Immersive Learning for Integrity and Anti-Corruption Education in Higher Education: Conceptual Foundations and Best Practices from the UQU10903 Integrity and Anti-Corruption Course in UTHM

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ABSTRACT

Integrity and anti-corruption education in higher education requires learning designs that move beyond legal literacy and moral instruction towards applied ethical judgment, civic agency and behavioural preparedness. In Malaysia, the National Anti-Corruption Strategy 2024-2028 identifies education as a central strategy and calls for strengthening integrity and anti-corruption courses in higher learning institutions. This article refines a conceptual best-practice manuscript on UQU10903 Integrity and Anti-Corruption at Universiti Tun Hussein Onn Malaysia (UTHM) by responding to the need for stronger applicability, clearer transferability and a more explicit empirical validation pathway. The objective is to propose a Purposeful Blended-Immersive Integrity Learning (PBIL) model that integrates flipped digital preparation, scenario-based role-play, gamified branching decisions, practitioner engagement, institutional exposure, structured reflection and evidence-informed course improvement. Methodologically, the article adopts a design-informed practice analysis by synthesising recent peer-reviewed literature on immersive, blended, flipped and gamified learning with policy and practice sources from MACC, UNODC, OECD and Malaysian institutional examples. The article identifies a research gap: while integrity education is increasingly institutionalised, limited work explains how immersive and blended strategies can be coherently aligned with anti-corruption learning outcomes and empirically tested in Malaysian higher education. To address this limitation, the revised framework includes a pilot evaluation roadmap using mixed methods, pre-post measures, scenario-based ethical reasoning tasks, reflective journals, focus groups and possible comparison with lecture-based delivery. The article concludes that UQU10903 can serve as a transferable pedagogical model for institutions seeking to strengthen integrity education through low-cost, reflective, evidence-informed and empirically testable immersive learning.

Keywords: Immersive learning, blended learning, integrity education, anti-corruption education, higher education

INTRODUCTION

Integrity and anti-corruption education has become an increasingly important agenda in Malaysian higher education. Universities are expected not only to produce graduates with disciplinary knowledge and technical competence, but also to cultivate graduates who are able to recognise corruption risks, exercise ethical judgment and contribute to transparent public, professional and civic life. This expectation has become more visible with the introduction of the Integrity and Anti-Corruption course in public higher learning institutions in Malaysia, following national attention to the need to strengthen integrity values among future graduates (Lai, 2023). The course therefore occupies a strategic space between curriculum, citizenship formation and national governance reform.

The challenge, however, is pedagogical as much as policy-oriented. Students may memorise definitions of bribery, abuse of power, conflict of interest, gratification and whistleblowing, but still struggle to identify moral ambiguity when it appears in social, institutional or professional settings. Corruption rarely appears to young

graduates as a textbook definition. It may appear as a gift from a supplier, a request from a superior, a favour for a friend, pressure to manipulate a procedure, misuse of student leadership power, or silence when wrongdoing is observed. Integrity education must therefore help students move from knowing what corruption is to rehearsing how they might respond when faced with ethically difficult situations.

UQU10903 Integrity and Anti-Corruption at Universiti Tun Hussein Onn Malaysia (UTHM) provides a timely context for developing a more active model of integrity education. Earlier development of this manuscript identified promising learning strategies such as role-play simulations, digital learning activities, field exposure and interactive workshops. This revised article strengthens the manuscript by positioning it as a conceptual best-practice paper with a clearer empirical validation roadmap rather than a causal impact study. It argues that immersive learning can support integrity education when it is integrated with blended preparation, realistic scenario design, practitioner input, guided reflection and assessment evidence.

The article is guided by four questions. First, what conceptual foundations justify the use of immersive and blended learning in integrity and anti-corruption education? Second, what research gap exists in current discussions of integrity education in Malaysian higher education? Third, how can UQU10903 be organised as a coherent best-practice model that can be adapted by other institutions and disciplines? Fourth, how can the proposed model be empirically tested in future course cycles? The contribution of the article is a Purposeful Blended-Immersive Integrity Learning (PBIL) framework that treats integrity education as a sequence of preparation, ethical experience, reflection, assessment and continuous improvement.

LITERATURE REVIEW

Integrity education as applied ethical judgment

Integrity education differs from ordinary content-based instruction because its intended outcomes include knowledge, values, attitudes, ethical reasoning and behavioural preparedness. Anti-corruption education must include legal knowledge and institutional procedures, but it must also cultivate the moral imagination needed to understand how ordinary decisions become corrupt when shaped by pressure, loyalty, opportunity, rationalisation or fear. This aligns with the OECD Public Integrity Handbook, which emphasises the role of integrity systems, ethical culture and capacity-building rather than rules alone (OECD, 2020).

International anti-corruption education resources also point towards active learning. The UNODC Education for Justice Anti-Corruption University Module Series provides learning outcomes, exercises, class structures and assessment guidance, indicating that anti-corruption education should combine concepts with participatory activities, case discussion and assessment (UNODC, 2019a, 2019b, 2019c). The pedagogical implication is clear: students should be required to analyse situations, justify decisions and connect learning to future roles, not merely reproduce definitions.

Experiential, blended and flipped learning

Experiential learning provides a foundational theory for integrity education. Dewey argued that education becomes meaningful when experience is organised, reflected upon and connected to future action (Dewey, 1938). Kolb later conceptualised learning as a cycle of concrete experience, reflective observation, abstract conceptualisation and active experimentation (Kolb, 1984). This cycle is particularly relevant to anti-corruption education because ethical competence develops through practice, reflection and transfer. A student who role-plays the refusal of a bribe, reflects on the pressure felt during the scenario, connects the experience to legal and moral principles, and formulates future action is moving through the experiential learning cycle.

Blended learning strengthens this cycle by combining digital preparation with face-to-face or synchronous active learning. Recent systematic review evidence in higher education suggests that replacing some classroom time with well-designed online learning can support flexibility, but its effectiveness depends on careful pedagogical integration rather than mere digital delivery (Müller & Mildenberger, 2021). Flipped learning studies similarly suggest that pre-class preparation must be connected to meaningful in-class activity; otherwise, flipping can become a logistical change rather than a learning improvement (Kapur et al., 2022). For UQU10903, this means

that micro-lectures, LMS quizzes and short readings should prepare students for scenario analysis, not simply duplicate lecture slides.

The design of digital preparation should also draw on multimedia learning principles. Short videos and multimedia materials are more effective when they are concise, segmented, signalled and aligned with learning tasks (Brame, 2016; Mayer, 2021). In integrity education, pre-class digital materials can introduce key concepts such as conflict of interest, abuse of power, reporting channels, whistleblowing protection and the social consequences of corruption. Classroom time can then be reserved for dilemma analysis, role-play and reflective dialogue.

Immersive learning, presence and transfer

Immersive learning extends experiential learning by placing learners in scenarios that create a sense of presence, involvement or situated participation. Recent work describes immersive learning broadly, including virtual reality, augmented reality, simulations, games, role-play and other experience-rich pedagogies (Mystakidis & Lympouridis, 2023). This broader definition is important for social science and ethics education because immersion does not require expensive technology. A well-structured role-play, mock investigation, branching scenario or practitioner dialogue can create cognitive and emotional presence if students are required to assume roles, make decisions and confront consequences.

Recent immersive learning literature also cautions against technological determinism. The Cognitive Affective Model of Immersive Learning (CAMIL) explains that immersive virtual environments can support learning through presence, agency, motivation, self-efficacy, embodiment, cognitive load and self-regulation (Makransky & Petersen, 2021). However, learning depends on instructional design, not immersion alone. The Theory of Immersive Collaborative Learning (TICOL) further highlights that collaboration in immersive environments depends on shared tasks, social interaction and structured meaning-making (Makransky & Petersen, 2023). These insights matter for UQU10903 because anti-corruption learning is inherently social: ethical pressure often comes from relationships, hierarchy and institutional culture.

Reviews of immersive virtual reality in higher education show promising outcomes but also highlight design gaps, limited longitudinal evidence and the need to align immersive tools with pedagogical objectives (Hamilton et al., 2021; Radianti et al., 2020). Experimental work also suggests that immersion and interactivity may influence learning differently, and that virtual field trips can support learning when guided by appropriate instructional principles (Makransky & Mayer, 2022; Petersen et al., 2022). Therefore, UQU10903 should not adopt immersive learning as an entertainment device. It should use immersion purposefully to improve recognition of ethical risk, decision-making practice and transfer to real-life contexts.

Gamification, serious games and anti-corruption learning

Gamification and serious games can support integrity education when they are aligned with learning outcomes and ethical reflection. Meta-analytic evidence suggests that gamification can improve learning outcomes, motivation and engagement, although the effect depends on design quality, context and the choice of game elements (Bai et al., 2020; Sailer & Homner, 2020). A systematic review of gamification in learning and instruction similarly emphasises that empirical benefits are strongest when game elements are embedded in meaningful learning activities rather than added superficially (Zainuddin et al., 2020).

In anti-corruption education, gamification is valuable because students can test decisions in a safe environment. U4 Anti-Corruption Resource Centre notes that anti-corruption games and simulations can help learners face corruption challenges, but they must be ethically designed, inclusive, updated over time and evaluated through clear metrics (Nicaise & Tufft, 2023). This warning is central to UQU10903. A digital branching story about gifts, procurement, student leadership, favouritism or reporting wrongdoing should not simply reward correct answers. It should help students see competing pressures, identify rationalisations, receive feedback and discuss the consequences of each decision during debriefing.

Malaysian policy and institutional ecosystem

The Malaysian policy context makes this article especially timely. The National Anti-Corruption Plan 2019-2023 positioned education and public awareness as part of a wider strategy to create a corruption-free nation (Government of Malaysia, 2019). The National Anti-Corruption Strategy 2024-2028 strengthens this agenda under Strategy 1: Education, including a specific sub-strategy to improve the implementation of the Integrity and Anti-Corruption Course at higher learning institutions and another to conduct integrity and anti-corruption courses for educators at higher learning institutions (Government of Malaysia, 2024). This policy context supports the need for pedagogically strong, evidence-informed and scalable course models.

MACC also identifies education as a core anti-corruption strategy. Its public education page states that anti-corruption education aims to increase understanding of corruption offences, their impacts and prevention measures, while nurturing integrity and anti-corruption values in society (Malaysian Anti-Corruption Commission, 2026b). AMAR, the Angkatan Mahasiswa Anti Rasuah, provides a student-facing ecosystem by aiming to cultivate anti-corruption values, prevent abuse of power among higher education students, and make students messengers of anti-corruption values on and beyond campus (Malaysian Anti-Corruption Commission, 2026a).

Institutional practices in Malaysia suggest that experiential approaches are already emerging. UMPSA reported visits to MACC offices as part of the student learning plan to reinforce learning through exposure to investigation procedures and facilities (Universiti Malaysia Pahang Al-Sultan Abdullah News, 2023). Raffles University reported an anti-corruption campaign involving practitioner talks, educational games and role-play video projections (Raffles University, 2025). These examples show that immersive practices exist, but they require stronger conceptual documentation, alignment with theory and systematic assessment.

Table 1. Recent literature and policy sources informing the revised conceptual framework.

Focus area	Key recent/supporting sources	Main insight for UQU10903
Immersive learning and IVR	(Makransky & Petersen, 2021, 2023); (Radianti et al., 2020); (Hamilton et al., 2021); (Mystakidis & Lympouridis, 2023)	Immersion works best when presence and agency are aligned with learning outcomes, feedback and reflection.
Blended and flipped learning	(Müller & Mildenberger, 2021); (Kapur et al., 2022); (Brame, 2016); (Mayer, 2021)	Digital preparation should reduce cognitive load and free class time for applied decision-making.
Gamification and serious games	(Bai et al., 2020); (Sailer & Homner, 2020); (Zainuddin et al., 2020); (Nicaise & Tufft, 2023)	Game elements should support ethical reasoning, safe experimentation and debriefing, not entertainment alone.
Integrity and anti-corruption education	(OECD, 2020); (UNODC, 2019a, 2019b, 2019c); (Malaysian Anti-Corruption Commission, 2026a, 2026b)	Anti-corruption learning requires cases, exercises, assessment and links to institutional integrity cultures.
Malaysian policy alignment	(Government of Malaysia, 2019, 2024); (Lai, 2023); (Universiti Malaysia Pahang Al-Sultan Abdullah News, 2023); (Raffles University, 2025)	The course is nationally relevant and should be documented as a scalable, evidence-informed practice.

RESEARCH GAP

The reviewed literature suggests three gaps. First, recent immersive learning studies have expanded theoretical understanding of presence, agency and cognitive-affective engagement, but much of the work is concentrated in science, health, engineering, simulation training and virtual reality contexts (Hamilton et al., 2021; Makransky & Petersen, 2021; Radianti et al., 2020). Less attention has been given to integrity and anti-corruption education, where immersion may involve social dilemmas, institutional exposure and reflective moral dialogue rather than advanced virtual reality.

Second, anti-corruption education resources from OECD, UNODC, MACC and U4 strongly support active learning, cases, simulation, games and assessment (Malaysian Anti-Corruption Commission, 2026b; Nicaise & Tufft, 2023; OECD, 2020; UNODC, 2019a, 2019b, 2019c). However, these resources are often presented as policy guidance, modules or training ideas rather than as a coherent higher education course architecture that integrates blended learning, scenario immersion, practitioner engagement, assessment and continuous improvement within a compulsory university course.

Third, the Malaysian context has a clear policy mandate to improve Integrity and Anti-Corruption courses at higher learning institutions (Government of Malaysia, 2024), and examples of experiential practice are emerging (Raffles University, 2025; Universiti Malaysia Pahang Al-Sultan Abdullah News, 2023). Yet there remains limited conceptual documentation on how a Malaysian public university course such as UQU10903 can organise immersive and blended strategies in a theoretically grounded, low-cost, ethical, assessable and empirically testable manner. This article addresses this gap by proposing the PBIL model and an explicit roadmap for pilot implementation, evaluation and adaptation across disciplines.

CONCEPTUAL FRAMEWORK

The proposed framework is named the Purposeful Blended-Immersive Integrity Learning (PBIL) model. It rests on four assumptions. First, integrity education requires constructive alignment among outcomes, learning activities and assessment (Biggs & Tang, 2011). Second, ethical competence develops through experience and reflection, consistent with experiential learning (Dewey, 1938; Kolb, 1984). Third, digital learning is most useful when it prepares students for higher-order face-to-face or synchronous tasks rather than replacing active learning (Müller & Mildenberger, 2021). Fourth, immersion must be followed by debriefing and assessment so that experience becomes transferable ethical judgment (Nicaise & Tufft, 2023; Wiggins & McTighe, 2005).

Purposeful immersion means that every immersive element must serve a defined learning outcome, ethical skill or reflective movement. The framework avoids the assumption that technology automatically improves learning. Instead, it combines five linked layers: digital preparation, scenario immersion, authentic exposure, guided reflection and evidence-informed improvement. Digital preparation introduces key concepts. Scenario immersion allows students to experience ethical pressure. Authentic exposure connects learning to MACC, AMAR, integrity officers or real institutional processes. Guided reflection converts activity into ethical reasoning. Evidence-informed improvement uses rubrics, student feedback, pilot data and continuous quality improvement to refine the course.

The model generates four design propositions. Proposition 1: digital preparation improves the quality of in-class immersion when students complete concise, structured and accountable pre-class tasks. Proposition 2: scenario immersion strengthens ethical reasoning when students are required to assume roles, identify pressures, justify decisions and consider consequences. Proposition 3: practitioner and institutional exposure increases authenticity by linking classroom learning to anti-corruption systems and public trust. Proposition 4: debriefing, reflective writing and rubrics are necessary to transform immersive activity into assessable learning outcomes.

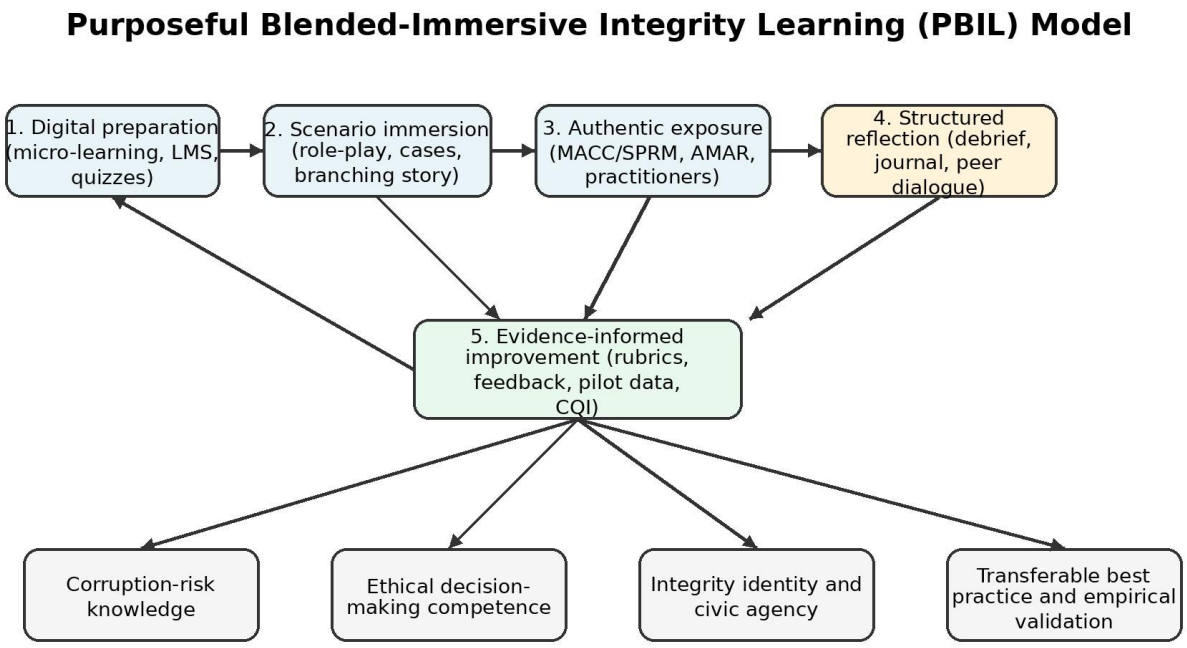


Figure 1: Purposeful blended-immersive integrity learning model for UQU10903 Integrity and Anti-Corruption.

METHODOLOGY

This article adopts a qualitative, design-informed practice analysis. It is not presented as a controlled experimental study and does not claim causal measurement of student learning gains. Rather, it develops a conceptual and best-practice manuscript from three sources: the course-based manuscript on immersive learning approaches in UQU10903 Integrity and Anti-Corruption at UTHM; recent peer-reviewed literature on immersive, blended, flipped and gamified learning; and publicly available policy and practice sources related to integrity and anti-corruption education in Malaysia and internationally.

The literature strengthening process prioritised sources from 2020-2026 where possible, especially systematic reviews, meta-analyses and theoretical papers on immersive learning, collaborative immersive learning, blended learning, flipped learning and gamification. Foundational works were retained where they provide essential theoretical grounding, including Dewey, Kolb, constructive alignment and Understanding by Design (Biggs & Tang, 2011; Dewey, 1938; Kolb, 1984; Wiggins & McTighe, 2005). Policy and practice sources were included where they are directly relevant to the implementation of integrity and anti-corruption education, including the National Anti-Corruption Strategy 2024-2028, MACC education resources, AMAR, UNODC E4J modules, OECD public integrity guidance and Malaysian institutional examples (Government of Malaysia, 2024; Malaysian Anti-Corruption Commission, 2026a, 2026b; OECD, 2020; UNODC, 2019a; Universiti Malaysia Pahang Al-Sultan Abdullah News, 2023).

The methodological logic follows educational design scholarship. First, the problem of practice is identified: integrity education risks becoming abstract if students remain passive recipients of definitions and laws. Second, theoretical principles are synthesised to explain why experience, presence, collaboration, reflection and alignment matter. Third, course design components are mapped to possible UQU10903 learning outcomes and assessment evidence. Fourth, best-practice principles are generated for adaptation by other institutions. Fifth, in response to the recognised limitation of conceptual work, an empirical validation roadmap is proposed so future course cycles can evaluate the model through systematic evidence. The paper therefore offers analytical findings and design propositions, not statistical findings.

Best-Practice Model for Uqu10903 Integrity and Anti-Corruption

Course design sequence

UQU10903 can be organised as a 14-week blended-immersive sequence that moves students from conceptual understanding to ethical action. The sequence begins with digital orientation and foundational concepts, then progresses to case analysis, role-play simulations, practitioner engagement, institutional exposure, reflective assessment and final synthesis. The model is flexible and can be adapted for large lectures, tutorial groups, blended delivery or modular implementation.

The first component is flipped digital preparation. Students complete short online materials before class, such as micro-lectures, short readings, infographics, quizzes and reflective prompts on corruption offences, integrity values, reporting channels and relevant institutions. These materials should be concise and aligned with class tasks. Their purpose is not to replace lecturers but to prepare students for ethical dialogue and decision-making.

The second component is scenario-based role-play. Students assume roles such as junior officer, contractor, student leader, procurement committee member, whistleblower, supervisor, community representative or peer observer. Scenarios may involve gifts, facilitation payments, conflict of interest, abuse of power, academic dishonesty, data manipulation or pressure to bypass procedures. Role-play enables students to feel ethical pressure and observe how rationalisation operates. The lecturer's role is to protect psychological safety and ensure that debriefing returns the activity to learning outcomes.

The third component is digital gamified learning. A branching scenario on the learning management system can ask students to make sequential decisions and receive consequences. For example, a student acting as a young officer may need to decide whether to accept a gift, report a colleague, challenge a superior or seek advice. Points, badges or feedback messages should be used carefully. The key pedagogical value is not the score but the opportunity to test decisions safely, revisit alternatives and discuss consequences.

The fourth component is practitioner and institutional exposure. This may include visits to MACC offices, virtual tours, dialogue with integrity officers, AMAR activities, court-related case analysis or guest workshops. Such exposure gives credibility to the course because students see how anti-corruption work is institutionalised. Where physical visits are difficult, video tours, recorded interviews and live online briefings can provide partial immersion.

The fifth component is structured reflection and assessment. Every immersive activity should close with questions such as: What happened? What made the decision difficult? What values were in conflict? What law, policy or institutional procedure is relevant? Who is affected? What would I do differently in real life? Reflection prevents immersive learning from becoming entertainment and converts activity into ethical reasoning.

Table 2. Alignment of immersive components, learning outcomes and assessment evidence.

Immersive component	**Pedagogical purpose**	**Suggested UQU10903 activity**	**Assessment evidence**
Flipped micro-learning	Build prior knowledge and reduce cognitive load	Short videos/readings on corruption offences, reporting channels and integrity values	Online quiz; pre-class reflection prompt
Scenario role-play	Rehearse ethical decision-making under pressure	Gift-giving dilemma, conflict of interest case or abuse of power simulation	Observation checklist; group debrief notes
Digital branching simulation	Allow safe experimentation with consequences	Interactive LMS story with multiple decision points and feedback	Completion report; reflective commentary

Practitioner engagement	Provide authenticity and professional insight	Interactive talk or workshop with MACC, AMAR or institutional integrity practitioner	Case analysis worksheet; Q&A reflection
Institutional exposure	Connect classroom content with anti-corruption practice	Visit, virtual tour or case-based briefing on investigation and reporting procedures	Field reflection; concept map
Structured reflection	Convert experience into transferable judgment	Guided journal, peer dialogue and final synthesis essay	Rubric-based reflective essay

Analytical findings from the design synthesis

The first analytical finding is that immersive learning strengthens integrity education when it makes corruption visible as a lived dilemma. In conventional delivery, students may see corruption as a legal offence committed by distant actors. Through role-play and branching cases, corruption becomes a decision embedded in friendship, hierarchy, fear, loyalty, opportunity and self-interest. This is important because many ethical failures begin with gradual rationalisation rather than deliberate criminal intent.

The second finding is that blended preparation improves the quality of immersion. Students cannot engage meaningfully in a simulation if they lack basic concepts. Micro-learning, readings and quizzes provide the vocabulary needed for discussion. When preparation is linked to in-class tasks, students are more likely to use terms such as conflict of interest, gratification, abuse of power, reporting channel and whistleblowing in applied ways.

The third finding is that practitioner involvement increases credibility and seriousness. Integrity education gains depth when students hear from MACC officers, integrity practitioners, AMAR leaders or institutional actors who can explain how cases are reported, investigated, prevented and communicated. Such exposure does not need to happen every week, but each course cycle should include at least one authentic encounter with practice.

The fourth finding is that reflection is the decisive element. Without debriefing, immersive activities may be enjoyable but shallow. Debriefing helps students name the ethical dilemma, identify pressures, connect experience to legal and moral principles, and formulate future action. Reflection also supports affective learning by asking students to consider who they are and what responsibility they carry as future professionals and citizens.

The fifth finding is that low-cost immersion is feasible. UTHM and similar institutions do not need to begin with advanced virtual reality. Role-play, case simulation, digital branching stories, courtroom-style discussion, integrity campaigns and guided practitioner sessions can create meaningful immersion. Technology should be adopted where it enhances access, feedback or realism, but the core pedagogical requirement is purposeful experience followed by guided meaning-making.

Proposed Empirical Validation and Transferability Roadmap

A central limitation of the present article is that it is conceptual and practice-based. To strengthen applicability, the PBIL model should be tested through pilot implementation with students enrolled in UQU10903 or comparable integrity and anti-corruption courses. A feasible first phase is a one-semester mixed-method pilot in which selected tutorial groups use the full PBIL sequence while other groups use the existing lecture-and-discussion approach. The purpose is not to rank lecturers but to determine whether the blended-immersive design adds educational value beyond conventional delivery.

The quantitative component may include pre- and post-course instruments measuring anti-corruption knowledge, integrity awareness, ethical decision-making confidence and behavioural intention to resist or report corruption. Scenario-based ethical reasoning tasks can be scored using a common rubric before and after the intervention. The qualitative component may include reflective journals, focus groups, open-ended survey

responses and lecturer observation logs. LMS analytics from micro-learning and branching simulations can provide supplementary evidence of completion, repetition of decision paths and time-on-task.

A second phase should test transferability across faculties and institutions. UQU10903 serves students from different disciplines, but corruption-risk scenarios should be contextualised for engineering, business, education, information technology, health, public administration and student leadership. The framework can also be adapted by private universities or polytechnics through low-cost activities such as case simulations, online practitioner dialogue and AMAR-style peer campaigns. Table 3 outlines a practical validation plan that future researchers and course coordinators can adopt.

Table 3. Proposed empirical validation plan for the PBIL model.

Evaluation focus	**Possible indicator**	**Data source**	**Timing**	**Analysis approach**
Knowledge and awareness	Understanding of corruption offences, reporting channels and institutional roles	Pre/post quiz; short answer items	Week 1 and Week 14	Descriptive comparison; paired test where appropriate
Ethical reasoning	Ability to identify dilemma, apply concepts, evaluate stakeholders and justify action	Scenario-based written task scored with rubric	Early and final course stage	Rubric score comparison; inter-rater discussion
Decision-making confidence	Perceived ability to refuse, report or seek advice in ethically difficult situations	Likert-scale survey and reflective prompt	Pre/post and after major activities	Change in mean/median scores; thematic comments
Behavioural intention and civic agency	Intention to uphold integrity, speak up, join campaigns or support anti-corruption culture	Survey; reflection journal; focus group	End of course	Thematic analysis and frequency patterns
Learning engagement	Completion of digital preparation, participation in simulation and quality of debriefing	LMS analytics; observation checklist; attendance record	Throughout semester	Engagement profile and triangulation
Comparative value	Difference between PBIL groups and lecture-heavy groups	Common assessment task and student feedback	End of semester	Quasi-experimental or matched-group comparison

Table 4. Transferability matrix for adapting PBIL across disciplines and settings.

Context	**Sample integrity dilemma**	**Suitable immersive activity**	**Adaptation note**
Engineering and technology	Supplier gifts, safety shortcuts, data manipulation or procurement pressure	Role-play procurement meeting; mock incident investigation	Use discipline-specific regulations and safety consequences.
Business and accounting	Conflict of interest, facilitation payment, false claim or financial misreporting	Branching compliance scenario; boardroom simulation	Link to corporate governance and professional ethics.

Education and student leadership	Academic dishonesty, favouritism, misuse of student funds or peer pressure	Student council scenario; reflective dialogue	Connect with academic integrity and leadership accountability.
Public administration and social science	Abuse of power, nepotism, whistleblowing and public trust	Case hearing; practitioner workshop with integrity officer	Emphasise institutional consequences and citizen rights.
Online or resource-limited delivery	Remote reporting dilemma or social media exposure of corruption	Interactive video, LMS branching story or virtual practitioner talk	Use low-cost tools and structured debriefing to maintain immersion.

DISCUSSION

The proposed UQU10903 model contributes to integrity education by translating anti-corruption learning into a structured sequence of cognition, experience, reflection and evidence-informed improvement. This is consistent with constructive alignment: learning outcomes, learning activities and assessment must support one another (Biggs & Tang, 2011). If a course outcome requires students to apply integrity principles to real situations, then assessment should not rely only on recall questions. It should include case analysis, reflective essays, scenario responses, peer dialogue and evidence of ethical reasoning.

The model also clarifies the meaning of immersion. Immersion is not limited to virtual reality or augmented reality. In social science and ethics education, immersion may occur through narrative, role assumption, dilemma analysis, institutional exposure and embodied participation in discussion. This broader view is important for public universities because it allows innovation without heavy technological cost. It also respects the human nature of corruption: corruption is not only a technical problem, but a relational and moral problem involving power, trust, institutions and consequences.

Another contribution is the integration of classroom learning with campus and national ecosystems. MACC's educational strategy and AMAR's role among higher education students show that integrity learning extends beyond one course (Malaysian Anti-Corruption Commission, 2026a, 2026b). UQU10903 can become a hub that connects curriculum, co-curriculum, community engagement and institutional integrity culture. A class simulation may lead to an integrity campaign; a practitioner workshop may lead to student-produced public service announcements; and a reflective assignment may become part of a wider integrity pledge or community project.

The revised model also addresses the issue of generalizability. Although the framework is grounded in a single UTHM course, the principles are not limited to UTHM. Digital preparation, scenario immersion, practitioner exposure, guided reflection and evidence-informed improvement can be adapted to other disciplines and institutions. What must change is the content of the dilemma, not the pedagogical logic. For example, engineering students may work through procurement and safety cases, business students may work through compliance and conflict-of-interest cases, while education students may work through academic integrity and leadership cases.

Nevertheless, immersive learning must be used ethically. Some corruption scenarios may involve sensitive issues such as fear, coercion, gendered power, financial vulnerability or institutional distrust. Lecturers should avoid shaming students, stereotyping communities or presenting corruption as the problem of one group. Scenarios should be realistic but respectful. Students should be allowed to participate in different roles, including observer and analyst roles, so that introverted students or students uncomfortable with acting are not disadvantaged.

Assessment must also be designed carefully. A student who performs dramatically in role-play may not necessarily demonstrate deeper ethical reasoning. Therefore, assessment should focus on analysis, justification, evidence, reflection and transfer. A strong rubric should ask whether the student identifies the ethical issue, applies relevant law or principle, evaluates stakeholders and consequences, proposes responsible action and reflects on personal learning.

Table 5. Sample rubric for assessing reflective ethical reasoning after immersive activities.

Criterion	Excellent	Satisfactory	Needs improvement
Identification of issue	Clearly identifies the corruption/integrity issue and distinguishes it from ordinary disagreement or inefficiency.	Identifies the main issue but with limited nuance.	Describes the situation but does not clearly identify the ethical issue.
Application of concepts	Applies relevant concepts such as abuse of power, conflict of interest, bribery, accountability or whistleblowing accurately.	Uses relevant concepts but explanation is general.	Uses concepts inaccurately or minimally.
Stakeholder and consequence analysis	Evaluates consequences for individuals, institutions, public trust and society.	Mentions some stakeholders and consequences.	Focuses mainly on personal opinion without wider analysis.
Responsible action	Proposes realistic, lawful and ethically defensible action.	Proposes action but with limited justification.	Action proposed is unclear, unsafe or weakly justified.
Reflective learning	Shows personal insight and transfer to future professional/civic contexts.	Shows some personal reflection.	Reflection is descriptive or superficial.

Implications for Practice and Policy

For lecturers, the model implies that integrity education should be designed as a series of ethical rehearsals. Each topic should include a concrete dilemma that requires students to make or evaluate a decision. The lecturer becomes not only a content expert but also a facilitator of moral dialogue. Professional development for lecturers should therefore include scenario writing, facilitation skills, debriefing strategies and psychologically safe classroom management.

For course coordinators, the model suggests the need for a shared repository of scenarios, cases, digital prompts, rubrics and reflective questions. A repository would reduce individual workload and improve consistency across tutorial groups. It should include cases from different sectors such as engineering, business, public administration, education, health, technology and student leadership, making UQU10903 relevant to students from various faculties.

For institutions, UQU10903 should be linked with wider campus integrity initiatives. Collaboration with MACC, AMAR, integrity units, student affairs divisions and community partners can transform the course from a classroom requirement into a living culture. Institutional support is needed for scheduling guest speakers, organising visits or virtual engagements, maintaining digital modules, recognising student-led anti-corruption initiatives and collecting evidence for course improvement.

For policymakers, the article highlights the importance of aligning curriculum policy with pedagogical and empirical support. Making a course compulsory is only the first step. The quality of implementation depends on learning materials, lecturer training, assessment design, digital infrastructure, partnerships with credible agencies and systematic evaluation. A national course can achieve stronger outcomes when institutions are encouraged to document, pilot, evaluate and share best practices across settings.

Limitations and Future Research

This article is limited by its conceptual and practice-based design. It does not present a controlled empirical evaluation of UQU10903 or claim measurable improvement in student behaviour. The design principles are drawn from literature, public institutional examples and a course-based manuscript. Therefore, the article should be read as a pedagogical framework and best-practice proposal rather than a definitive impact study.

The single-course context also limits direct generalisation. UQU10903 at UTHM has its own institutional culture, student profile, teaching arrangements and access to partners. However, the article addresses this

limitation by presenting PBIL as a transferable design logic rather than a fixed package. Future studies should test the model in different faculties, public and private universities, polytechnics and online or blended delivery contexts.

Future research should collect systematic evidence. Possible designs include pre- and post-tests of anti-corruption knowledge, scenario-based ethical reasoning tasks, analysis of reflective journals, student focus groups, lecturer observation logs and longitudinal follow-up of graduates. Comparative studies between lecture-heavy and immersive-blended delivery modes would also be valuable. Another promising direction is the development of validated rubrics for anti-corruption ethical reasoning among university students in Malaysia.

The digital dimension also warrants further study. Future UQU10903 cycles could test whether branching simulations, interactive videos, mobile micro-learning, augmented reality or collaborative virtual environments produce different types of engagement and learning. However, technology should be evaluated not by novelty but by whether it improves ethical reasoning, accessibility, inclusiveness and transfer of learning to real-life contexts.

CONCLUSION

Integrity and anti-corruption education in higher education must form judgment, not only transmit information. The revised conceptualisation of UQU10903 Integrity and Anti-Corruption at UTHM shows how a compulsory integrity course can be strengthened through purposeful immersive learning. By combining flipped digital preparation, scenario role-play, gamified decision-making, practitioner engagement, institutional exposure, structured reflection and evidence-informed improvement, the course can help students move from awareness to ethical competence and civic responsibility.

The central argument of this article is that immersive learning is valuable when it is aligned, ethical, reflective and empirically testable. It should not be reduced to technology or entertainment. Its value lies in giving students a safe but serious space to experience dilemmas, practise decisions, examine consequences and connect their learning to future professional and social roles. In this way, UQU10903 can contribute not only to compliance with national curriculum expectations but also to the formation of graduates who are prepared to uphold integrity in complex real-world situations.

The next stage is empirical validation. Pilot implementation, mixed-method assessment and comparison with traditional approaches would allow future researchers to determine the model's actual impact on ethical reasoning, integrity awareness, decision-making skills, behavioural intentions and civic engagement. Such work would strengthen the evidence base for integrity education and support the transfer of blended-immersive pedagogy to other disciplines and higher education institutions.

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ETHICS STATEMENT

This manuscript is a conceptual and practice-based pedagogical article. It does not report identifiable human participant data. Future empirical research involving student responses, grades, recordings or reflections should obtain appropriate institutional ethical approval and informed consent.

DATA AVAILABILITY STATEMENT

No empirical dataset was generated for this conceptual article. Publicly available sources used in the article are listed in the references.

CONFLICT OF INTEREST

The authors declare no conflict of interest.

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