

BEYOND TRADITIONAL NOTES: COMIC-BASED LEARNING IN HIGHER EDUCATION

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Abstract. Traditional lecture notes may not adequately support diverse learning needs in self-directed environments, especially in the increasing complexity of law-related subjects in tertiary education presents significant challenges for long-distance learners, particularly in sustaining attention, interpreting abstract legal doctrines, and retaining dense textual information. Traditional text-heavy lecture notes may not adequately support diverse learning needs in self-directed environments. This study examines students' lived experiences of using lecture notes designed in the form of comics (COMIC) in a Bachelor's degree programme at a local university. The problem addressed concerns whether an alternative visual-narrative format can enhance comprehension and retention among distance learners studying law-related content. The objective of the research was to explore how students perceive and experience comic-based notes and to identify their pedagogical value in supporting academic learning. A qualitative phenomenological design was employed to capture the essence of students' experiences. Thirty long-distance learning students participated, and data were collected through reflective responses and analysed thematically. The findings indicate that Comic Learning Enhances Academic Retention, conceptualised through the C.L.E.A.R. framework: Conceptual Clarity, Learner Engagement, Experiential Understanding, Accessible Content, and Retention of Knowledge. Students reported that the structured visuals and narrative sequencing simplified complex legal principles, increased engagement, reduced cognitive overload, and supported longer-term recall. The study recommends the integration of structured comic-based materials as a complementary instructional strategy in law-related courses, particularly for distance education contexts. Such an approach may promote deeper understanding, sustained engagement, and improved knowledge retention in higher education settings. The contribution lies in connecting visual pedagogy with phenomenological evidence from authentic distance-learning practice and offering an integrative framework for designing academically rigorous supplementary materials.

Keywords: *comic-based learning, visual pedagogy, distance learning, legal education, phenomenology*

Introduction

Teaching and learning in tertiary education have evolved significantly in response to digital transformation, diverse learner profiles, and the increasing complexity of disciplinary content. Traditional note-taking and text-heavy instructional materials remain dominant in higher education; however, they often present challenges for students, particularly in abstract and theory-driven subjects. Long-distance learners rely heavily on written materials for independent study, making clarity and engagement essential. Recent pedagogical discourse emphasises active learning, visual literacy, and multimodal instruction as mechanisms to enhance understanding and retention (Mayer, 2021; Martin and Bolliger, 2020). Narrative and visual approaches, including comic-based materials, have emerged as innovative tools to support cognitive processing and reduce overload. This research explores how students perceive and experience comic-

based notes and identifies their pedagogical value in supporting academic learning. Specifically, the study examines whether comic-based instructional materials enhance student retention and understanding compared with traditional notes in a tertiary learning environment.

Pedagogy in contemporary higher education

Contemporary pedagogy in higher education increasingly emphasises learner-centred approaches that integrate cognitive, emotional, and experiential dimensions of learning (Darling-Hammond et al., 2020). This shift reflects a broader move away from passive knowledge transmission towards active knowledge construction, where learners are positioned as participants rather than recipients. Constructivist perspectives suggest that learning is most effective when students actively engage with content and construct meaning through interaction and reflection (Biggs and Tang, 2022). Multimodal learning theories highlight the importance of presenting information through multiple channels, particularly visual and textual modes (Mayer, 2021). According to multimedia learning theory, learners process information through verbal and visual channels, and meaningful learning occurs when these channels are effectively integrated. Visual pedagogy therefore enhances dual-coding processes by allowing learners to build connections between images and words, facilitating deeper comprehension and more durable knowledge structures. Recent studies further suggest that combining narrative elements with visual representation can enhance cognitive engagement and promote higher-order thinking (Chan and Lee, 2024). As higher education increasingly accommodates diverse learner profiles, including adult and distance learners, there is a growing need for pedagogical approaches that support flexible, accessible, and cognitively aligned learning experiences.

Traditional methods of notes

Traditional note-taking practices in higher education are predominantly characterised by linear, text-dense explanations that prioritise content coverage and conceptual detail. While such formats are effective for documentation and information storage, they may not sufficiently stimulate engagement or accommodate diverse learning preferences (Henderson and Phillips, 2022). From a cognitive perspective, text-heavy materials may impose high intrinsic and extraneous cognitive load, particularly when learners are required to interpret complex or abstract concepts without visual scaffolding (Paas and Van Merriënboer, 2020). This issue is particularly pronounced in distance-learning contexts, where students rely heavily on written materials for self-directed study and may lack immediate instructional support (Nguyen, 2023). Traditional notes also tend to assume uniform learning strategies, overlooking variability in learners' cognitive processing styles and preferences. Research suggests that when instructional materials fail to align with learners' cognitive needs, engagement and retention may be compromised (Bond et al., 2020). Although traditional notes remain foundational in higher education, these limitations have prompted exploration of alternative instructional formats that better support comprehension and sustained engagement.

Emerging methods for the new generation

The emergence of Generation Z and contemporary adult learners has intensified the need for innovative pedagogical approaches. These learners are often described as

visually oriented, digitally immersed, and accustomed to interactive forms of content (Seemiller and Grace, 2016). Consequently, interest has grown in integrating visual and narrative-based instructional methods within higher education. Comic-based learning represents one such innovation, combining storytelling, dialogue, and imagery to present academic content in structured yet engaging formats. Unlike purely decorative visuals, comics employ sequential art to guide learners through concepts, thereby supporting both comprehension and narrative coherence. Recent studies indicate that visual narratives can enhance motivation, engagement, and meaning-making processes (Kuttner et al., 2021). By embedding academic concepts within relatable scenarios, comics facilitate experiential understanding and contextual learning. Chan and Lee (2024) further argue that narrative-based visual materials can strengthen cognitive connections by linking abstract concepts to familiar contexts, thereby improving recall and application. The integration of visual storytelling also aligns with experiential learning theory, which emphasises learning through experience and reflection (Morris, 2020). Comic-based learning may therefore enhance engagement while promoting deeper and more meaningful learning outcomes.

Are innovative methods superior to traditional notes?

A growing body of research suggests that multimodal instructional materials offer advantages over traditional text-based approaches. Mayer (2021) argues that integrating visual and verbal elements enhances cognitive processing by reducing overload and supporting the organisation of information into coherent mental models. Similarly, Rahman and Yusof (2025) found that multimodal pedagogy in tertiary classrooms significantly improves conceptual understanding and long-term retention compared with text-only formats. Although the effectiveness of multimodal learning is well supported, its application within higher education remains uneven. Much of the existing literature focuses on controlled experimental settings or lower educational levels, with limited exploration of authentic classroom contexts, particularly in distance-learning environments. Qualitative evidence on students' lived experiences when engaging with innovative formats such as comic-based notes also remains limited. This gap is particularly relevant in conceptually demanding subjects, where traditional approaches may not adequately support comprehension and retention. The present study addresses the gap by providing phenomenological insight into how comic-based learning influences students' understanding, engagement, and retention within a tertiary education context.

Materials and Methods

Research design

This study adopted a qualitative phenomenological design to explore students' lived experiences of using comic-based notes. Phenomenology seeks to understand the essence of participants' experiences and how meaning is constructed (Creswell and Poth, 2017; Moustakas, 1994). This approach was appropriate because the study aimed to capture subjective perceptions rather than measure quantitative outcomes.

Participants

Thirty long-distance learning students enrolled in a Bachelor's degree programme at a local university participated in the study. The subject was law-related and conceptually demanding, making it suitable for evaluating an alternative instructional format.

Data collection and analysis

Data were collected through structured reflective responses. Thematic analysis followed Braun and Clarke (2021) reflexive thematic approach. Themes were identified inductively and organised into coherent clusters that represented recurring patterns across participants' accounts.

Results and Discussion

Analytical overview

The analysis focused on responses from 30 long-distance learners at a Malaysian university. Participants were assigned anonymised identifiers from P01 to P30. Quotations are reproduced verbatim, including minor grammatical and typographical irregularities, to preserve participants' voices. The phenomenological analysis generated four interconnected themes as described in the *Table 1*. Descriptive counts are reported to indicate the distribution of experiences within this sample, not to support statistical generalisation.

Table 1. *Phenomenological analysis.*

Theme	Descriptive evidence
Simplified learning and visual clarity	27 of 30 participants described improved understanding; 19 explicitly attributed this improvement to illustrations, colour, dialogue, or visual sequencing.
Learner engagement and enjoyment	20 participants explicitly described the comics as fun, engaging, interesting, enjoyable, or less boring than conventional notes.
Minimal confusion and constructive refinement	Of the 27 participants who provided interpretable responses, 20 reported no substantive confusion, while seven identified specific design limitations.
Perceived enhancement of retention	11 participants explicitly referred to memory, memorisation, recall, or remembering key points.

Simplified learning and visual clarity

The most prevalent finding concerned the perceived simplification of conceptually dense material. Participants described the comic notes as clearer, more concise, and easier to process than paragraph-based academic notes. The combination of images, short dialogue, and sequential scenes appeared to provide an immediately recognisable structure for interpreting the content. P04 directly contrasted the comic format with conventional textual presentation:

"It simplify the chapter in a very unique and using graphic image to help me understand better. this approach is better then student having ti read through a bunch of paragraphs." (P04)

P07 similarly emphasised clarity and contextualisation:

"The pictures and short dialogues made it easier to follow the situation and understand how industrial relations work in real life." (P07)

For P28, visual and narrative organisation supported the interpretation of theoretical material:

“The storyline and characters simplified the explanations, especially for HRM processes that are usually theoretical.” (P28)

The findings also indicate that simplification did not necessarily mean reducing content to isolated facts. Several participants explained that the comics highlighted essential information while maintaining sufficient context. P13 stated:

“The comic only highlight the main point and it is easy to remember.” (P13)

P20 described the material as providing:

“a clearer picture in a straight forward and concise version.” (P20)

These responses show that students valued the prioritisation and sequencing of key ideas. The comics appeared to reduce the effort required to identify relationships between concepts, examples, and workplace situations.

Learner engagement and motivational activation

A second theme concerned affective and cognitive engagement. Participants repeatedly described the comics as enjoyable, colourful, interactive, and less stressful than traditional reading materials. This experience was particularly relevant to long-distance learners, who were required to interact with instructional materials independently. P10 summarised the emotional quality of the experience as:

“Less stress, less pressure, more fun and interesting.” (P10)

P14 explained that the format sustained attention when the subject matter became demanding:

“Sometimes when the topics are heavy, it’s hard to stay focused, but with the comics, it felt more relaxed and enjoyable.” (P14)

The reduction of boredom was especially prominent. P15 contrasted comics with lengthy text:

“Reading long texts tend to make me feel sleepy, the comic attract my attention.” (P15)

P20 offered a similar comparison:

“It’s like reading entertainment materials. It hacks my brain to not easily get boring reading some new informations.” (P20)

Engagement was not limited to entertainment. Participants connected enjoyment with greater willingness to continue reading and interpret the content. P29 characterised comics as:

“a more interactive, relatable, and enjoyable way of learning compared to traditional text-heavy materials.” (P29)

P30 similarly noted:

“The pictures and stories made everything more relatable and I could remember the ideas better because it didn’t feel like boring reading.” (P30)

The responses therefore indicate that enjoyment operated alongside concentration, relevance, and sustained interaction. The comic format changed both how students felt about the material and how they approached the learning task.

Minimal confusion and constructive refinement

Among the 27 participants who provided interpretable responses to the question on confusion, 20 reported that the comic was clear or presented no substantive difficulty. Responses included “No,” “Everything is okay,” “Everything was clear overall,” and “everything work well and easy to understand.” P17 reported:

“No, everything work well and easy to understand.” (P17)

P20 similarly stated:

“They were not. So far it works for me very well.” (P20)

Perceived enhancement of retention

Eleven participants explicitly linked the comic format to memory, memorisation, or recall. Visual scenes, characters, dialogue, and highlighted key points functioned as perceived memory cues during revision. P13 explained:

“As a part time student where we real case scenario, it is not difficult for me to provide example or elaborate it as long as I can remember the key point.” (P13)

P14 contrasted narrative understanding with rote memorisation:

“Instead of just memorizing the notes, I could imagine how the process, conflicts, and solutions happen in real life.” (P14)

P15 explicitly connected visual support with retention:

“learning with visuals aid as comic improve our memory retention than text alone.” (P15)

P28 reported that:

“The illustrations also helped me remember the key points more clearly compared to reading text alone.” (P28)

P30 similarly stated:

“Seeing the characters deal with situations made it easier to remember and relate to, compared to just reading text.” (P30)

The findings establish perceived retention, rather than objectively measured retention. Students believed that visual and narrative structures assisted recall, but the study did not employ delayed testing or comparative achievement measures. This distinction is retained in the subsequent interpretation.

The findings indicate that comic-based notes shaped students’ learning through five interconnected dimensions represented by the C.L.E.A.R. framework: Conceptual Clarity, Learner Engagement, Experiential Understanding, Accessible Content, and Retention of Knowledge. *Table 2* integrates the empirical observations, theoretical interpretations, and pedagogical implications associated with each dimension.

Table 2. Observation table for C.L.E.A.R. dimension.

C.L.E.A.R. dimension	Observation	Interpretation	Insight	Supporting literature
C: Conceptual Clarity	Visual sequencing and concise dialogue made complex content easier to understand.	Integrated words and images supported mental-model construction and reduced unnecessary cognitive effort.	Comics function as cognitive scaffolds without reducing academic rigour.	Mayer (2021); Paas and van Merriënboer (2020)
L: Learner Engagement	Students described the comics as enjoyable, interesting, and less stressful than text-heavy notes.	The format supported emotional interest, attention, and learning persistence.	Engagement strengthens motivation and continued participation among distance learners.	Bond et al. (2021); Ryan and Deci (2020)
E: Experiential Understanding	Scenarios, characters, and dialogue helped students relate theory to practice.	Narrative situations created contextualised and mediated learning experiences.	Comics bridge abstract knowledge and real-world application.	Morris (2020); Kuttner et al. (2021)
A: Accessible Content	Most students reported minimal confusion, although some requested clearer explanations and transitions.	Multiple representations reduced learning barriers, but weak design could create new confusion.	Accessibility requires clear captions, accurate visuals, and appropriate pacing.	CAST (2021); Paas and van Merriënboer (2020)
R: Retention of Knowledge	Students reported that visual scenes and key points supported memory and revision.	Visual and verbal cues provided multiple pathways for encoding and retrieval.	Retention emerged from the combined effects of clarity, engagement, experience, and accessibility.	Mayer (2021)

Conclusion

This study provides empirical and phenomenological evidence that comic-based notes constitute a pedagogically meaningful innovation within contemporary higher education. In contexts where distance learners must independently navigate complex and abstract content, structured visual narratives offer a cognitively supportive and

engaging alternative to traditional text-heavy materials. The findings demonstrate that comic-based learning enhances conceptual clarity, fosters sustained learner engagement, supports experiential understanding, improves accessibility, and strengthens knowledge retention. The study does not advocate replacing conventional instructional materials. It positions comic-based notes as a complementary pedagogical strategy aligned with multimodal learning and contemporary instructional design. By integrating visual, narrative, and textual elements, comic-based learning facilitates deeper cognitive processing and supports more durable learning outcomes, particularly in self-directed learning environments. Theoretically, the research contributes to visual-pedagogy scholarship by introducing the C.L.E.A.R. framework as an integrative model linking cognitive-load theory, dual-coding theory, and experiential learning in higher education. Practically, it offers educators and instructional designers a structured approach for enhancing engagement and retention through innovative but theoretically grounded materials. Future research should employ mixed-method, experimental, and longitudinal designs to compare learning outcomes across instructional formats and examine sustained retention and knowledge transfer. As higher education responds to digital transformation and diverse learner needs, multimodal instructional strategies will become increasingly consequential for meaningful, inclusive, and sustainable learning.

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Conflict of interest

The authors confirm that there is no conflict of interest involving any party in this research study.

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