



A QUALITATIVE CASE STUDY OF THE EVOLUTION OF EXAMINATION TOPICS IN OPEN AND DISTANCE LEARNING: THE EKP65 MODULE OF THE HELLENIC OPEN UNIVERSITY (1999–2024)

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Abstract:

This qualitative case study examines the evolution of examination topics in the EKP65 module of the Hellenic Open University from 1999 to 2024, analysing how assessment design in Open and Distance Learning (ODL) responds to pedagogical, institutional and technological change. Using NVivo-assisted qualitative document analysis, the study explores transformations in clarity, structural coherence, alignment with learning materials, cognitive demands and authenticity. Findings show significant improvements after 2016, with examination topics becoming more concise, conceptually integrated and pedagogically transparent. The transition to online examinations in 2020 accelerated enhancements in clarity and workload calibration, while the emergence of generative artificial intelligence after 2022 prompted a stronger emphasis on interpretive reasoning and personalised responses to safeguard authenticity. Overall, EKP65 reflects wider assessment transformations in ODL, demonstrating how examination design adapts to digital environments and emerging challenges. The study contributes insights for developing credible, learner-centred and AI-resilient assessment practices.

Keywords: Open and Distance Learning; assessment; examination topics; artificial intelligence

1. Introduction

Assessment constitutes a central component of Open and Distance Learning (ODL), shaping students' learning trajectories, influencing motivation and providing

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mechanisms for verifying academic achievement. In distance education environments, where interpersonal communication is mediated through digital or printed materials, the design of examination topics carries particular pedagogical significance. Clear instructions, manageable workload, alignment with course content and opportunities for deep cognitive engagement are integral to ensuring fair and meaningful assessment.

The EKP65 module of the Hellenic Open University (HOU) provides a unique opportunity for examining the evolution of assessment practices over an extended period. Since its introduction in the late 1990s, EKP65 has served thousands of distance learners and has undergone significant transformations in content delivery, pedagogical design and assessment methodology. The availability of a complete twenty-five-year archive of examination topics, combined with tutors' evaluative comments, offers a rich and unusually comprehensive dataset for examining longitudinal change.

This study explores how examination topics in EKP65 have evolved from 1999 to 2024, examining the pedagogical principles that shaped their development and analysing how broader institutional and technological shifts influenced their design. In particular, two external developments play a central role in this case:

- 1) the transition to online examinations beginning in 2020, which reshaped the affordances and constraints of assessment environments; and
- 2) the emergence and rapid dissemination of artificial intelligence tools after 2022, which introduced new concerns regarding the authenticity of student responses.

To address these issues, the study adopts a qualitative case study research design and employs NVivo-assisted qualitative document analysis. By examining examination topics and tutors' comments across a twenty-five-year period, the study provides insights into how assessment practices adapt to evolving pedagogical contexts and technological challenges.

Based on these aims, the study is guided by the following research questions:

RQ1: How have the EKP65 examination topics evolved in terms of clarity, structural coherence and alignment with course materials between 1999 and 2024?

RQ2: What pedagogical, institutional and technological factors have shaped the design of examination topics across different periods of the module's history?

RQ3: How did the transition to online examinations in 2020 influence the clarity, cognitive demands and workload of examination topics?

RQ4: How did the emergence of artificial intelligence after 2022 affect concerns about authenticity, and how did examination topic design respond to these new challenges?

2. Literature review

Assessment in higher education is recognised as a complex, multidimensional process that extends beyond measuring performance to capturing learning outcomes and cultivating enduring cognitive and metacognitive skills (Creswell, 2016; Balboni, 2016). In open and distance learning (ODL), the need for valid, reliable and pedagogically

robust assessment models becomes even more pressing, given persistent concerns about authenticity, transparency and equity in remote examination environments (Vorvilas et al., 2023; Aristeidou et al., 2024). The international literature identifies four interrelated thematic axes that frame contemporary discussions on assessment in ODL: (a) the shift from knowledge reproduction to authentic assessment; (b) institutional and ethical frameworks; (c) the role of artificial intelligence; and (d) the diversification of assessment formats.

2.1 From recall-based assessment to authentic learning

Studies consistently show that assessment practices grounded solely in memorisation and reproduction fail to promote meaningful learning. Instead, authentic assessments that foster critical thinking, reflection and the construction of new knowledge are increasingly prioritised (Mezzadri, 2020; Lionarakis, 2005). The design of examination topics that require analytical reasoning, interpretation and student voice contributes to the development of higher-order cognitive and metacognitive skills.

Recent research reinforces this orientation by highlighting critical thinking as a core learning outcome in ODL environments, one that necessitates instructional approaches promoting reflection, analysis, and synthesis of information. These skills have become a pedagogical priority, particularly in digitally mediated contexts, where learners must navigate complex information environments with autonomy and intellectual rigor (Manousou, 2025).

2.2 Institutional and ethical frameworks

A second body of literature emphasises that assessment in ODL cannot be separated from the establishment of robust institutional and ethical frameworks ensuring fairness, transparency and quality (Chaudhary & Dey, 2013; Baume, 2020; Domínguez-Figaredo et al., 2022). The shift to emergency remote teaching during the pandemic further exposed vulnerabilities related to academic integrity, data protection and unequal access to technology. At the same time, this period opened possibilities for revisiting conventional assessment approaches and experimenting with alternatives that emphasise critical thinking and learner autonomy (Ioakeimidou et al., 2023; Froehlich et al., 2023).

The need for assessment frameworks grounded in humanistic and ethical values has been long recognised. UNESCO's early guidelines (2006) underscored the importance of equity, respect and social justice in educational assessment. Contemporary scholarship strengthens this perspective, advocating assessment practices that are not merely instruments of measurement but integral components of the learning process that foster responsibility, dialogue and ethical awareness (Bozkurt et al., 2024; Tasis, 2022). Ethical and institutional frameworks thus constitute foundational pillars for cultivating a culture of assessment that is rigorous, equitable and aligned with the principles of lifelong learning and democracy.

2.3 Artificial intelligence, critical literacy and assessment design

A rapidly expanding body of international research addresses the pedagogical implications of artificial intelligence in higher education. At the same time, AI can enhance personalised learning and support the development of digital skills, uncritical use risks diminishing authentic thought, reinforcing bias and inhibiting learner autonomy. These concerns are particularly salient in assessment contexts, where AI-generated responses may compromise academic integrity and obscure genuine student understanding (Manousou, 2025).

The Artificial Intelligence-Based Assessment in Education (AIBA) framework, proposed by Fang, Roscoe and McNamara (2023), underscores the multifaceted nature of AI systems, incorporating their purposes, data sources, computational methods and degrees of transparency. Such models highlight the need for AI-enhanced assessment to remain pedagogically grounded, intelligible and ethically responsible.

This position aligns with arguments by Vlachopoulos and Makri (2024), who maintain that authentic assessment is indispensable for cultivating twenty-first century skills. Similarly, Du Plessis (2025) asserts that project-based assessment can strengthen deep learning when appropriately supported by AI. At the same time, scholars such as Bozkurt et al. (2024) warn of algorithmic biases, privacy risks and the hidden forms of inference embedded in “stealth assessment,” underscoring the necessity of carefully crafted design frameworks.

In ODL environments, these challenges become even more pronounced. AI reshapes assessment practices by functioning both as a tool for feedback and adaptation and as a threat to academic integrity. Issues such as plagiarism, authenticity and transparency require institutions to articulate new guidelines governing AI use.

2.4 Mixed and alternative forms of assessment

A substantial body of work documents a shift toward a pluralistic set of assessment formats in ODL, including open-book examinations, oral examinations, project-based assessments, portfolios and simulations (Ioakeimidou et al., 2023; Aristeidou et al., 2024; Kinley, 2023). Written examinations remain widely used, often incorporating similarity-checking tools to minimise rote learning and encourage critical analysis through extended, argument-based responses.

Oral examinations, although recommended by many institutions for their potential to assess authentic understanding, are less widely implemented due to organisational demands and time constraints (Ioakeimidou et al., 2023). Project-based assessments and research assignments promote authentic learning by fostering collaboration, inquiry, creativity and problem solving. In parallel, e-portfolios allow students to curate representative work over time, enhancing metacognitive awareness and enabling more holistic evaluation of learning processes.

Recent literature also identifies blended assessment models—combining face-to-face and online components—as promising approaches that enhance student trust, balance flexibility with structure, and support academic integrity (Cross et al., 2023).

These models integrate technological affordances while retaining the pedagogical value of human interaction and personalised feedback.

Collectively, these developments reflect a transition from monolithic, recall-oriented assessment toward a richer, more learner-centred framework responsive to the complexities of modern ODL. They illustrate how universities increasingly adopt diversified assessment methods that balance validity, reliability, authenticity and student agency (Manousou & Rassia, 2024; Hughes & Tait, 2021; Guangul, 2020).

Taken together, these strands of literature illuminate the broader landscape within which the EKP65 examination topics evolved and provide a strong conceptual lens for interpreting the findings of this study. Across the international research, three overarching patterns emerge: (a) a sustained pedagogical shift toward authenticity and critical engagement; (b) increasing institutional and ethical complexity within ODL systems; and (c) the rapid technological transformation—particularly through online learning environments and artificial intelligence—that redefines assessment design. These patterns resonate strongly with the historical trajectory of EKP65 and help explain the changes observed across its twenty-five-year examination archive.

First, the transition from recall-based assessment to authentic, meaning-oriented tasks mirrors shifts identified in the broader literature. As universities worldwide adopted assessment strategies that emphasise inquiry, interpretation and student agency, EKP65 examinations similarly moved away from long descriptive prompts towards tasks requiring analytical reasoning and conceptual synthesis. This alignment suggests that EKP65 did not evolve in isolation but reflected a broader pedagogical recalibration occurring within ODL. The increasing emphasis on critical thinking documented in recent ODL frameworks (Manousou, 2025; Vlachopoulos & Makri, 2024) provides an interpretive foundation for understanding why contemporary EKP65 topics require deeper engagement with theoretical constructs than earlier ones.

Second, the literature on institutional and ethical assessment frameworks contextualises the structural and clarity-related improvements identified in the EKP65 archive. The necessity for transparent, equitable and ethically grounded assessment practices—highlighted by UNESCO (2006), Chaudhary and Dey (2013), and subsequent pandemic-era research—helps explain the standardisation and professionalisation observed in EKP65 after 2016. The module's increased alignment with course materials, clearer instructions and better workload calibration reflect institutional commitments similar to those described in global ODL practices seeking to enhance trust, fairness and learning coherence (Hughes & Tait, 2021; Cross et al., 2023).

Third, the rapid expansion of AI-based tools provides a crucial backdrop for interpreting the post-2022 changes identified in the examination topics. Although EKP65 examinations do not explicitly reference AI, the tightening of conceptual focus, the increased insistence on personalised reasoning and the emphasis on contextualised responses align closely with strategies proposed in the literature for mitigating AI-driven risks to authenticity (Fang et al., 2023; Bozkurt et al., 2024). In this sense, the EKP65 archive offers a concrete example of how ODL assessment design evolves not only in

response to established pedagogical frameworks but also in anticipation of emerging technological challenges.

Finally, the diversification of assessment forms in the international literature—ranging from project-based assignments to oral examinations and blended assessment models—provides a useful comparative lens for understanding EKP65's continued reliance on written examinations. While EKP65 aligns with trends toward increased authenticity in design, it remains anchored in a traditional examination format. This tension underscores the value of examining EKP65 as a case study: it enables investigation of how authenticity and critical thinking can be cultivated even within conventional assessment structures, offering insights relevant to institutions that still depend heavily on written examinations.

Synthesising these bodies of literature, EKP65 emerges as a revealing microcosm of broader transformations in ODL assessment. The convergence of pedagogical reform, institutional adaptation and technological disruption provides a rich backdrop for understanding the module's assessment evolution. This synthesis also positions the case study as a meaningful contribution to ongoing debates about how ODL institutions can design credible, equitable and future-ready assessments in the age of online education and artificial intelligence.

2.6 Conceptual framework

Building on the strands of literature reviewed above, the present study adopts a conceptual framework that synthesises three interrelated dimensions of assessment in open and distance learning: authenticity, alignment, and cognitive complexity. These dimensions, recurrently highlighted in international scholarship, provide an analytical lens for understanding how EKP65 examination topics evolved over twenty-five years and how broader pedagogical and technological developments shaped their design.

Authenticity has emerged as a defining principle in contemporary assessment discourse. Rooted in constructivist learning theories and reinforced by recent work on AI-resilient evaluation (Fang et al., 2023; Vlachopoulos & Makri, 2024), authenticity refers to the degree to which assessment tasks require students to engage in meaningful, context-specific reasoning rather than rote memorisation or generic reproduction of knowledge. In ODL contexts, authenticity has particular relevance, as online examinations can be prone to plagiarism, outsourcing and, more recently, generative AI misuse (Bozkurt et al., 2024). Authenticity in assessment is thus operationalised in this study as: (a) conceptual specificity; (b) interpretive and personalised reasoning; and (c) demonstrable engagement with the assigned learning materials.

A second dimension, alignment, draws on Biggs' notion of constructive alignment and extensive ODL research emphasising the coherence between learning outcomes, teaching materials and assessment tasks. Alignment serves as a marker of pedagogical transparency and institutional consistency, both key concerns in distance learning (Chaudhary & Dey, 2013; Hughes & Tait, 2021). In the context of EKP65, alignment is examined through the degree to which examination topics reflect core concepts of the

module, follow its didactic structure and support fair opportunities for students to demonstrate course-related understanding.

The third dimension, cognitive complexity, captures the depth of reasoning required by assessment tasks. Drawing on Bloom-inspired taxonomies, scholarship on critical thinking in ODL (Manousou, 2025), and pandemic-era research on online examinations (Aristeidou et al., 2024), this study conceptualises cognitive complexity along a continuum ranging from recall and comprehension to analysis, synthesis and reflective judgement. Because online and AI-mediated environments can reduce the reliability of surface-level tasks, cognitive complexity has become a defining criterion for the credibility of digital assessments.

These three dimensions do not operate in isolation. Rather, they form an integrated conceptual system that reflects the main pedagogical and technological pressures shaping modern ODL assessment. Authenticity helps guard against academic integrity risks. Alignment ensures institutional consistency and fairness. Cognitive complexity secures the rigor needed for meaningful learning. Together, these dimensions provide a structured analytical framework for examining shifts in clarity, structure, task demands and responsiveness to emerging challenges such as online delivery and artificial intelligence.

This conceptual framework guides the thematic analysis presented in the following sections. It informs the coding strategy applied in NVivo, shapes the interpretation of tutors' comments and supports the identification of cross-period patterns in the evolution of EKP65 examination topics. By situating the case study within a coherent theoretical structure, the framework strengthens the study's explanatory power and contributes to broader debates on assessment transformation in ODL systems.

3. Material and Methods

3.1 Research design: Case study

This study is framed as a qualitative intrinsic case study, aiming to understand the evolution of examination topics in EKP65 as a distinctive and bounded case. According to Stake and Yin, case study research is appropriate when the goal is a deep understanding of a specific system rather than generalization across contexts. The boundaries of this case are defined by: the educational context (the EKP65 module), the time period (1999–2024), and two pivotal transitions in assessment practice (online examinations beginning in 2020 and authenticity concerns arising after 2022).

3.2 Data sources

Two datasets were analysed:

3.2.1 Examination topics (1999–2024)

Drawn from the complete archival file of examination papers, containing every exam topic administered during the twenty-five-year period. The dataset reflects diverse

assessment practices, including essay-style topics, case studies, theoretical applications and structured analysis tasks.

3.2.2 Tutors' evaluative comments

Qualitative comments provided by HOU tutors assessing the clarity, difficulty, representativeness and authenticity of examination topics in various years. Numerical ratings (e.g., average scores of 4.11 or 4.5) were used only as descriptive context—not as quantitative data.

3.3 Data analysis using NVivo

The analysis followed a hybrid (deductive + inductive) coding framework supported by NVivo qualitative analysis software.

Stage 1: Data preparation

All examination topics and tutors' comments were imported into NVivo. Separate folders were used for pre-2016 topics, 2016–2019 topics, 2020–2021 online examination topics and post-2022 topics influenced by AI authenticity concerns.

Stage 2: Open coding

Initial open coding was performed on exam topics to identify structural features (e.g., clarity, length, type of task, reading load) and on tutor comments (e.g., concerns, praises, suggestions).

Stage 3: Deductive coding

Codes derived from literature (clarity, alignment, cognitive demand, workload, contemporary relevance, authenticity) were applied to both datasets.

Stage 4: Inductive coding

Emergent themes were identified, such as “overly narrative structure,” “shift toward targeted prompts,” “post-2022 authenticity pressure,” and “importance of interpretive reasoning.”

Stage 5: Pattern analysis

NVivo queries (coding queries, matrix coding queries, word frequency queries) identified periods of thematic density and cross-year shifts.

3.4 Trustworthiness

Credibility was enhanced through constant comparison between exam topics and tutor commentary. Dependability was supported by NVivo's coding audit trail. Confirmability was ensured through analytic memos and triangulation of data sources. The longitudinal nature of the case enhances transferability to other ODL examination contexts.

4. Results and Discussion

This section presents the main findings of the study in order of analytical significance and integrates them with existing literature on assessment in Open and Distance Learning (ODL). The results derive from NVivo-assisted thematic analysis of all EKP65 examination topics (1999–2024) and accompanying tutors’ evaluative comments. The discussion is embedded within each thematic domain, in accordance with the journal’s guidelines.

Table 1: Evolution of EKP65 examination characteristics across five historical periods (1999–2024).

Period	Main Features	Tutor Feedback	Trend
1999–2005	Long narratives, overlapping subtasks, limited clarity	<i>“Dense”, “unclear”, “difficult to interpret”</i>	Structural inconsistency
2006–2015	Streamlining, clearer task orientation	<i>“More coherent”, “improved clarity”</i>	Stabilisation
2016–2019	Strong clarity, conceptual focus, workload balance	<i>“Well structured”, “representative”</i>	Marked improvement
2020–2022 (Online)	Concise instructions, reduced narrative load	<i>“Precise”, “communicatively efficient”</i>	Rapid optimization
2022–2024 (AI era)	Interpretive reasoning, specificity, authenticity focus	<i>“Generic responses”, “variable difficulty”</i>	AI-aware recalibration

Table 2: NVivo thematic coding summary of tutor feedback and examination characteristics

Theme	Coding Frequency	Trend Description	Representative Comments
Clarity & Structure	High after 2016	Shift to concise, well-designed prompts	<i>“Clearer and focused tasks”</i>
Alignment	Consistently high	Increased conceptual integration post-2010	<i>“Strong connection to module theory”</i>
Cognitive Demand	Increasing after 2015	More analysis and interpretation	<i>“Requires deeper reasoning”</i>
Workload	Improved after 2010	Balanced tasks, reduced narrative	<i>“Reasonable for exam duration”</i>
Authenticity (Post-2022)	Emerging high	AI-aware design	<i>“Generic responses indicate possible tool use”</i>

4.1 Clarity and structural consistency

A dominant pattern across the archive concerns the progressive improvement in the clarity and structural coherence of examination topics. Early examinations (1999–2005) often contained long narrative introductions, overlapping sub-questions and ambiguous instructions. Tutors frequently described these tasks as “dense,” “unclear,” or “multi-layered,” comments that appear repeatedly in NVivo-coded segments.

From 2006 onwards, examinations displayed greater organisational consistency. By 2016, topics had become more concise and linguistically controlled, a shift reflected in tutors’ increasing evaluations of clarity. This progression mirrors international trends

emphasising transparency and accessibility in ODL assessment (Chaudhary & Dey 2013; Hughes & Tait 2021). The transition to online examinations in 2020 further accelerated this development, with examiners adopting more economical phrasing to accommodate the constraints of digital delivery. The pattern aligns with findings by Cross et al. (2023) and Aristeidou et al. (2024), who report that online settings require structurally streamlined tasks to ensure equitable comprehension under remote conditions.

4.2 Alignment with learning materials

Alignment between examination topics and the official learning materials remained consistently strong throughout the twenty-five-year period, although its pedagogical function evolved. In earlier years, alignment often meant direct reproduction of specific textual sections, leading tutors to observe that some tasks encouraged surface-level learning.

After 2010, alignment took a more integrative form. Examination topics increasingly required students to synthesise concepts across multiple units, reflecting the growing emphasis on constructive alignment and deeper cognitive engagement documented in the literature (Balboni 2016; Mezzadri 2020). Post-2020, alignment became central to maintaining authenticity, as detailed conceptual references reduced the likelihood of generic or AI-generated responses—an approach consistent with strategies proposed by Fang et al. (2023) and Bozkurt et al. (2024). In this sense, EKP65 exemplifies how ODL assessments can use alignment not merely as a curriculum-matching tool but as a safeguard of academic integrity.

4.3 Cognitive demands and depth of reasoning

The cognitive demands of EKP65 examinations evolved from text-heavy processing to deeper analytical reasoning. Early tasks often placed a substantial cognitive burden on students due to extensive narrative framing. Tutors noted the “difficulty of managing the text within time limits,” a pattern evident in multiple coding nodes.

Between 2010 and 2019, examination questions increasingly required comparative analysis, theoretical interpretation and reflective reasoning, echoing wider ODL priorities for promoting critical thinking (Manousou 2025). This shift corresponds with findings in the international literature suggesting that authentic assessment strengthens higher-order thinking, particularly in distance contexts where students must structure their own learning pathways (Vlachopoulos & Makri 2024).

After 2022, cognitive demands incorporated subtler forms of interpretation and contextualisation designed to differentiate human from AI-produced reasoning. This aligns with Du Plessis’ (2025) argument that AI challenges must be met with assessment strategies emphasizing personalized analysis and situated judgement.

4.4 Workload and manageability

Workload emerged as a strong evaluative theme, particularly in earlier years. Examination topics from 1999 to 2008 often required processing multiple sub-sections or ancillary materials, prompting tutors' concerns about time feasibility.

Between 2010 and 2018, the workload became more balanced. Tasks were shorter, expectations clearer, and narrative framing reduced. Online examinations further reinforced this trend, as digital formats demand a tighter correspondence between task complexity and available examination time (Guangul et al. 2020; Aristeidou et al. 2024). Tutors consistently acknowledged the improved calibration between task demands and exam duration after 2020, supporting the view that remote settings encourage pedagogical discipline in task design.

4.5 Updating and contemporary relevance

The content of EKP65 assessments evolved in tandem with shifts in ODL discourse. Early examinations focused on printed materials, tutor roles and the foundations of distance pedagogy. From the mid-2000s, references to digital learning and computer-mediated communication became increasingly visible, consistent with broader trends identified by Domínguez-Figaredo et al. (2022).

The post-2020 period reflects an explicit engagement with digital learning environments, synchronous and asynchronous interaction, and the challenges of online examination practices. While AI is never directly referenced, post-2022 tasks exhibit markers of AI-aware design, such as specificity, contextualisation and interpretive reasoning, consistent with the concerns raised in Bozkurt et al. (2024) and in the “stealth assessment” debates.

4.6 Authenticity in the online and AI era

Authenticity concerns became significant only after 2022. Tutors noted “generic phrasing,” “non-specific arguments,” and “possible external assistance” as warning signs of AI-generated content. In response, examination topics shifted toward highly specific conceptual prompts, a requirement for textual justification, as well as explicit reference to module theories and personalized or situated reasoning tasks.

These strategies resonate strongly with international recommendations for AI-resilient assessment frameworks (Fang et al. 2023; Hatzipanagos et al. 2024). EKP65 thus illustrates how examination design can adapt rapidly to emerging technological challenges without altering the formal examination format.

Of course, while the present analysis approaches generative artificial intelligence primarily as a challenge to assessment authenticity, it is important to acknowledge that international scholarship increasingly frames AI as a potential pedagogical resource when integrated transparently and ethically. Rather than positioning AI solely as a threat, recent debates emphasize its possible role in supporting formative feedback, reflective learning and critical engagement. In the context of EKP65, this perspective does not imply direct AI integration into assessment practices, but it highlights an emerging conceptual

shift within ODL discourse—one that invites future exploration of assessment models capable of balancing AI awareness, academic integrity and pedagogical value.

4.7 Cross-period patterns and overall trajectory

NVivo cross-case analysis shows a marked improvement in tutor satisfaction after 2016, particularly for clarity, alignment and cognitive depth. The highest evaluations appear in the 2019–2020 and 2022–2023 examination cycles, where mean ratings reached 4.11 and 4.5, respectively, reflecting mature and pedagogically coherent task design.

The variability observed in 2023–2024—where the regular examination scored 3.0 and the resit 3.72—aligns with tutors’ comments on inconsistent difficulty and shifting expectations in the AI era. These patterns underscore the need for continuous refinement, consistent with international recommendations for iterative assessment redesign (Hughes & Tait 2021; Aristeidou et al. 2024).

Overall, EKP65 mirrors broader global transitions in ODL assessment shaped by pedagogical reform, digital transformation and the emergence of artificial intelligence.

4.8 Limitations

Despite the documented pedagogical refinement observed in the EKP65 module over time, the present study is not without limitations. First, the analysis focuses on a single module within one institution, which restricts the generalizability of the findings to other Open and Distance Learning contexts. Second, the study relies primarily on archival examination materials and tutors’ evaluative comments, without incorporating direct student perspectives. As a result, potential implications of assessment redesign on student workload, stress levels, or perceptions of fairness cannot be fully assessed. Finally, although the transition to online examinations and the growing emphasis on AI-aware task design appear pedagogically justified, issues related to unequal access to technology and varying levels of digital literacy among students warrant further investigation. At the same time, recent examination topics indicate an emerging orientation toward alternative assessment logics and a cautious, pedagogically grounded consideration of artificial intelligence, as discussed in the literature and reflected in broader institutional debates. Future research incorporating comparative module analysis and student-reported data would help address these limitations and strengthen the empirical basis of the conclusions.

5. Recommendations

The findings of this case study point to several theoretical, practical and institutional directions for strengthening assessment design in Open and Distance Learning (ODL), particularly within increasingly digital and AI-mediated educational environments. These recommendations extend beyond the immediate context of EKP65 and contribute to wider discussions on how contemporary assessment systems can remain authentic, equitable and pedagogically meaningful.

First, assessment design should prioritise clarity, conceptual focus and cognitive depth. Examination prompts that highlight essential constructs, minimise narrative complexity, and explicitly articulate the reasoning required are more likely to support transparent and valid assessment processes. Institutions and course teams may therefore benefit from adopting structured design templates or checklists that guide examiners in crafting tasks that balance linguistic economy with analytical richness. Such tools can help ensure coherence across modules and promote consistency in the student experience.

Second, authenticity must be approached as a dynamic pedagogical construct subject to ongoing revision in response to technological developments. As generative AI becomes increasingly embedded in learners' practices, exam design should emphasise personalised, contextualised and theoretically grounded reasoning. These elements offer a pedagogically sound alternative to reliance on technological detection measures and help safeguard academic integrity in a non-punitive manner. ODL institutions should consider issuing guidelines on AI-aware assessment design that support examiners in developing tasks resilient to automated responses.

Third, institutions should strengthen their assessment governance structures. The improvements observed in EKP65 after 2016 suggest that collaborative moderation, common quality criteria and regular review cycles can enhance the reliability and transparency of examinations. Universities may therefore wish to formalise mechanisms for cross-cycle evaluation, assessment, peer review and coordinated professional development initiatives for tutors and academic staff. Such coordinated approaches can foster a shared assessment culture, support staff in navigating digital transformation and contribute to institutional coherence.

Fourth, the transition to online examinations highlights the need for comprehensive digital assessment policies that extend beyond technical considerations. Issues of accessibility, data privacy, workload equity and the psychological experience of remote examinations require systematic institutional attention. Universities should aim to create proactive frameworks that address these dimensions, recognising that digital assessment environments have social and cultural implications for learners' sense of fairness, agency and belonging.

Fifth, the rapidly evolving AI landscape calls for interdisciplinary dialogue among educators, technologists and ethicists. Assessment innovation must be grounded in principles of transparency, fairness and learner development. Institutions should therefore encourage cross-disciplinary research and collaborative initiatives that explore emerging assessment frameworks capable of balancing pedagogical integrity with technological affordances.

Finally, future research should broaden the scope of this study by incorporating student perspectives and conducting comparative analyses across different modules and institutions. Understanding how learners experience assessment transitions—especially in online contexts and AI-influenced environments—will offer richer insights into how assessment design shapes motivation, perceived fairness and academic confidence.

Longitudinal and comparative studies can illuminate whether the patterns observed in EKP65 reflect wider systemic shifts or module-specific dynamics.

6. Conclusion

This qualitative case study examined the evolution of EKP65 examination topics over a twenty-five-year period, offering a longitudinal view of how assessment practices in an ODL environment adapt to changing pedagogical, institutional and technological conditions. The findings demonstrate a clear trajectory of improvement: examination tasks gradually shifted from narratively dense and structurally complex prompts toward clearer, more coherent and pedagogically grounded designs. This transition reflects the broader maturation of assessment philosophy within ODL, aligning with international trends emphasising authenticity, cognitive depth and learner-centred evaluation.

The transition to online examinations in 2020 acted as an inflection point, accelerating developments already underway. Digital examination environments required greater linguistic economy, explicit task formulation and improved workload calibration, prompting more intentional and streamlined design choices. Similarly, institutional coordination and clearer assessment governance contributed to increased consistency, transparency and alignment across exam cycles, particularly after 2016. The module's trajectory thus illustrates how institutional structures and pedagogical reflexivity interact to shape the quality and reliability of assessment.

The emergence of generative artificial intelligence after 2022 introduced new pressures on authenticity and academic integrity. While AI was not explicitly referenced in examination tasks, its influence is visible in the shift toward conceptually specific, interpretive and context-dependent prompts—tasks less easily replicated by generic AI-generated responses. This aligns with the growing international consensus that assessment must evolve to preserve authenticity, requiring deeper engagement with theoretical constructs, personal reasoning and situated judgment. In this sense, EKP65 serves as a microcosm of how ODL institutions worldwide navigate the challenges and opportunities of assessment in increasingly hybrid and AI-mediated learning environments.

Beyond documenting historical change, the present study contributes methodologically by demonstrating the value of NVivo-assisted qualitative document analysis for examining assessment evolution over extended periods. By triangulating tutor commentary, examination archives and thematic coding, the study provides a nuanced account of how assessment practices are shaped over time—not only by pedagogical intentions but also by institutional norms, digital affordances and emerging technological disruptions.

Several implications emerge. For assessment designers, the findings highlight the importance of balancing clarity with cognitive depth, designing tasks that both guide and challenge learners, and ensuring alignment with the evolving epistemic identity of ODL. For institutions, the results underscore the need for sustained support for assessment

governance, including coordination structures, professional development and clear policy frameworks that anticipate technological change. For the wider research community, the study affirms the necessity of ongoing inquiry into how AI transforms authenticity, student behaviour and the future landscape of evaluation.

Future research could build on this case study by comparing EKP65 with other modules within the Hellenic Open University or across international ODL institutions to identify broader patterns of convergence and divergence. Further work might also incorporate student perspectives, exploring how learners interpret, experience and respond to evolving assessment practices in an era marked by online learning and AI-enabled tools. Such comparative and multi-perspective approaches would deepen our understanding of how assessment can remain rigorous, fair and pedagogically meaningful in the shifting terrain of digital and hybrid education.

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Conflict of Interest Statement

The authors declare no conflicts of interest.

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