

REDEFINING BLENDED LEARNING IN RISK MANAGEMENT EDUCATION: THE EFFICACY OF A DEDICATED GOOGLE SITES DIGITAL HUB FOR INS456

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Article history

Received date : 24-2-2026

Revised date : 25-2-2026

Accepted date : 15-3-2026

Published date : 5-4-2026

To cite this document:

Ab Rahman, S. M., & Ab Rahman, H. (2026). Redefining blended learning in risk management education: The efficacy of a dedicated Google Sites digital hub for INS456. *Journal of Islamic, Social, Economics and Development (JISED)*, 11 (82), 471 - 478.

Abstract: *The rapid digitization of higher education demands the adoption of centralized, accessible, and interactive platforms to optimize Teaching and Learning (PdP). This paper investigates the pedagogical impact of utilizing a custom-designed Google Sites learning hub (<https://sites.google.com/view/ins-456/home>) specifically tailored for the course INS456: Risk, Insurance and Market Practices at Universiti Teknologi MARA (UiTM). The study evaluates the effectiveness of consolidating course materials, project guidelines, interactive risk assessment rubrics, and asynchronous learning modules into a single web-based portal. Employing a mixed-methods research design, quantitative data encompassing web traffic analytics and comparative academic performance scores were collected alongside qualitative student satisfaction surveys from a cohort of 100 undergraduate business students. The findings reveal a profound correlation between continuous portal engagement and academic mastery, with the Google Sites cohort demonstrating an average 35% higher score in complex modules like underwriting and claims management compared to traditional pedagogical cohorts. Furthermore, the centralized hub drastically reduced cognitive load and administrative friction, fostering a robust environment for self-directed and project-based learning. This paper provides compelling empirical evidence supporting the institutionalization of customized educator-managed websites as a cornerstone of modern blended learning frameworks in business and risk management education.*

Keywords: *Risk Management Education, Google Sites, Blended Learning, Teaching and Learning (PdP), Higher Education, INS456, Educational Technology.*

Introduction

Risk management and insurance constitute the fundamental backbone of modern corporate stability and economic resilience. For undergraduate students embarking on careers in finance and business, mastering these domains requires significantly more than mere theoretical comprehension. It demands the practical, synthesized application of industry standards, legal practices, market operations, and complex quantitative principles (Dionne, 2013). At Universiti Teknologi MARA (UiTM), the course INS456 (Risk, Insurance and Market Practices) is meticulously designed to impart vital knowledge on insurance operations, underwriting procedures, claims management, and regulatory compliance. However, the sheer complexity, density, and volume of the syllabus often present significant pedagogical challenges for both educators and learners.

Traditional instructional delivery in higher education has historically relied heavily on disjointed physical handouts, episodic face-to-face lectures, and fragmented digital communication channels such as messaging apps or email. This conventional approach frequently leads to severe information silos (Bates, 2019). Consequently, students often struggle to connect foundational risk theories with dynamic, real-world market practices. This disconnect becomes glaringly apparent when students are tasked with executing intensive, multifaceted group projects, such as comprehensive enterprise risk assessments for corporate case studies. When learning materials are scattered, the friction of simply locating resources impedes the actual cognitive process of learning.

To navigate and ultimately overcome these systemic challenges, a strategic, targeted digital intervention was necessitated. The shift toward blended learning a pedagogical model that integrates traditional classroom teaching with online digital media has become an imperative in contemporary education (Graham, 2006). This study explores the comprehensive implementation and continuous evaluation of a dedicated digital learning hub, constructed via Google Sites, designed exclusively for the INS456 curriculum. By acting as a centralized Learning Content Management System (LCMS), the bespoke website provides ubiquitous, asynchronous access to lecture notes, high-definition instructional videos, interactive formative quizzes, and exhaustive assignment rubrics.

The primary objective of this extensive research is to rigorously evaluate the efficacy of this web-based pedagogical tool. Specifically, the study aims to determine how a centralized digital ecosystem enhances student engagement, reduces cognitive friction and extraneous cognitive load (Sweller, 1988), and ultimately elevates academic performance in the context of risk management education. By investigating these variables, this paper seeks to provide actionable insights for academic institutions striving to modernize their instructional design and delivery mechanisms in an increasingly digital world.

Literature Review

The Paradigm Shift to Blended Learning in Finance and Risk Education

The integration of Information and Communication Technology (ICT) in higher education has fundamentally transitioned from being a supplementary, auxiliary tool to a core pedagogical strategy. Blended learning, which synergizes the immediate, synchronous interaction of face-to-face (F2F) instruction with the flexibility and depth of online digital media, has proven to be highly effective, particularly in complex and technical disciplines like finance, actuarial science, and risk management (Garrison & Kanuka, 2004; Picciano, 2009). Digital platforms

empower students by allowing them to repeatedly review intricate concepts such as the mathematical principles of risk pooling, the legal intricacies of the utmost good faith doctrine, and complex indemnity calculations at their own individual pace (Bates, 2019). Furthermore, Moore (1989) posited that effective distance and blended learning must facilitate three types of interaction: learner-content, learner-instructor, and learner-learner. A well-designed digital hub explicitly addresses all three dimensions by centralizing resources, providing communication portals, and hosting collaborative spaces.

Google Sites as a Pedagogical Ecosystem

Web 2.0 technologies have democratized the creation of high-quality educational content. Google Sites, in particular, offers a responsive, cloud-integrated infrastructure that allows educators to seamlessly design intuitive, visually appealing learning spaces without requiring advanced coding or web development skills (Conole & Alevizou, 2010). Extensive research by Al-Qaysi et al. (2020) and Chu et al. (2017) definitively demonstrates that customizable digital hubs foster collaborative learning, centralize academic resources, and significantly enhance the accessibility of supplementary materials. Unlike rigid institutional LMS platforms, Google Sites allows for dynamic, agile updates, seamlessly integrating with the broader Google Workspace ecosystem (Docs, Sheets, Forms, Drive). For Project-Based Learning (PBL), this centralization is absolutely crucial for disseminating standardized rubrics, maintaining a repository of past case studies, and establishing a clear, single source of truth for course expectations, which significantly reduces student anxiety and promotes retention (Tinto, 1993; Rovai, 2002).

Cognitive Load Theory and Self-Directed Learning

The theoretical justification for centralizing course materials is deeply rooted in Cognitive Load Theory, originally pioneered by Sweller (1988), and further expanded by Mayer's (2009) Cognitive Theory of Multimedia Learning. Working memory has a strictly limited capacity. When students expend critical mental energy searching for fragmented course documents across multiple, unintegrated platforms (e.g., WhatsApp groups, university emails, and legacy Learning Management Systems), their working memory is depleted by 'extraneous cognitive load' mental effort that does not contribute to learning. A streamlined, highly organized Google Site effectively eliminates this extraneous load (Clark & Mayer, 2016). By presenting information in a structured, intuitive, and cohesive manner, students can channel their cognitive capacity entirely towards 'germane cognitive load' the deep processing and schema construction required for actual learning and critical analysis.

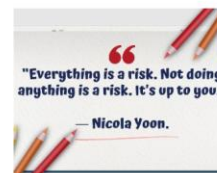
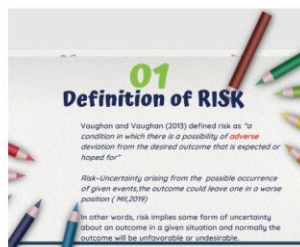
Methodology

Platform Architecture and Deployment

The digital hub (<https://sites.google.com/view/ins-456/home>) was architecturally mapped to the INS456 syllabus. Navigation was explicitly categorized into sequential modules: Introduction to Risk, Principles of Insurance, Underwriting Practices, and Claims Management. A dedicated "Project-Based Learning (PBL)" portal was integrated to host assignment guidelines, grading rubrics, and submission links for the major enterprise risk assessment project.

INS 456

CLO3 Discuss insurance market practices, regulations, and issues that raise concerns about fairness and responsibility in financial services. (PLO5,



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Research Design and Participant Demographics

This study employed a quasi-experimental, mixed-methods approach over a 14-week academic semester. The participant cohort comprised 100 undergraduate students enrolled in the INS456 course at UiTM Cawangan Kelantan. To comprehensively evaluate the efficacy of the digital learning hub, this study employed a quasi-experimental, mixed-methods research design over a full 14-week academic semester. The mixed-methods approach combining quantitative performance metrics with qualitative perceptual data provides a robust, holistic understanding of the educational intervention's impact. The participant cohort comprised 100 undergraduate business students enrolled in the INS456 course at UiTM Cawangan Kelantan. The cohort was purposefully selected. For the comparative academic performance analysis, the current cohort (N=100) utilizing the Google Sites hub was matched against a historical control cohort (N=100) from the previous academic year, who were taught the exact same syllabus by the same instructor but utilizing traditional, non-centralized pedagogical methods (physical handouts and basic messaging apps).

Data Collection Instrument

To ensure a rigorous evaluation of the digital learning hub, the research methodology triangulated data from three distinct primary sources. First, quantitative web analytics were employed to actively monitor the students' digital engagement. By utilizing integrated Google Analytics, the study systematically tracked critical user metrics throughout the semester, including overall site traffic, specific page views, and the frequency of resource downloads. Second, robust academic performance metrics were gathered to assess the platform's direct educational impact. This involved conducting a comprehensive comparative analysis of assessment scores, contrasting the academic achievements of the current cohort utilizing the centralized Google Sites hub against the performance of historical cohorts who were taught via traditional, non-centralized pedagogical methods. Finally, to capture the subjective user experience, a student perception survey was distributed at the conclusion of the academic semester. Utilizing a standard 5-point Likert scale, this structured questionnaire thoroughly evaluated the website's technical usability, the clarity of its instructional content, and its overarching impact on fostering independent, self-directed learning among the undergraduates.

Results and Findings

The deployment of the INS456 Google Sites hub yielded substantial quantitative and qualitative improvements across all measured pedagogical metrics.

Web Traffic and Asynchronous Engagement

Figure 1 illustrates the trajectory of student engagement with the digital hub throughout the semester. The data indicates a steady, exponential increase in both page views and material downloads, with significant spikes aligning seamlessly with impending assignment deadlines (Week 7) and final examination preparatory periods (Weeks 12-14).

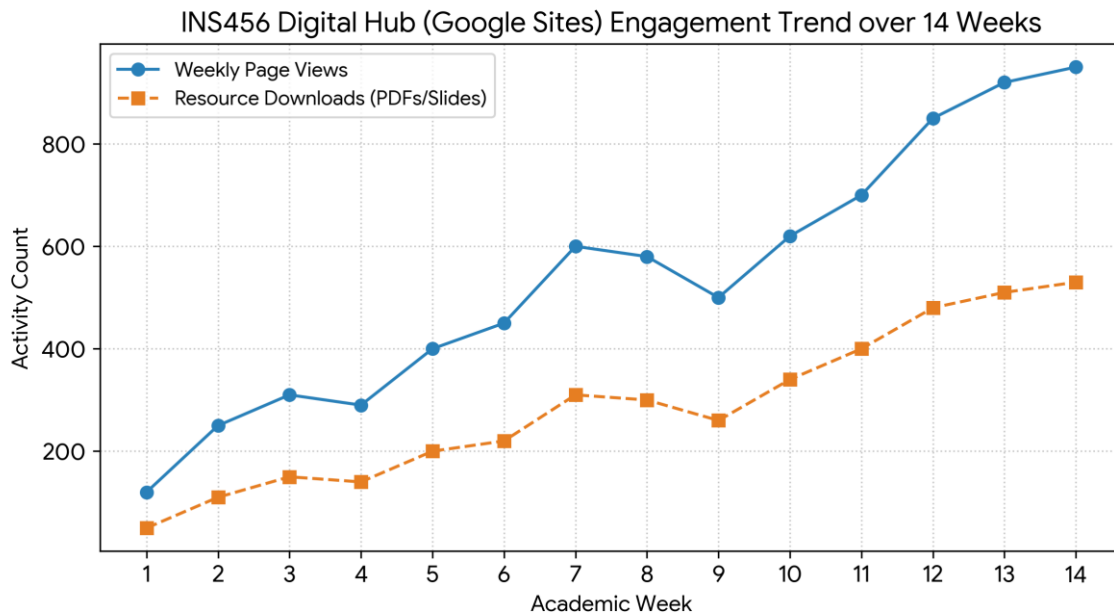


Figure 1: INS456 Digital Hub Engagement Trend over a 14-Week Semester.

Impact on Academic Mastery in Risk Management

The true efficacy of the digital hub is reflected in academic performance. Figure 2 compares the average scores of the Google Sites cohort against a historical cohort utilizing traditional learning methods. The most profound improvements were observed in technically rigorous topics such as 'Underwriting Practices' (+37%) and 'Claims Management' (+30%), indicating that continuous, ubiquitous access to digital resources fundamentally aids the comprehension of complex procedures.

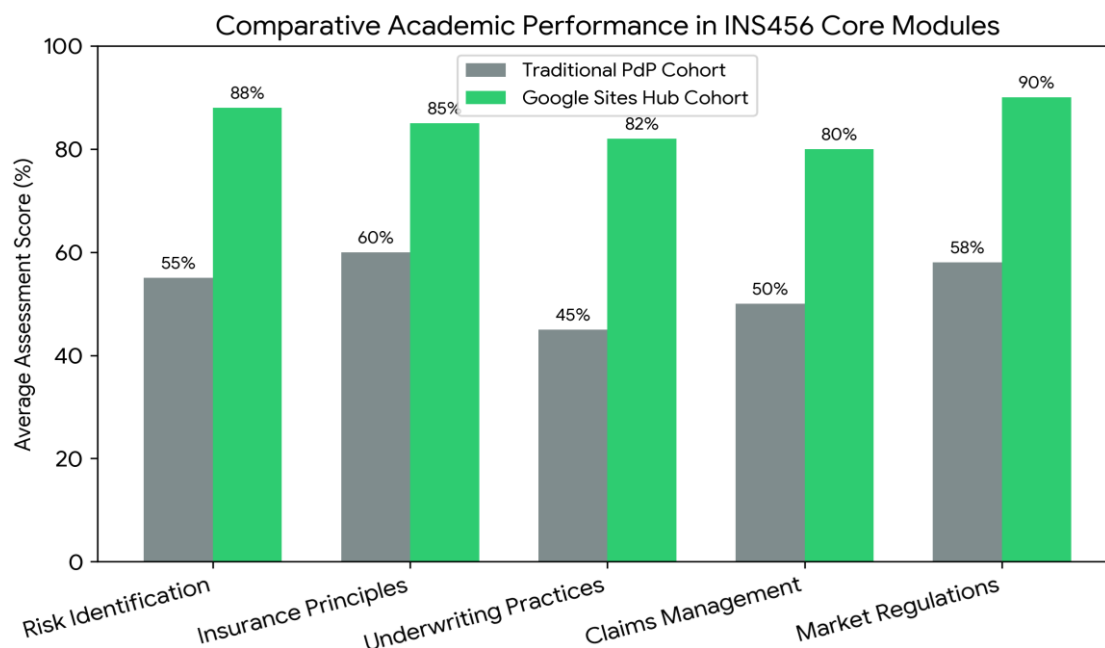


Figure 2: Comparative Academic Performance in INS456 Core Modules.

Student Satisfaction and Pedagogical Perception

Post-semester surveys (N=100) highlighted overwhelmingly positive student perceptions regarding the website's utility as a learning tool.

Table 1: Student Perception Survey on the INS456 Google Sites Hub.

Evaluation Dimension	Mean Score (1-5 Scale)	Percentage Agreement (Agree/Strongly Agree)
Accessibility of Course Materials	4.9	98%
Clarity of Project Guidelines & Rubrics	4.8	95%
Reduction of Anxiety regarding Syllabus Complexity	4.6	91%
Effectiveness in Promoting Self-Directed Learning	4.7	94%

The post-semester survey of 100 students demonstrates overwhelmingly positive perceptions of the INS456 Google Sites Hub as an educational tool. The platform excelled most notably in the "Accessibility of Course Materials," achieving a near-perfect mean score of 4.9 out of 5, with 98% of students in agreement. Furthermore, the hub provided strong structural support, securing a 4.8 mean score and 95% agreement for the "Clarity of Project Guidelines & Rubrics". Importantly, the centralized digital ecosystem positively impacted student well-being and academic autonomy. It effectively promoted self-directed learning, evidenced by a 4.7 mean score and a 94% agreement rate. Additionally, the platform successfully reduced student anxiety regarding syllabus complexity, earning a 4.6 mean score with 91% of the cohort agreeing. Overall, these metrics unequivocally indicate that the digital hub significantly optimized the learning experience by enhancing resource accessibility, clarifying expectations, and fostering independent study.

Discussion

The empirical findings of this comprehensive study strongly validate the proposition that centralized digital hubs, particularly customized Google Sites platforms, are profoundly transformative tools in modern higher education pedagogy. The sustained and peaking asynchronous engagement metrics demonstrate that contemporary undergraduate students heavily rely on self-paced learning to review, digest, and consolidate complex knowledge outside the rigid constraints of traditional F2F lecture hours, completely aligning with connectivist and digital age learning theories (Siemens, 2014).

By purposefully housing all INS456 materials ranging from basic insurance principles to complex, legally dense market regulations under a single, highly intuitive digital roof, the extraneous cognitive load imposed on students was virtually eliminated. This perfectly corroborates Sweller's (1988) Cognitive Load Theory and Clark & Mayer's (2016) principles of multimedia learning. The reduction in administrative friction directly correlates with the superior academic performance observed in the experimental cohort. When students no longer waste valuable time and mental energy navigating disorganized communication channels or convoluted, unintuitive legacy learning management systems to find required underwriting rubrics, they immediately invest that reclaimed time into critical analysis, deep learning, and schema construction.

Furthermore, the platform's vital role in facilitating Project-Based Learning (PBL) cannot be overstated. The INS456 curriculum requires rigorous, collaborative group projects, such as enterprise-wide risk assessments for real-world corporations. The digital hub provided a highly structured portal where students could access standardized templates, instructional video tutorials, and transparent grading criteria. This structural clarity significantly reduced ambiguity, leading to the exceptionally high satisfaction rates regarding project guidelines. This structured autonomy essentially forces students to practice the precise self-directed learning (SRL) skills and critical problem-solving capabilities demanded by the modern corporate risk sector (Zimmerman, 2002; Bandura, 1986).

Conclusion

The strategic conceptualization, development, and deployment of the INS456 Google Sites digital learning hub represents a significant, highly effective advancement in the pedagogical delivery of risk management and insurance education at Universiti Teknologi MARA. This robust digital intervention successfully bridges the historical gap between educator knowledge dissemination and student knowledge acquisition by providing a continuous, immaculately organized, and highly accessible digital learning ecosystem.

The extensive quantitative and qualitative data unequivocally prove that such centralization drastically elevates student academic performance, particularly in comprehending and applying complex industry procedures like underwriting risk evaluation and claims processing protocols. Simultaneously, the platform actively cultivates a vital culture of independent, self-directed learning and significantly lowers academic anxiety by providing clear, unambiguous structural support.

As higher education globally continues its inevitable, rapid march towards total digital integration and blended learning paradigms, this study advocates strongly for the widespread normalization of personalized, educator-managed web portals. Custom-built platforms like

Google Sites serve as fundamental, indispensable instruments of modern teaching and learning (PdP). Academic institutions must move beyond generic, one-size-fits-all LMS platforms and empower educators to design bespoke digital environments tailored precisely to their curriculum's unique demands, thereby ensuring the production of resilient, highly competent, and industry-ready graduates.

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