

Design Thinking for Student Empowerment in Malaysian Higher Education: A Conceptual Framework for Institutional Innovation

(Pemikiran Reka Bentuk Bagi Pemerkasaan Pelajar Dalam Pendidikan Tinggi Malaysia: Satu Kerangka Konseptual Untuk Inovasi Institusi)

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ABSTRACT

As universities look to produce graduates who are creative, resilient, and able to contribute to institutional and societal reform, student empowerment has emerged as a strategic objective in higher education. Meaningful participation in institutional decision-making and cooperative problem-solving is still scarce in Malaysia, despite policy changes encouraging increased student involvement. The potential of Design Thinking as a human-centered framework for enhancing student empowerment in Malaysian higher education institutions is examined in this conceptual case study. The paper develops a conceptual framework with three interrelated components: institutional drivers and student challenges, the iterative Design Thinking process (Empathize, Define, Ideate, Prototype, and Test), and collaborative empowerment outcomes. This framework is based on a review of recent literature, national higher education policies, and real-world campus challenges. The approach demonstrates how co-design, shared decision-making, and ongoing learning may help institutions turn student experiences into practical institutional improvements. The conversation shows how the framework may be used to solve problems with student representation, mental health, food insecurity, sustainability, and campus well-being. The paper makes the case that using Design Thinking as an institutional mentality rather than only as an innovative technique will promote inclusive, sustainable, and future-ready universities and increase participatory governance. In order to help higher education institutions rethink student empowerment through collaborative institutional innovation, this study offers a useful conceptual framework.

Keywords- Design Thinking, Student Empowerment, Higher Education, Institutional Innovation, Student Partnership

ABSTRAK

Seiring dengan aspirasi institusi pendidikan tinggi untuk melahirkan graduan yang kreatif, berdaya tahan dan mampu menyumbang kepada transformasi institusi serta masyarakat, pemerkasaan pelajar telah menjadi agenda strategik dalam pembangunan pendidikan tinggi negara. Walaupun pelbagai pembaharuan dasar telah diperkenalkan bagi memperluaskan penglibatan pelajar, penyertaan yang benar-benar bermakna dalam proses membuat keputusan institusi dan penyelesaian masalah secara kolaboratif masih memerlukan pengukuhan. Justeru, kajian kes konseptual ini meneliti potensi Pemikiran Reka Bentuk (Design Thinking) sebagai kerangka berpusatkan manusia untuk memperkukuh pemerkasaan pelajar di institusi pendidikan tinggi Malaysia. Berdasarkan sorotan literatur, dasar pendidikan tinggi negara dan cabaran semasa di kampus, kajian ini membangunkan satu kerangka konseptual yang merangkumi tiga komponen utama, iaitu pemacu institusi dan cabaran pelajar, proses iteratif Pemikiran Reka Bentuk (Empati, Takrif, Penjanaan Idea, Prototaip dan Ujian), serta hasil pemerkasaan secara kolaboratif. Kerangka ini menunjukkan bagaimana pendekatan co-design, perkongsian dalam membuat keputusan dan pembelajaran berterusan dapat menterjemahkan pengalaman pelajar kepada penambahbaikan institusi yang lebih responsif dan mampan. Perbincangan turut memperlihatkan aplikasi kerangka ini dalam menangani isu kesihatan mental, keterjaminan makanan, kelestarian kampus, kesejahteraan serta perwakilan pelajar. Kajian ini menghujahkan bahawa penerapan Pemikiran Reka Bentuk sebagai pendekatan strategik di peringkat institusi, dan bukan sekadar kaedah inovasi, berupaya memperkukuh tadbir urus yang lebih partisipatif, membudayakan kolaborasi, serta membentuk universiti yang inklusif, mampan dan bersedia menghadapi cabaran masa hadapan. Secara keseluruhannya, kajian ini menawarkan satu kerangka konseptual yang praktikal bagi memperkukuh pemerkasaan pelajar melalui inovasi institusi secara kolaboratif.

Kata kunci- Pemikiran Reka Bentuk; Pemerkasaan Pelajar; Pendidikan Tinggi; Inovasi Institusi; Kolaborasi Pelajar-Institusi

INTRODUCTION

Higher education institutions are increasingly expected to produce graduates who are not only academically competent but also capable of addressing complex societal challenges through creativity, collaboration, empathy, and innovation. As global economies transition towards knowledge-based and innovation-driven systems, universities are under growing pressure to cultivate graduates equipped with critical thinking, problem-solving, leadership, and human-centered decision-making skills (Brown, 2008; World Economic Forum, 2023). Consequently, student empowerment has emerged as a strategic priority within higher education policies worldwide, emphasizing students as active contributors rather than passive recipients of educational experiences (Healey et al., 2014; Cook-Sather et al., 2014).

In Malaysia, student empowerment has undergone substantial transformation over the past decade. The amendment of the Universities and University Colleges Act (AUKU) marked an important milestone by expanding students' participation in leadership, governance, and socio-political engagement (Ministry of Higher Education Malaysia, 2024). The policy shift reflects the Ministry of Higher Education's aspiration to nurture graduates who are more independent, responsible, and capable of contributing meaningfully to institutional and national development. Nevertheless, legislative reform alone does not automatically translate into authentic empowerment. Many institutional practices continue to position students primarily as programme participants or event organizers, with limited opportunities to influence decision-making processes or co-create solutions for challenges affecting campus communities (Bovill et al., 2016).

Traditional leadership development programmes in many universities continue to emphasize administrative responsibilities, event management, and compliance with institutional procedures. While these experiences remain valuable, they often provide limited opportunities for students to develop empathy, systems thinking, collaborative problem-solving, and innovation capabilities required to address increasingly complex challenges (Cross, 2011; Johansson-Sköldberg et al., 2013). Contemporary issues such as student mental health, food insecurity, environmental sustainability, digital transformation, and social inclusion cannot be adequately addressed through conventional leadership models that focus primarily on organizational management. Instead, these multidimensional problems require interdisciplinary collaboration, iterative

learning, and user-centered approaches capable of generating sustainable and context-sensitive solutions.

Design Thinking has emerged as one of the most influential human-centered innovation frameworks across industries, public organizations, and educational institutions. Characterized by the iterative stages of empathizing, defining problems, ideating, prototyping, and testing, Design Thinking shifts attention from solving perceived problems to understanding the genuine needs and lived experiences of stakeholders. Rather than positioning users as passive beneficiaries, Design Thinking actively involves them as collaborators throughout the innovation process. Within higher education, this philosophy aligns naturally with the objective of student empowerment, encouraging students to become co-designers of policies, services, and learning environments instead of merely participating in initiatives designed by institutional administrators (Damşa & de Lange, 2019).

The application of Design Thinking within higher education has gained increasing attention internationally. Previous studies have demonstrated its effectiveness in enhancing creativity, entrepreneurial thinking, interdisciplinary collaboration, and innovation competencies among university students. Furthermore, Design Thinking has been successfully implemented in addressing various campus-related issues, including mental health support systems, sustainability initiatives, community engagement, digital learning experiences, and student well-being programmes (Brown, 2008; Plattner et al., 2011). Despite these promising developments, much of the existing literature primarily focuses on Design Thinking as a pedagogical approach within academic curricula or entrepreneurship education. Comparatively fewer studies have examined its broader potential as an institutional framework for empowering students in governance, leadership development, and campus-wide policy innovation, particularly within the Malaysian higher education landscape.

The Malaysian context presents unique opportunities for exploring this perspective. Public universities operate within large and highly structured organizational environments, whereas private universities generally possess greater operational flexibility and responsiveness. Although these institutional settings differ considerably, both continue to encounter similar challenges related to student engagement, representation, inclusivity, and well-being (Doorley et al., 2018; Sanders & Stappers, 2008). Therefore, there is a growing need for an empowerment framework that is sufficiently flexible to accommodate diverse institutional contexts while maintaining a

strong focus on empathy, collaboration, and continuous innovation.

This paper argues that Design Thinking provides a practical and transformative framework for reimagining student empowerment beyond conventional leadership models. Instead of viewing empowerment solely through formal positions or representative roles, the framework positions students as active partners in identifying institutional challenges, co-designing innovative solutions, and continuously improving campus ecosystems. Drawing upon contemporary Malaysian higher education policies, practical campus examples, and international perspectives, particularly lessons from Malaysia and Japan, this paper illustrates how Design Thinking can strengthen authentic student participation, foster innovation-driven leadership, and cultivate more inclusive, resilient, and sustainable university communities. Specifically, this paper makes three primary contributions:

- i. It reconceptualizes student empowerment from traditional participation and representation towards a human-centered co-design approach grounded in Design Thinking principles.
- ii. It demonstrates how Design Thinking can be applied to address real campus challenges, including student mental health, food insecurity, sustainability initiatives, governance, and student representation.
- iii. It proposes a conceptual framework that integrates national higher education aspirations with practical institutional strategies for cultivating future-ready student leaders capable of driving meaningful and sustainable change.

METHODOLOGY

This paper adopts This paper adopts a conceptual qualitative approach to examine how Design Thinking can serve as a transformative framework for student empowerment in Malaysian higher education. Rather than reporting empirical findings from a specific intervention or case study, the paper synthesizes existing theories, national higher education policies, contemporary institutional practices, and illustrative campus examples to develop an integrated conceptual perspective on student-centered leadership and governance.

The conceptual analysis is primarily grounded in the Design Thinking framework, originally popularized by the Stanford d.school and the Hasso Plattner Institute of Design, which consists of five

iterative stages: Empathize, Define, Ideate, Prototype, and Test. These stages were adopted as an analytical lens to reinterpret student empowerment beyond conventional leadership practices, emphasizing human-centered innovation, collaborative problem solving, and continuous improvement. Rather than treating Design Thinking solely as an innovation methodology, this paper positions it as a governance philosophy that enables students to become active co-designers of institutional policies, services, and campus experiences.

The development of the paper followed three complementary stages. First, a comprehensive review of contemporary literature on student empowerment, participatory governance, leadership development, and Design Thinking in higher education was conducted to establish the theoretical foundation. Particular attention was given to studies discussing human-centered innovation, co-creation, participatory decision-making, and student engagement within university settings. The review enabled the identification of current challenges and gaps in traditional leadership models that continue to characterize many higher education institutions.

Second, the conceptual discussion was contextualized within the Malaysian higher education landscape by examining recent policy developments related to student participation and empowerment. These include the amendments to the Universities and University Colleges Act (AUKU), initiatives introduced by the Ministry of Higher Education, and evolving institutional practices that encourage greater student participation in governance and campus development. Rather than evaluating specific policies, the paper interprets these reforms as indicators of Malaysia's transition from compliance-oriented student management towards more participatory and trust-based educational environments.

Third, the theoretical concepts were illustrated using representative examples of campus challenges commonly encountered in higher education, including student mental health, food insecurity, environmental sustainability, student representation, and institutional governance. These examples are not intended as formal case studies but are used to demonstrate how each phase of the Design Thinking process can be applied to address complex student issues through empathy-driven problem identification, collaborative ideation, iterative solution development, and continuous refinement. The discussion further incorporates comparative reflections between Malaysian and Japanese higher education contexts to illustrate how different institutional cultures can adopt similar Design Thinking principles while responding to their respective educational environments.

Figure 1 illustrates the conceptual framework underpinning this paper. Student empowerment is positioned as the central outcome, supported by the iterative Design Thinking cycle that transforms students from passive recipients of institutional services into active co-designers of campus innovation. The framework highlights the continuous interaction between institutional policies, student experiences, collaborative problem solving, and iterative learning, ultimately contributing to more inclusive, innovative, and sustainable university ecosystems.

The methodology emphasizes conceptual synthesis rather than hypothesis testing. The intention is to generate a practical framework that can guide higher education institutions, policymakers, and student leaders in rethinking empowerment through a human-centered innovation perspective. By integrating contemporary educational theories with policy developments and practical institutional experiences, the paper offers a holistic understanding of how Design Thinking may strengthen authentic student participation and leadership development within Malaysian universities.

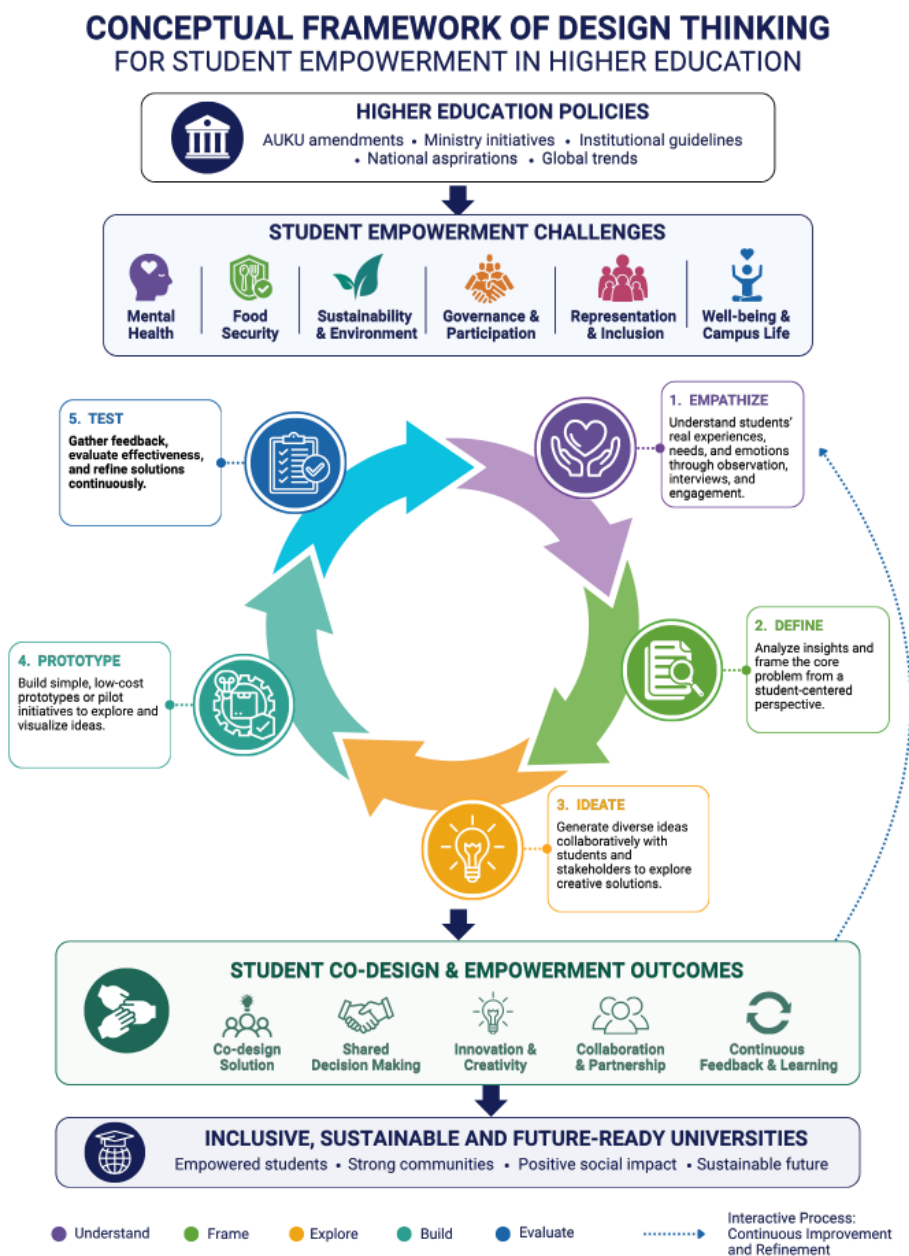


FIGURE 1. The Proposed Conceptual Framework of Design Thinking in Higher Education

RESULTS & DISCUSSION

Design Thinking as a Framework for Student Empowerment

Figure 1 presents the proposed conceptual framework that positions Design Thinking as a human-centered approach for transforming student empowerment in higher education. The framework illustrates that student empowerment should not be viewed solely as an institutional outcome driven by policies and governance structures, but rather as a continuous process of collaboration between students, university administrators, academic staff, and other stakeholders. By integrating higher education policies with iterative problem-solving processes, Design Thinking enables universities to move beyond traditional leadership development towards meaningful student participation in institutional innovation.

Unlike conventional governance models where students are primarily consulted after decisions have been made, the proposed framework positions students as active co-designers throughout the entire problem-solving process. This shift reflects recent developments in higher education that increasingly recognize students as valuable contributors to institutional decision-making and quality enhancement (Healey et al., 2014; Bovill et al., 2016). Consequently, empowerment becomes a lived experience rather than a symbolic representation through elected positions or participation in isolated programmes.

The proposed framework consists of three interconnected components. The first component represents the external and institutional drivers of student empowerment, including higher education policies, university governance, and emerging student challenges. These challenges encompass issues related to mental health, food insecurity, sustainability, student representation, and campus well-being, all of which require interdisciplinary and human-centered solutions. The second component is the iterative Design Thinking process comprising Empathize, Define, Ideate, Prototype, and Test, which provides a structured methodology for transforming student experiences into actionable institutional improvements. Finally, the third component illustrates the expected outcomes of collaborative innovation, including shared decision-making, co-design, continuous learning, and ultimately the development of inclusive, sustainable, and future-ready universities.

Empathize: Understanding Students Beyond Institutional Assumptions

The first stage of Design Thinking emphasizes empathy, requiring institutions to understand students' lived experiences before proposing solutions. Traditional university management often assumes that institutional leaders possess sufficient knowledge to identify student needs. However, many contemporary challenges are deeply contextual and cannot be adequately understood without engaging directly with students themselves.

Mental health provides an important illustration of this principle. While universities increasingly invest in counselling services, many students continue to avoid seeking professional help because of stigma, fear of judgement, confidentiality concerns, or lack of awareness. These barriers are often invisible within administrative reports but become apparent through empathetic engagement such as interviews, observations, journey mapping, and open dialogue sessions. Design Thinking therefore encourages universities to investigate the underlying emotional and social dimensions of student behaviour rather than responding solely to observable outcomes.

Similarly, issues relating to food insecurity frequently remain hidden despite the availability of financial assistance programmes. Students may choose not to seek support due to embarrassment or concerns regarding social identity. By beginning with empathy rather than assumptions, universities can better understand these hidden experiences and subsequently develop interventions that preserve students' dignity while improving accessibility.

Define: Reframing Institutional Challenges

Following empathetic engagement, Design Thinking emphasizes defining the actual problem instead of responding to its symptoms. Higher education institutions frequently address operational issues without first examining the underlying causes that influence student experiences.

For example, low participation in student activities is often interpreted as a lack of interest among students. However, deeper investigation may reveal barriers such as academic workload, financial constraints, scheduling conflicts, or perceptions that activities provide limited personal value. Similarly, concerns regarding ineffective student representation may not necessarily arise from leadership quality but

rather from communication gaps, limited transparency, or insufficient opportunities for continuous engagement between representatives and the wider student community.

Reframing problems through collaborative discussion enables universities to identify more meaningful intervention points. Instead of asking how to increase programme attendance, institutions begin asking how students define meaningful engagement and what institutional barriers prevent their participation.

Ideate: Collaborating to Develop Creative Solutions

The ideation step invites students and university stakeholders to work together to develop creative solutions after problems have been precisely outlined. By acknowledging students as experts in their own experiences, Design Thinking fosters group creativity in contrast to traditional administrative planning, where solutions are mostly created by institutional leaders (Healey et al., 2014).

Thus, the conceptual framework promotes collaborative design sprints including students, academic staff, administrators, and industry partners, as well as interdisciplinary brainstorming sessions, student innovation laboratories, and participatory workshops (Doorley et al., 2018; Sanders & Stappers, 2008). These cooperative settings promote a variety of viewpoints and raise the possibility of producing workable and contextually appropriate solutions.

Peer support systems for mental health, anonymous digital reporting platforms, student-run food banks, student-designed environmental campaigns, and digital dashboards that enhance student governance transparency are a few examples. Crucially, the ideation stage encourages innovation before institutional limitations are taken into account by valuing diversity of ideas over immediate viability.

Prototype and Test: Learning Through Continuous Improvement

Traditional university programmes are frequently implemented as large-scale initiatives with limited opportunities for iterative refinement. In contrast, Design Thinking promotes the development of low-risk prototypes that allow institutions to evaluate ideas before wider implementation.

Within higher education, prototypes may include pilot mentoring programmes, experimental food assistance mechanisms, digital feedback systems, sustainability campaigns, or student well-being initiatives conducted within selected residential colleges or faculties (Damşa & de Lange, 2019).

Continuous feedback from participating students enables institutions to refine programmes based on evidence rather than assumptions.

Testing therefore represents more than programme evaluation; it establishes a culture of continuous organizational learning. Rather than treating unsuccessful initiatives as failures, Design Thinking interprets them as valuable learning opportunities that contribute to improved future interventions. This iterative philosophy enhances institutional resilience while strengthening trust between students and university management.

From Student Representation to Student Partnership

One of the most significant contributions of the proposed framework is its reconceptualization of student representation. Traditionally, student empowerment has been measured by the existence of student councils or representative bodies. However, representation alone does not necessarily guarantee meaningful participation in institutional decision-making.

The Design Thinking framework proposes a transition from representative governance towards collaborative governance, where students actively participate throughout policy formulation, programme development, implementation, and evaluation. This approach strengthens institutional trust because students become partners rather than merely recipients of university services.

The recent evolution of Malaysian higher education policies, particularly following amendments to the Universities and University Colleges Act (AUKU), reflects an increasing emphasis on student autonomy and leadership. Nevertheless, realizing these policy aspirations requires universities to cultivate institutional cultures that genuinely value student voices beyond formal consultation processes. Design Thinking provides an operational framework capable of translating these policy intentions into everyday institutional practice.

In addition, Recent regulatory advancements in Malaysia bolster the shift from traditional student representation to substantive student collaboration. Subsequent to the 2024 revision of the Universities and University Colleges Act (AUKU), the Ministry of Higher Education conferred enhanced autonomy upon Student Representative Councils (Majlis Perwakilan Pelajar, MPP) and Student Unions in the administration of their financial assets, student initiatives, and campus electoral processes. This reform signifies a notable transformation in institutional ideology by redefining students as not just executors of programs, but as strategic collaborators who play an active role in

university governance and institutional advancement. The Ministry additionally indicated that the engaged student councils effectively handled their fiscal duties, encompassing the creation of audited financial statements, with no instances of financial impropriety noted during the preliminary implementation phase. Leveraging these favorable results, fiscal independence will gradually be conferred to additional registered student organizations commencing with the 2026/2027 academic year. These advancements illustrate that governance founded on trust may enhance student responsibility and leadership, whilst fostering a climate conducive to collaborative institutional innovation. From a Design Thinking viewpoint, these policy reforms establish a pragmatic basis for integrating empathy, co-design, collaborative decision-making, and ongoing enhancement into university governance, thus converting students from passive beneficiaries of institutional services into proactive co-designers of campus evolution.

Implications to higher education in Malaysia

Despite having unique governance frameworks, Malaysian public and private colleges face comparable issues with student participation, well-being, sustainability, and representation. The suggested framework exhibits enough adaptability to take these variations into account while upholding a consistent human-centered philosophy.

Through pilot projects and cooperative governance, the framework helps public universities make small institutional reforms within sizable and intricate organizational structures. Because private colleges have somewhat flexible organizational structures, Design Thinking allows for quick experimentation and innovation. Putting students at the center of institutional innovation benefits both sectors despite these contextual disparities.

In the end, the framework implies that real student empowerment goes beyond giving students more authority or leadership roles. Rather, when students actively engage in comprehending institutional difficulties, co-designing creative solutions, assessing their efficacy, and consistently enhancing campus life, empowerment results. Universities that use this strategy are more inclusive, flexible, and sensitive to the changing demands of modern students.

CONCLUSION

In higher education, student empowerment should go beyond involvement in leadership roles or

institutional initiatives to include significant input into the development of university services, policies, and learning environments. In order to promote genuine student empowerment through empathy, cooperation, co-creation, and ongoing improvement, this study put out a conceptual framework that presents Design Thinking as a human-centered approach. The framework shows how universities may turn students from passive beneficiaries into active players in campus innovation by combining institutional motivations, current student concerns, and the iterative Design Thinking approach. The conversation further demonstrates how this strategy may be used to solve complicated problems like food hunger, mental health, sustainability, and student representation while encouraging inclusive governance and collaborative decision-making. In the end, implementing Design Thinking as an institutional mentality as opposed to just a method for problem-solving has the potential to foster innovative, resilient, and future-ready colleges where students are empowered to co-design significant and long-lasting change.

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