based learning; Challenge-based learning; Inquiry-based learning; Active learning; Higher education andragogy*

Introduction

The design of undergraduate criminology degrees in the United Kingdom is shaped by several competing imperatives. Higher education providers are required to align their provision with the Quality Assurance Agency Subject Benchmark Statement for Criminology ([QAA, 2022](#)), which sets out the threshold, typical and excellent standards expected of graduates and articulates a vision of the discipline as one underpinned by research, critical enquiry and active engagement with contested social questions. At the same time, providers experience institutional, professional and reputational pressures to produce graduates who are equipped for a rapidly changing labour market and possess the transferable skills, methodological literacy and reflexive capacities that employers across the criminal justice and wider public sectors increasingly demand ([QAA, 2022](#)).

In this context, the transmission-based lecture-and-essay model that has historically characterised much undergraduate criminology teaching is under sustained and justified challenge. Critics suggest that passive pedagogies produce surface-level learning, fail to develop the analytical and evaluative skills demanded at higher levels of study, and reproduce forms of assessment that disadvantage students from diverse educational and cultural backgrounds ([Kozanitis and Nenciovici, 2023](#)). The QAA Benchmark Statement is itself explicit on this point, calling for flexible, varied and inclusive learning, teaching and assessment strategies that give students opportunities to engage with contemporary social, political and public disputes and to apply criminological knowledge to real problems ([QAA, 2022](#)).

A range of active and student-centred curriculum design approaches has emerged in higher education over the past three decades in response to these challenges. IBL, PBL, PjBL, CBL, place-based learning and CBE each offer distinctive andragogical architectures, and each carries a body of empirical evidence regarding its benefits and limitations. This article reviews that evidence critically and assesses the relevance of each approach to the specific disciplinary context of criminology.

The article proceeds as follows. Section 2 provides a brief account of the theoretical foundations of active learning in higher education. Sections 3 to 8 examine each of the major approaches in turn. Section 9 considers the specific requirements of criminology as a discipline. Section 10 proposes a framework for a principled hybrid

model. Section 11 addresses limitations and directions for future research before the conclusion.

Global Drivers and Policy Context

While the preceding discussion foregrounds the QAA benchmarks as a domestic imperative, the move toward student-centred, skills-based learning constitutes a global restructuring of higher education. Evidence from the India Skills Report 2022 ([Wheebox, 2022](#)) indicates that creativity and social intelligence will be among the most valuable competencies for the workforce by 2030, offering workers meaningful protection against automation at a time when more than twenty million jobs worldwide are projected to be displaced by machines. This finding echoes broader arguments in this article that criminology programmes must align themselves toward durable, human-centric capabilities that technical automation cannot easily replicate.

India's National Education Policy 2020 ([Ministry of Education, 2020](#)) provides a striking parallel to the UK's evolving andragogical agenda. NEP 2020 advocates explicitly for a multidisciplinary and holistic approach to higher education, placing experiential learning, critical thinking, and problem-solving at its core. The policy calls for andragogy to become inquiry-driven, discovery-oriented, learner-centred and discussion-based a formulation that maps directly onto the constructivist and active learning principles underpinning the Principled Hybrid Model proposed here. That two of the world's largest higher education systems are converging on this trajectory confirms that the andragogical reorientation advocated in this article is not a parochial UK response, but part of a worldwide movement to align degrees with twenty-first-century life skills and the demands of democratic citizenship.

Theoretical Foundations of Active Learning in Higher Education

All of the approaches considered in this article are grounded in a broad constructivist tradition of learning theory, which holds that knowledge is not transmitted from teacher to learner but is actively constructed by the learner through engagement with material, peers and context ([Vygotsky, 1978](#), cited in [Kozanitis and Nenciovici, 2023](#)). This tradition encompasses Dewey's account of education as experience, Piaget's cognitive developmental framework, and sociocultural theories that

emphasise collaborative and contextually situated learning ([Kozanitis and Nenciovici, 2023](#)).

The empirical case for moving beyond passive instruction in higher education is now substantial. [Kozanitis and Nenciovici \(2023\)](#) conducted a meta-analysis of 104 studies comparing the assessment performance of college students in humanities and social sciences under active instruction versus traditional lecturing. They found that student performance was higher by 0.489 standard deviations under active instruction across a sample of 15,896 students. Notably, the beneficial effects were strongest in sociology, psychology, language, education and economics, in smaller class sizes and at upper rather than introductory levels, all of which have direct implications for criminology programme design.

The motivational psychology underpinning student engagement in active learning environments warrants further theoretical elaboration. Self-Determination Theory (SDT), comprehensively reviewed by [Ryan and Deci \(2020\)](#), identifies three universal psychological needs whose fulfilment predicts intrinsic motivation: autonomy (the sense of initiative and ownership over one's actions); competence (the experience of mastery and growth within well-structured challenges); and relatedness (a sense of belonging and meaningful connection to others). When these three needs are satisfied, students' progress from externally controlled compliance toward genuinely internalised engagement ([Ryan and Deci, 2020](#)).

[Pantzos, Pears and Buckley \(2025\)](#), in a qualitative study of Master's-level engineering students undertaking CBL courses at the Royal Institute of Technology (KTH), Sweden, found that SDT's three needs were directly addressed through the structure of challenge-based environments: autonomy through student-directed problem framing; competence through iterative mastery of real-world tasks with feedback; and relatedness through collaborative engagement with peers and external stakeholders. Students reported motivations centred on innovation, entrepreneurship and societal contribution - precisely the kind of intrinsic, values-aligned engagement that criminology educators might hope to cultivate when students work with community organisations or criminal justice bodies on genuine social problems. [Pantzos et al. \(2025\)](#) also identified extrinsic motivational benefits: students viewed external stakeholder projects as meaningful opportunities for professional networking and

career-oriented validation, reinforcing the case for partnership-centred approaches at Levels 5 and 6 of the model.

A significant caution also emerges from this literature. Where the challenge environment is insufficiently structured - offering too little scaffolding for students who have not yet developed the metacognitive resources to manage open-ended inquiry - SDT needs can be frustrated rather than satisfied. This finding reinforces the developmental logic of the Level 4-to-6 progression described later in this article: by incrementally increasing autonomy and challenge complexity across the degree, the model creates the well-structured environments that [Ryan and Deci \(2020\)](#) identify as necessary conditions for competence need-satisfaction.

Inquiry-Based Learning: Principles and Evidence

Inquiry-based learning describes a family of approaches in which students are positioned as investigators rather than recipients of knowledge. Broadly, IBL encompasses any andragogy in which students formulate questions, explore data or evidence, reflect on their findings, and construct their own understanding ([Sam, 2024, cited in Harleni et al., 2025](#)). It sits on a spectrum from structured inquiry, in which the teacher provides the question and the method, to open inquiry, in which students generate their own questions and design their own investigative processes.

Evidence for IBL's effectiveness is well-established across a range of disciplines, including the social sciences. Systematic review evidence confirms that IBL fosters critical thinking, creativity and academic achievement, and promotes deeper conceptual understanding and the development of higher-order cognitive skills ([Sam, 2024](#)). A meta-analysis by [Harleni et al. \(2025\)](#) identified a small but statistically significant overall effect on student learning outcomes across 21 studies (effect size $d = 0.444$), with effects particularly evident in subjects requiring analytical reasoning. Inquiry-based approaches have also been associated with higher student engagement, stronger motivation and increased scientific literacy ([Sam, 2024](#)). For criminology, IBL is particularly relevant because the discipline is, at its core, an investigative enterprise. The QAA Benchmark Statement explicitly positions research and critical enquiry as foundational to criminology at all levels ([QAA, 2022](#)).

Limitations

The implementation of IBL in higher education is not without difficulty. Open inquiry demands substantial time for students to explore, question and reflect, and the time constraints imposed by modular structures and institutional timetabling can prevent the depth of engagement that IBL requires ([Sam, 2024](#)). Research also identifies challenges around instructional scaffolding, particularly for students from educational backgrounds in which passive reception of knowledge has been the norm, who may experience open inquiry as disorienting or anxiety-provoking ([Harleni et al., 2025](#)). A further limitation is that IBL requires significant preparatory work and andragogical confidence from teaching staff. Without adequate professional development, IBL can collapse into loosely structured activity that lacks the intellectual rigour required by the QAA Benchmark's expectations of excellent-level graduates ([QAA, 2022](#)). The effectiveness of IBL is also moderated by assessment alignment: where summative assessment continues to reward knowledge recall, students are unlikely to invest in the depth of inquiry that the approach demands.

Problem-Based Learning: Principles and Evidence

Problem-based learning originated in medical education at McMaster University in the 1960s and has since diffused across a wide range of higher education disciplines ([Yu and Zin, 2023](#)). In PBL, students are presented with an ill-structured, authentic problem before any formal teaching takes place. The problem drives the learning: students identify what they need to know, engage in self-directed investigation and return to the group to synthesise their findings and refine their understanding. The Seven Jump method, developed at Maastricht University, provides a widely adopted procedural scaffold for this process ([Gijssels, 1995](#), cited in [University of Queensland, 2024](#)). The seven steps require the learner to: clarify known and unknown terminologies; define the problem to be addressed; brainstorm individually or in small groups; structure and analyse what has been discovered; define specific learning objectives and knowledge gaps; engage in independent study to address those objectives; and synthesise findings into a shared output.

The evidence base for PBL in higher education is extensive. A systematic review by [Trullàs et al. \(2022\)](#) found consistent evidence of effectiveness in promoting active learning, deeper cognitive processing and sustained motivation compared to

traditional lecture-based approaches. [Liu and Pásztor \(2022\)](#) conducted a meta-analysis specifically examining PBL's effect on critical thinking in higher education and found a positive overall effect, though with significant variation across instructional designs and assessment types. [Yu and Zin \(2023\)](#) identified PBL's particular effectiveness in developing students' ability to form sub-problems from structurally ambiguous situations - a capacity directly relevant to criminological reasoning about contested evidence and rival theoretical frameworks.

From a criminology perspective, PBL is well-suited to the discipline because criminology's theoretical and evidential terrain is inherently contested. The QAA Benchmark Statement notes that bodies of evidence in criminology are often consistent with alternative interpretations embodied in rival theoretical perspectives, and that students should be provided with opportunities to weigh alternative interpretations in terms of consistency with evidence, logic, fit with other findings and breadth of explanatory power ([QAA, 2022](#)). PBL's tutorial structure creates precisely this kind of analytical space.

Limitations

PBL's limitations in higher education are also well-documented. Research findings on its effects on critical thinking and content knowledge are inconsistent, with some studies finding significant improvements and others finding minimal differences compared to traditional teaching ([Deshanty et al., 2023](#), cited in [Frontiers in Education, 2025](#)). These inconsistencies are partly explained by variation in the quality of problems used, the level of tutor facilitation and the alignment between PBL processes and assessment criteria ([Liu and Pásztor, 2022](#)). A particular challenge for PBL in criminology is the risk of depth-breadth trade-offs: PBL works best when students can pursue a problem in depth over sustained time, but modular degree structures may fragment this process. There is also evidence that some student groups, particularly those entering with weaker prior subject knowledge, struggle with the demands of self-directed inquiry without adequate scaffolding, and that PBL can inadvertently disadvantage students from educational cultures that have emphasised structured knowledge transmission ([Yu and Zin, 2023](#)). This has direct implications for the QAA Benchmark's requirements around equality, diversity and inclusion ([QAA, 2022](#)).

Project-Based Learning: Principles and Evidence

Project-based learning shares many characteristics with PBL but is distinguished by its emphasis on the production of a tangible, public output. Where PBL is primarily focused on the analytical process of working through a problem, PjBL is oriented toward the creation of an artefact, product or presentation that demonstrates what students have learned and that can be assessed and shared beyond the classroom (Thomas, 2000, cited in [Exploring the Benefits and Challenges, 2023](#)). Effective PjBL involves a sustained inquiry process driven by a challenging question, student voice and choice in the design of the project, iterative revision in response to feedback, and the public presentation of outcomes (Barron and Darling-Hammond, 2008, cited in [Newswise, 2024](#)).

The benefits of PjBL for student engagement, employability skills and interdisciplinary competence are well-documented. Research by [Brassler and Dettmers \(2017, cited in Newswise, 2024\)](#) identifies positive impacts including increased design proficiency, developed thinking skills, improved confidence and willingness to approach challenges. A study using industry-integrated project-based learning (I-PBL) in higher education found that sustained industry engagement within a PjBL curriculum produced a 25 per cent improvement in self-reported competencies in job-related skills and a 30 per cent increase in student engagement ([Nature, 2025](#)). For criminology, PjBL offers a mechanism for connecting theoretical learning to professional practice. The QAA Benchmark Statement calls for partnership with criminal justice agencies, NGOs and community organisations, and notes that placement and work-based learning should be embedded in most courses ([QAA, 2022](#)).

Limitations

PjBL implementation in higher education faces several significant practical challenges, including faculty resistance and readiness, complexities in curriculum design and assessment, time and resource constraints, and the need for effective project management frameworks ([Bossio et al., 2023, cited in ResearchGate, 2023](#)). Assessment of PjBL outputs is particularly challenging, as the variability inherent in student-driven projects makes standardised marking criteria difficult to apply consistently. There is also evidence that the benefits of PjBL are not uniformly

distributed: students with stronger prior academic preparation, better access to resources and more developed self-regulation skills tend to benefit more, raising concerns about equity ([Duke Centre for Teaching and Learning, 2025](#)). For criminology, a further concern is the risk that the focus on producing outputs crowds out theoretical and conceptual depth. The QAA Benchmark Statement is explicit that criminological theory is a core, foundational aspect of any criminology degree ([QAA, 2022](#)), and PjBL designs must be carefully constructed to ensure that the intellectual content of the discipline is not sacrificed to the demands of professional-facing production.

Challenge-Based Learning: Principles and Evidence

Challenge-based learning is the most recent and arguably the most ambitious of the active learning family. CBL emerged originally from Apple's educational technology programme and was subsequently adopted and theorised within higher education contexts ([Gallagher and Savage, 2023](#)). In CBL, students work in heterogeneous teams on open-ended, socially significant challenges in collaboration with external stakeholders ([van den Beemt et al., 2025](#)). The defining characteristic of CBL that distinguishes it from PBL and PjBL is the absence of predefined study content or challenge parameters: students are required to identify, frame and address the problem as part of the learning process itself ([Gallagher and Savage, 2023](#)).

[Gallagher and Savage \(2023\)](#) conducted an exploratory literature review of 100 CBL articles and identified eight common characteristics of the approach: real-world challenges, collaboration with external stakeholders, interdisciplinarity, self-directed learning, active engagement, iterative design, assessment of both process and product, and a focus on developing transversal competencies alongside disciplinary knowledge. A systematic review by [Doulougeri et al. \(2024\)](#), analysing 48 published CBL implementations in higher engineering education, found that CBL promotes student engagement with complex societal challenges and develops both disciplinary and transdisciplinary skills. A further systematic review of CBL teaching practices across higher education from 2013 to 2023 confirmed that CBL produces a consistent shift towards student-centred learning, categorised across four dimensions:

andragogical approaches, technological integration, industry engagement and support for student development ([Rodriguez-Gomez et al., 2024](#)).

The CBL-compass framework, developed by [van den Beemt et al. \(2025\)](#), provides a practical design tool for higher education practitioners, mapping CBL implementations across the dimensions of vision, teaching and learning, and support. The framework identifies three minimum requirements for a CBL intervention: real-life and authentic challenges; activities that stimulate deep content understanding alongside broader disciplinary perspectives; and learning activities that promote rigorous engagement with the challenge ([van den Beemt et al., 2025](#)). CBL is particularly relevant to criminology because the discipline is by its nature concerned with socially significant challenges relating to crime, harm, justice and victimisation. The QAA Benchmark Statement explicitly calls for students to develop an ability to apply criminological knowledge to contemporary crime problems and to engage with the applied nature of criminology through partnership with external organisations ([QAA, 2022](#)).

Limitations

The challenges of implementing CBL in higher education are substantial and have been clearly identified in recent empirical work. [Georgiou et al. \(2025\)](#) examined challenges reported by students, lecturers and external stakeholders in CBL programmes and found that key areas of concern include resistance from staff to new teaching approaches, resourcing constraints, time constraints, institutional barriers, mismatched expectations between students and facilitators, and group work dynamics. Assessment is a specific and under-resolved challenge for CBL. [Helker et al. \(2025\)](#) note that the open-endedness of CBL raises important difficulties for summative assessment, particularly where institutional assessment frameworks expect predetermined and standardised learning outcomes. For criminology, there is an additional risk that the focus on real-world challenges may privilege the concerns of the dominant institutions with which partnerships are formed, such as police forces or government agencies, at the expense of the critical, emancipatory perspectives that are central to the criminological tradition. The QAA Benchmark Statement emphasises the importance of examining processes of criminalisation and victimisation, including from decolonising perspectives and in relation to structural inequalities ([QAA, 2022](#)),

and CBL designs must actively resist the risk of reproducing institutional assumptions about what the problems of crime are and whose experiences matter.

Place-Based Learning: Principles and Evidence

Place-based learning connects students' learning to the local environment, community and culture in which they are studying. Its roots lie in Dewey's account of education as grounded in lived experience and in the progressive educational tradition that followed ([Gruenewald and Smith](#), cited in [Rios and Brewer, 2020](#)). In place-based education, the local community serves as a source of learning and a community to which students can contribute through application of what they have learned ([Rios and Brewer, 2020](#)). Quasi-experimental research by Rios and Brewer (2020) found that participation in a place-based learning community produced a stronger sense of belonging, improved academic performance and increased first-year persistence relative to a matched reference group, and participation narrowed equity gaps in first-year outcomes for students underrepresented in higher education. These findings are particularly significant for criminology given the discipline's historically broad recruitment profile, which has attracted mature students, students from non-traditional academic backgrounds and students with caring responsibilities ([QAA, 2022](#)). For criminology, the place-based approach maps naturally onto the discipline's concern with the geography of crime, harm and victimisation, and with the local institutions and communities that criminal justice processes affect. The QAA Benchmark Statement notes that teaching and learning should reflect variations in local concerns and individual provider arrangements ([QAA, 2022](#)).

Limitations

The research base for place-based learning in higher education remains relatively thin compared to PBL and IBL, and much of the strongest evidence comes from STEM contexts or pre-collegiate settings, raising questions about transferability ([Rios and Brewer, 2020](#)). The approach also raises practical challenges around the development and maintenance of community partnerships, the management of fieldwork and the accessibility of out-of-classroom activities. The QAA Benchmark Statement specifically notes that reasonable adjustments should be considered for fieldwork and that the often-hidden costs of field trips and placements should be

addressed proactively (QAA, 2022). There is also a risk that place-based learning, if not carefully theorised, can slip into uncritical local vocationalism, producing graduates who are well-adapted to local institutional arrangements but poorly equipped to think comparatively, critically and theoretically about crime and justice at national and international scales (QAA, 2022).

Competency-Based Education: Principles and Evidence

Competency-based education (CBE) is an educational design approach that measures student achievement in terms of demonstrated mastery of defined skills and competencies, rather than time spent in study (McGaghie et al., cited in Holmboe et al., 2024). CBE shifts the question from whether a student has completed a module to whether they can demonstrate the knowledge, skills and attributes that the module was intended to develop. It is closely associated with outcomes-based curriculum design and has been most fully developed in health professions education, though its principles are increasingly applied across higher education disciplines (Holmboe et al., 2024). CBE is not in itself an andragogy but a framework for structuring what a curriculum is trying to achieve and for assessing whether it has achieved it. Its value for criminology lies in the alignment it offers between the QAA Benchmark Statement's descriptions of threshold, typical and excellent graduate outcomes and the design of learning activities and assessments that can reliably measure student attainment at each level. The Benchmark Statement already describes graduate outcomes in terms of competencies - noting, for example, that at excellent level students should be able to provide exceptional critical assessment of the appropriateness of research methods and consistently identify appropriate strategies for specific research problems (QAA, 2022). CBE provides the curricular machinery for translating these outcome descriptors into practical learning and assessment designs.

Limitations

CBE has attracted criticism on several grounds. Critics argue that the reduction of complex disciplinary learning to lists of measurable competencies risks oversimplifying what it means to think like a criminologist and may privilege those dimensions of learning that are most easily quantified at the expense of those that are most intellectually significant. There are also concerns that competency frameworks

can become bureaucratic ends in themselves, consuming staff time in mapping exercises rather than improving student learning ([Holmboe et al., 2024](#)). For criminology, where the content is inherently contested and where critical reflexivity is a central graduate outcome, rigid competency specification may prove constraining.

The Specific Requirements of Criminology

The preceding sections have evaluated the major active learning methodologies in terms of their general evidence base and limitations. This section considers what the specific disciplinary context of criminology requires of a contemporary curriculum design.

The QAA Subject Benchmark Statement for Criminology (2022) articulates a vision of the discipline as theoretical, empirical and applied. It emphasises that criminology is multidisciplinary, constantly evolving and informed by changes in sociology, social policy, law, politics and philosophy ([QAA, 2022](#)). Its core concerns include processes of criminalisation and victimisation, social and legal constructions of crime, harm and deviance, the causes and organisation of crime, and official and unofficial responses to crime and harm, including the role of the state ([QAA, 2022](#)). Students are expected not only to describe these processes but to critically analyse them, recognise structural patterns of inequality, and apply criminological knowledge to real, contemporary problems.

Several specific requirements of the Benchmark Statement have direct implications for curriculum design methodology. First, research and critical enquiry are described as underpinning the entire degree, not as a component within it. At all levels, students are expected to have knowledge of ethical frameworks, research design, qualitative and quantitative methods, positionality and power, with the expectation increasing from foundational literacy at Level 4 to independent research design and execution at Level 6 ([QAA, 2022](#)). This requirement argues strongly for a model in which research is integrated throughout the curriculum as a tool for learning, not isolated in dedicated methods modules.

Second, the Benchmark Statement places equality, diversity and inclusion at the forefront of the discipline. It calls for the curriculum to engage with structural discrimination, colonialism, intersectionality and systemic bias, and for learning,

teaching and assessment approaches to be designed from the outset to be as inclusive as possible (QAA, 2022). This requirement speaks directly to the accessibility limitations of CBL and PjBL identified above and argues for deliberate equity-by-design principles in any curriculum model.

Third, the updated Benchmark Statement introduces education for sustainable development (ESD) as a major cross-cutting theme, citing green criminology, indigenous knowledge, semiology and southern criminology as emerging areas that curricula should address (QAA, 2022). ESD is explicitly linked to the development of global citizenship and the capacity to address social, environmental and economic concerns.

Fourth, the Benchmark Statement emphasises partnership with criminal justice agencies, NGOs and community organisations as a structural feature of criminology education, noting that such partnerships should enable data collection, the evaluation of crime prevention policies and the dissemination of research findings (QAA, 2022). This requirement is most fully realised through CBL and PjBL models that embed external stakeholders in the curriculum, but it also raises the critical caution noted above about whose knowledge and whose concerns are privileged in those partnerships.

Finally, experiential learning in criminology has a specific evidence base. Kakar (2025) examined innovative experiential learning techniques in criminology and criminal justice education and found that students in experiential learning environments demonstrated significantly higher levels of engagement, retention, critical thinking and comprehension of criminological concepts compared to those in traditional teaching conditions. These findings are consistent with the broader meta-analytic evidence reviewed above and provide discipline-specific support for the active learning approach.

Refining Andragogical Definitions: CBL, PBL and Simulation

Challenge-Based Learning Distinguished from Problem-Based Learning

Although PBL and CBL share a commitment to active, inquiry-led study, they are meaningfully distinct in ways relevant to criminology curriculum design. Gallagher and Savage (2023) identify several characteristics that set CBL apart: it requires students

to engage with global real-world challenges, involves academic and external stakeholders as co-participants in the learning process, and, crucially, operates in the absence of predefined study content or challenge. Where PBL typically presents learners with a structured problem and a defined body of knowledge to master, CBL demands that students first identify, frame and address the problem themselves, without a predetermined solution pathway. This distinction carries direct implications for the Level 5 and Level 6 stages of the model advanced in this article, where partnership with external criminal justice organisations and community bodies provides precisely the kind of open, stakeholder-embedded challenge environment that CBL theory requires.

Simulation-Based Learning as a Bridging Andragogy

A further andragogical tool meriting integration into the hybrid model is Simulation-Based Learning (SBL). [Chernikova et al. \(2020\)](#), in a comprehensive meta-analysis of simulation-based learning in higher education, found large positive effects on the development of complex skills, including communication, problem-solving, and diagnostic reasoning, across a wide range of disciplines. Simulations achieve these gains by replicating real-world conditions within a risk-free environment, enabling students to exercise professional judgement and decision-making without the ethical and practical constraints that would attend actual criminal justice practice. In a criminology context, as demonstrated by [Benbouriche and colleagues \(2025\)](#), who evaluated the CrimOPS offender-profiling simulation at the University of Westminster, such tools can bridge the gap between Level 4 structured inquiry and the more open, partner-dependent work of Level 5 and 6, allowing students to rehearse applied reasoning before they are required to exercise it in live external placements or community-facing projects.

Navigating Structural and Assessment Challenges

Interdisciplinary Comfort Zones

A recurring concern in the active learning literature is the tendency for students in multidisciplinary environments to retreat to familiar disciplinary frameworks when confronted with genuinely open-ended complexity ([Doulougeri et al., 2024](#)). Rather than drawing on diverse epistemological perspectives, students may default to the

concepts and methods of their primary subject area, limiting the integrative thinking that challenge-based tasks are designed to cultivate. For criminology, a discipline that is itself inherently interdisciplinary, drawing on law, sociology, psychology and public policy, this challenge is both present and tractable. The scaffolded Level 4 foundation proposed in this article, which explicitly models the application of multiple theoretical lenses to criminal justice problems, provides the cognitive scaffolding necessary to prepare students for the more demanding interdisciplinary work required at subsequent levels.

The Assessment Gap

Traditional examination-based assessment is repeatedly identified in the higher education literature as structurally misaligned with the process-oriented competencies that active learning is designed to develop ([Balloo et al., 2024](#)). Authentic assessment, broadly defined as evaluation that mirrors the conditions, tasks and audiences of professional practice, offers a more congruent alternative. [Hu, Liu and Daniel \(2025\)](#), in a systematic review of digital technologies in authentic assessment, identified seven types of authentic tasks in current higher education use, including simulations, e-portfolios, digital storytelling, peer evaluations and reflective essays, all of which are capable of capturing evidence of the applied, relational and metacognitive skills that conventional examinations cannot reach. For criminology, this might include structured police station simulations assessed by reflective logs, community-facing research reports reviewed by practitioner partners, or digital podcasts in which students present evidence-based policy arguments to a notional public audience. Such approaches would align assessment practice with the active pedagogies that generate the learning, rather than reverting to traditional formats that signal to students that rote knowledge reproduction remains the ultimate currency of success.

The Teacher as Facilitator

The successful implementation of any hybrid active learning model is ultimately dependent on the capacity of academic staff to enact the role of facilitator rather than lecturer. [Gallagher and Savage \(2023\)](#) note that CBL in particular requires educators to adopt the identity of co-collaborators, coaches or co-designers - a substantially different professional stance from the content-delivery model that many in higher education were trained to occupy. This transition demands new competencies: the

ability to manage productive ambiguity; to facilitate group processes without directing their outcome; and to coordinate relationships with external stakeholders who have legitimate but non-academic expectations of the learning process. As the [University of Glasgow's \(2024\)](#) active learning guidance notes, resistance from staff accustomed to teacher-centred approaches constitutes one of the more significant practical challenges to CBL implementation. The model proposed in this article therefore carries an implicit professional development requirement: investment in faculty training and reflective practice communities is a necessary, not optional, component of its realisation.

Supporting Evidence for the Principled Hybrid Model

The combination of SBL, PBL and CBL within a single coherently scaffolded degree structure is not merely a pragmatic compromise; it reflects an emerging theoretical consensus that these three methodologies address complementary dimensions of professional learning. SBL builds procedural confidence and applied judgement in controlled, low-stakes conditions; PBL develops collaborative problem-solving and knowledge mobilisation within structured parameters; and CBL cultivates the most advanced capacities - self-directed learning, stakeholder negotiation and real-world impact orientation - that are characteristic of graduate-level professional practice. Used in combination, and sequenced so that each methodology builds upon the competencies established by its predecessor, they form a coherent developmental arc.

The critical design principle that prevents this combination from becoming cognitively overwhelming is appropriate scaffolding at each transition point. [Chernikova et al. \(2020\)](#) note that simulation-based learning is most effective when accompanied by structured reflection phases - briefing, debriefing and documented self-assessment - that help learners to integrate tacit procedural experience with explicit conceptual knowledge. The Level 4-to-6 model proposed here embeds this logic structurally: each level increases the openness and stakes of the learning environment, while simultaneously providing the reflective and analytical scaffolding that enables students to extract generalisable insight from experiential encounter. The result is a degree that is neither purely theoretical nor unreflectively vocational, but

one that cultivates the kind of critically informed professional agency that contemporary criminology practice demands.

Towards a Principled Hybrid Model for Criminology

The evidence reviewed in the preceding sections suggests that no single methodology is fully adequate to the requirements of a contemporary criminology curriculum. Each approach carries genuine benefits and genuine limitations, and each speaks to different dimensions of what the QAA Benchmark Statement demands. The question facing criminology curriculum designers is therefore not which single approach to adopt but how to construct a principled hybrid that draws on the strengths of each approach while managing their individual limitations.

Several convergences across the approaches provide a useful starting framework. First, all of the active learning approaches reviewed are grounded in the proposition that content should be encountered as a resource for addressing a problem or inquiry, not as an end in itself. This aligns directly with the QAA Benchmark's statement that criminological theory is a core aspect of any criminology degree because it enables the analysis and explanation of crime and harm, not as abstract knowledge to be possessed ([QAA, 2022](#)). Curriculum designs that present theory and research methods as tools for investigating authentic problems will produce both deeper theoretical understanding and stronger methodological capability.

Second, the evidence supports a scaffolded, progressive model in which the degree of student autonomy in problem-framing and research design increases across the three levels of an undergraduate degree. At Level 4, structured inquiry and PBL approaches provide the scaffolding that students entering from diverse educational backgrounds require. At Level 5, project-based and challenge-based activities can build on this foundation with increasing use of external stakeholders and authentic challenge briefs. At Level 6, students are equipped for the full CBL and open inquiry model that the dissertation or capstone project demands ([QAA, 2022](#)).

Third, place-based learning can serve as an anchoring principle across all three levels, ensuring that the often-abstract theoretical concerns of criminology are connected to the lived realities of crime, harm and justice in the communities in which students study. This is consistent with the QAA Benchmark's emphasis on local

variation and with the evidence that place-based approaches are associated with improved belonging, persistence and equity outcomes ([Rios and Brewer, 2020](#)).

Fourth, a CBE framework can provide the outcomes architecture that maps across all three levels and ensures progression in research capability, theoretical understanding and reflexive practice is visible and assessable. The QAA Benchmark's existing descriptions of threshold, typical and excellent graduate outcomes already provide the raw material for a competency map; the challenge is to build learning activities and assessments that can reliably distinguish between these levels ([QAA, 2022](#)).

A hybrid model of this kind requires significant attention to assessment design. The evidence reviewed above consistently identifies assessment as the weak point in active learning implementations: where summative assessment continues to reward knowledge recall and essay writing, students will rationally invest in those forms of performance rather than in the investigative and applied competencies that the curriculum design is intended to develop. A genuinely integrated model requires assessment formats that are themselves active, applied and reflective, including briefing papers, research proposals, policy critiques, oral presentations and portfolio-based assessment that captures the development of students' thinking over time ([QAA, 2022](#)).

The implementation of such a model also requires sustained investment in staff development. The shift from knowledge transmission to facilitation of inquiry demands new andragogical competencies from academic staff, including the ability to work with ambiguity, to manage group processes, to build and maintain external partnerships and to assess performance on non-standardised tasks ([Georgiou et al., 2025](#); [Duke Centre for Teaching and Learning, 2025](#)). Research on PjBL implementation identifies faculty resistance and readiness as significant barriers, and notes that instructors' conceptualisation of their own role in the learning process directly shapes how successfully the approach is implemented ([Halvorsen and McIntyre, 2008](#), cited in [Purdue, 2008](#)).

Limitations and Directions for Future Research

This article is subject to several limitations that should be acknowledged. First, the empirical base for most of the approaches reviewed is dominated by STEM disciplines, particularly engineering and health sciences. While there is growing evidence from social science contexts, and a small but specific evidence base from criminology and criminal justice education, caution is required in transferring findings across disciplinary contexts. The meta-analysis by [Kozanitis and Nenciovici \(2023\)](#) provides important discipline-field evidence for the social sciences, but more primary research is needed within criminology specifically.

Second, much of the evidence for CBL is derived from higher education systems in continental Europe and North America, and its applicability within the specific institutional, regulatory and cultural context of UK higher education, including the requirements of the QAA Quality Code, remains an area where further empirical work is needed.

Third, this article has focused primarily on andragogical approaches and their evidence bases. The political economy of curriculum design in higher education, including the constraints imposed by resource allocation, staffing models, student-staff ratios and institutional risk aversion, sets significant limits on what is achievable in practice, and a full account of curriculum reform would need to engage seriously with these structural conditions.

Future research should prioritise longitudinal studies of active learning implementation in social science curricula that track not only short-term assessment outcomes but the development of research literacy, professional capability and critical thinking over the full duration of an undergraduate degree. Discipline-specific study within criminology and criminal justice education would be particularly valuable, as would comparative research across UK higher education providers that have adopted contrasting curriculum design models.

Conclusion

This article has reviewed the evidence base for IBL, PBL, PjBL, CBL, place-based learning and CBE in higher education and has assessed the relevance and applicability of each approach to the design of a contemporary criminology degree. The evidence consistently supports a shift away from passive, transmission-based

teaching towards active, student-centred pedagogies that engage students as investigators, analysts and co-producers of knowledge. This shift is not merely an andragogical preference but is directly required by the QAA Subject Benchmark Statement for [Criminology \(2022\)](#), which positions research, critical enquiry, equality and inclusion, education for sustainable development and professional partnership as foundational to the discipline.

No single methodology is adequate to these requirements alone. The case made here is for a principled hybrid model that uses structured inquiry and problem-based approaches at Level 4, challenge-based and project-based approaches at Level 5, and open inquiry and independent research at Level 6, with place-based anchoring throughout and a competency framework providing the outcomes architecture. Assessment must be redesigned in parallel with andragogy, and staff development must accompany curriculum reform rather than being treated as a secondary consideration.

The implementation of such a model is demanding and carries genuine risks, particularly around assessment design, equity of access and the integrity of theoretical and critical content. These risks are manageable, however, and the evidence reviewed in this article provides a strong and coherent basis for criminology programmes undertaking revalidation to move confidently in this direction.

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