



Journal for Advancing Business Education

VOLUME 7 • ISSUE 1



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International Accreditation Council
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ABOUT:

The Journal for Advancing Business Education is a practitioner and scholarly journal that publishes the best work in the field of business education to enhance teaching, achieve student learning outcomes, and meet program goals. The Journal follows the general IACBE theme of "Moving. Forward. Together." All submissions are subject to a double-blind peer review process. The Journal is an online journal and accessible on the IACBE Web page. The Journal for Advancing Business Education is a biannual publication.

MISSION:

The mission of the Journal for Advancing Business Education is to publish best practices and scholarship in business and business-related fields to improve business education and society.

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FROM THE EDITOR

Dear Reader,

Nowadays, research publications in business are attempting to be more relevant and rigorous, and appeal to a broader audience. Relevance relates to how much research is linked to the most significant challenges currently faced by society. Rigor is a measure of quality. Quality academic research is usually defined as being grounded in respectable work that makes use of established scholarship.

This movement toward quality requires a careful balancing act between being relevant and accessible to a general audience and retaining enough rigor to fulfill the academic peer-review and promotion standards. In addition, institutions of higher education have to, more intentionally, promote the practicality and societal impact of their research and publications.

Many academics measure their success (and get evaluated) by their publications in high-powered journals that nobody reads. The benchmarks are high-impact academic articles which are peer-reviewed and published in leading journals. These journals appear in rankings, such as the Financial Times 50 list of high-ranking journals, and the University of Texas Dallas journal guide and the Chartered Association of Business Schools journal guide.

Another variable that is considered, in this context, is the impact factor of a journal and how widely a journal is indexed. The impact factor of a journal is calculated according to the number of citations; these are direct references to an article in other publications. A journal index is a scholarly list of journals that allows researchers to find vetted academic content.

However, broader measures of influence are emerging, including the number of times research papers are downloaded by non-academic readers (e.g., industry leaders, policymakers, professionals). Downloads reflect real-world interest and application, and demonstrate the potential for business research to inform practice, shape decisions, and spark innovation in the global marketplace.

Another way for academics to communicate insights to a broad audience are textbooks and case studies. Unlike published research articles, which might only be read and used by a handful of people and often use language that is hard to understand, textbooks and case studies are read and used by thousands of students worldwide. But such publications typically receive less recognition within academia than articles in top journals.

Nowadays, business schools have to think, more than ever, beyond the academic confines. Academic publications have to shift their mindset, emphasizing more relevance in the real world instead of cuddling ignorance in the academic Ivory Tower.

Thank you!

Christian Gilde
Managing Editor

Journal for Advancing Business Education

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TRANSFORMATIVE LEADERSHIP IN BUSINESS EDUCATION: ADAPTING CLASSROOM PRACTICES FOR A CHANGING LANDSCAPE

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ABSTRACT

This paper examines how business education is evolving to develop leadership skills in students through innovative methods such as behavioral simulations and flipped classrooms. Central to this evolution is the integration of Self-Determination Theory (SDT) and Project-Based Learning (PBL), which together enhance student motivation and employment preparedness. SDT emphasizes the importance of satisfying the psychological needs for competence, autonomy, and relatedness. By engaging students in real-world projects, educators foster competence through skill mastery, autonomy by empowering students to direct their own learning, and relatedness through collaborative teamwork—each of which is essential for sustained motivation and mirrors the demands of modern workplaces. Project-Based Learning further bridges academic and professional environments, equipping students with critical thinking, problem-solving, and communication skills that employers increasingly value. In addition, the Social Change Model of Leadership Development (SCM) is highlighted as a framework for cultivating socially responsible leaders. Through collaborative projects and ethical decision-making scenarios, students learn to lead with empathy, adaptability, and a commitment to positive social change. The research underscores the importance of experiential learning, student empowerment, and collaborative approaches in preparing future leaders, emphasizing the need for business education to continually adapt to the complexities of the global landscape.

INTRODUCTION

In today's rapidly shifting business environment, the demand for effective leadership has never been more pressing. Business education, as a critical avenue for cultivating future leaders, must evolve to meet the challenges posed by globalization, digital transformation, and economic unpredictability (Leithwood et al., 2008; Robinson et al., 2008). The traditional pathway from the classroom to the boardroom, once defined by a linear acquisition of knowledge and gradual advancement, now requires a multifaceted skill set that includes not only theoretical understanding but also the ability to navigate ambiguity, technological innovation, and complex social dynamics (Hattie et al., 2016). Today's successful leaders must exhibit adaptability, resilience, and a capacity for strategic foresight—qualities that go beyond textbook knowledge and necessitate practical, immersive learning experiences in the classroom.

As such, business educators are increasingly tasked with fostering not just technical proficiency, but also the leadership qualities necessary to thrive in this dynamic landscape. The role of professors in this context extends beyond the conventional boundaries of instruction; they serve as transformative leaders (Kouzes & Posner, 2023), shaping students' ability to lead in uncertain and rapidly evolving business environments. This aligns with leadership theories that emphasize modeling excellence, creating shared visions, and fostering collaboration and engagement (Leithwood et al., 2008). By embodying these principles, professors act as role models whose behaviors, decisions, and leadership styles influence students in ways that traditional lecture-based methods cannot achieve alone. They instill in students the confidence to approach challenges creatively, fostering the skills needed to thrive amid the complexities of global business.

As business becomes more interconnected and technology-driven, the classroom must mirror these changes, providing students with opportunities to engage in critical thinking, collaboration, and adaptive learning. Professors who incorporate technology and real-world scenarios through case studies, simulations, and flipped classroom models cultivate an environment where learning is active and engaging. These pedagogical shifts reflect a broader movement in business education toward experiential learning and leadership development, which emphasizes not just knowledge acquisition but also the application of skills in realistic contexts. Educators, through their leadership, play a pivotal role in developing these competencies, guiding students through a process that reflects the complexity and demands of modern leadership (Cameron, 2013).

This paper situates the professor's role within the broader theoretical framework of leadership in education, focusing on how transformative leadership can be fostered through innovative teaching methods. By leveraging approaches that encourage students to take ownership of their learning and apply theory to practice, professors enable students to develop a robust leadership skill set. The increasing use of behavioral simulations and flipped classrooms demonstrates how business education is shifting toward more experiential, technology-driven approaches that engage students in active problem-solving and leadership development. In these environments, professors guide students through scenarios that simulate real-world challenges, helping them build resilience, adaptability, and confidence in their leadership abilities (Burns, 2022).

Drawing on theories of social learning and student empowerment, this paper argues that the modern business classroom must prioritize leadership development by engaging students in collaborative learning environments that reflect real-world business challenges (Bandura et al., 1999; Hattie & Timperley, 2007). Through these innovative approaches, professors encourage students to take ownership of their learning and develop the skills necessary for leadership in a globalized, technologically advanced business landscape. By comparing traditional educational methods with more contemporary, experiential learning techniques, this research highlights how professors can foster the development of future leaders who are prepared to thrive in complex, uncertain environments. Ultimately, the shift from passive learning to active engagement positions professors as facilitators of leadership, equipping students to meet the demands of a rapidly evolving business world.

LEADERSHIP IN A CHANGING LANDSCAPE

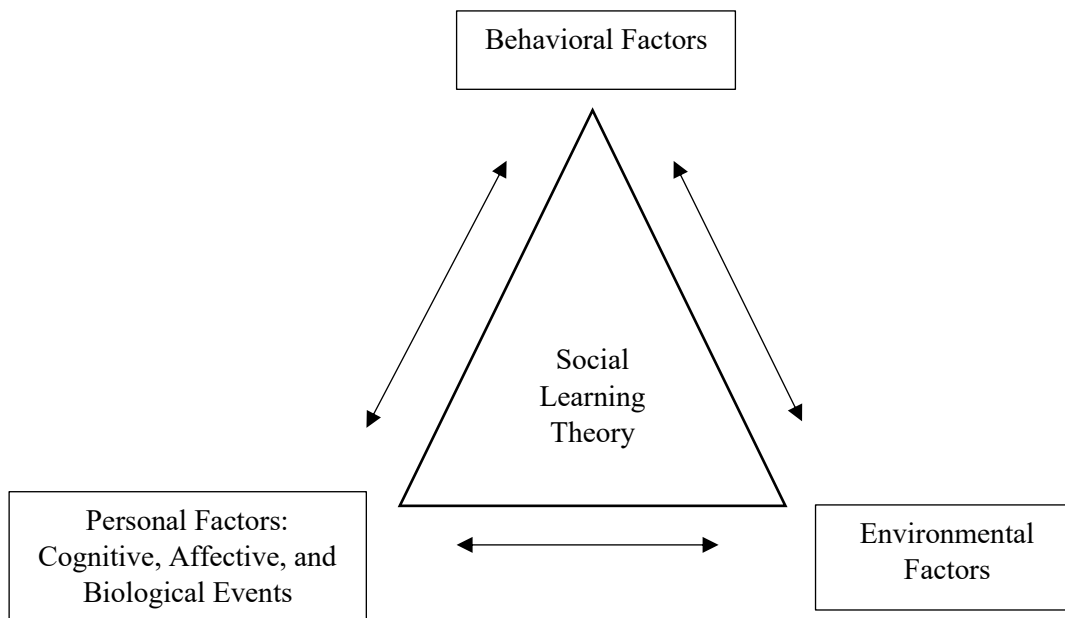
The evolving nature of business has significantly transformed the role of educators, moving from traditional knowledge delivery to a focus on cultivating leadership qualities that equip students for real-world challenges. As business environments grow increasingly complex, characterized by rapid technological advancements and global interconnectedness, it becomes essential for students to develop leadership skills that enable them to navigate uncertainty, make strategic decisions, and foster innovation (Leithwood et al., 2008; Hattie et al., 2016). The traditional classroom, with its emphasis on passive learning and knowledge acquisition, is no longer sufficient to meet these demands. Educators must adapt, integrating more dynamic teaching strategies that mirror the complexities of modern business (Cameron, 2013).

To equip students with the skills necessary to succeed, professors must embrace new pedagogical tools that not only teach theoretical concepts but also promote active engagement and leadership development. A critical innovation in business education has been the integration of behavioral simulations and digital platforms. These tools offer students hands-on experiences that closely mimic the challenges they will face in their professional careers. Behavioral simulations, for instance, immerse students in scenarios where they must make decisions under pressure, collaborate with diverse teams, and solve complex problems—skills that are at the core of effective leadership (Bandura et al., 1999). By engaging in these simulations, students participate in experiential learning that bridges the gap between the classroom and the workplace (Dillenbourg et al., 2009). This approach allows students to encounter real-world dilemmas in a controlled environment where they can test different leadership styles and approaches without the risks associated with high-stakes professional settings.

In this context, professors take on the role of facilitators rather than traditional lecturers, guiding students through immersive experiences, providing feedback, and encouraging reflective thinking that ties these activities to broader leadership concepts (Burns, 2022). This shift positions professors as models of adaptive leadership, where their guidance and responsiveness to student needs serve as real-time demonstrations of effective leadership. By observing their instructors navigate complex teaching environments and facilitate diverse group dynamics, students learn to

appreciate the importance of flexibility, empathy, and decision-making agility—qualities vital to leadership in today’s business landscape.

Figure 1: Bandura’s Social Learning Theory



Note Bandura's Social Learning Theory emphasizes the significance of social context, observation, and cognitive processes in shaping behavior.

Bandura's Social Learning Theory underscores how individuals learn through observing others, particularly in complex social environments. This theory is especially relevant in educational settings where students not only engage in direct experiences, like behavioral simulations, but also learn by observing the actions and decision-making processes of their peers and instructors. Figure 1 illustrates how Social Learning Theory applies to business education, where professors model leadership behaviors, guide students through real-world scenarios, and facilitate experiential learning. By observing these behaviors in action, students internalize leadership skills, making the transition from theoretical knowledge to practical application more effective.

Furthermore, the rise of hybrid learning models, which blend in-person instruction with online platforms, has reshaped the educational landscape, requiring educators to demonstrate leadership agility in the integration of these technologies (Lombardi & Oblinger, 2007). Professors must now not only be proficient in using these technologies but also adept at leading students through learning environments that are increasingly flexible and dynamic. The shift toward hybrid models

enables students to engage in collaborative learning across digital and physical spaces, preparing them for the demands of modern, technologically driven business environments. These platforms mirror the real-world challenges of managing geographically dispersed teams, making decisions in real time, and leveraging digital tools for communication and innovation (Mishra & Koehler, 2006).

As business leadership increasingly emphasizes adaptability, resilience, and innovation in times of change, professors are tasked with preparing students to lead in this context (Hattie et al., 2016). The modern business landscape requires leaders who can navigate volatility and ambiguity while inspiring teams and driving strategic change. In the classroom, behavioral simulations serve as a practical method for instilling these qualities. By presenting students with complex, real-world scenarios, simulations push them to think creatively, take calculated risks, and lead teams in uncertain environments. This experiential approach not only hones students' leadership capabilities but also mirrors the leadership challenges they will face in their future careers (Johnson & Johnson, 1999).

In this evolving educational environment, the role of the professor extends beyond delivering subject matter expertise. Professors must also coach students in leadership development, helping them build the skills necessary to manage diverse teams, drive innovation, and lead through uncertainty. By modeling these qualities in the classroom—through adaptability in teaching methods, resilience in managing evolving technologies, and innovative problem-solving—professors reinforce the leadership qualities their students will need in today's complex and interconnected business world (Leithwood et al., 2008). As transformative figures, professors exemplify the traits they wish to instill, creating an environment where students are empowered to approach challenges with a strategic mindset, embrace uncertainty, and lead with purpose in their professional journeys.

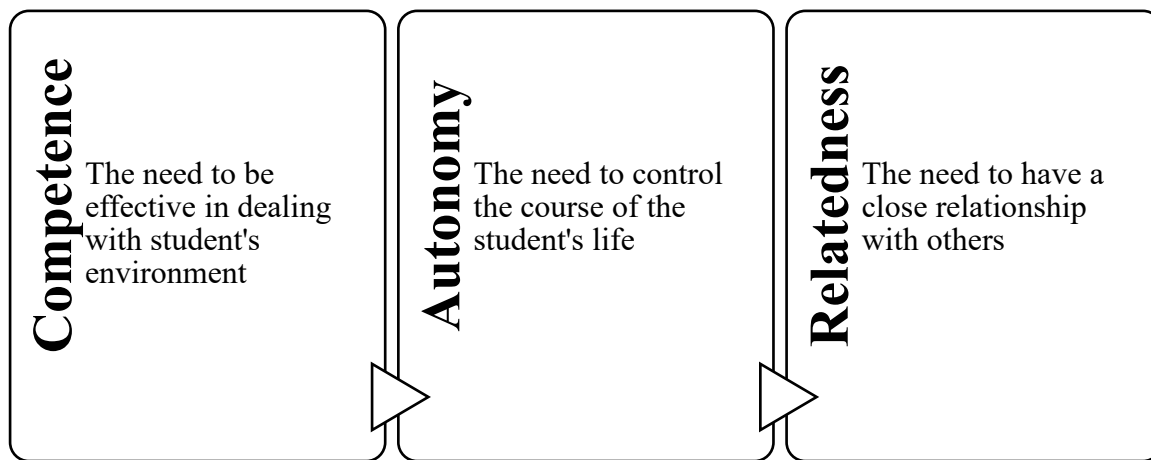
As educators embrace the role of transformative leaders, they must select teaching methods that bridge theoretical leadership concepts with practical applications. These innovative approaches, including flipped classrooms and behavioral simulations, ensure that students not only understand leadership theory but also have opportunities to practice and refine essential skills in a controlled environment.

INNOVATIVE TEACHING METHODS

As the landscape of business education evolves, so too must the methods through which educators impart knowledge and cultivate leadership skills. The integration of technology-enhanced learning environments and innovative pedagogical approaches represents one of the most significant shifts in modern business education. These innovations transform the way students acquire knowledge and practice skills essential for leadership in a globalized world marked by complexity and rapid technological advancement (Mishra & Koehler, 2006). By embracing methods that reflect the real-world challenges of contemporary business, educators prepare students to lead confidently and collaboratively in increasingly interconnected environments.

One prominent example of this shift is the adoption of flipped classrooms and behavioral simulations—approaches that prioritize experiential, hands-on learning over passive content delivery. In a flipped classroom model, students engage with foundational course content independently through digital platforms before class, allowing in-person sessions to focus on practical, interactive applications of that content. This structure encourages a shift in the professor’s role, from lecturer to facilitator, guiding students as they work through problem-solving exercises, collaborative projects, and real-world applications (Cameron, 2013; Burns, 2022). This approach not only deepens student engagement but also aligns with the foundational concepts of Self-Determination Theory, which posits that Competence, Autonomy, and Relatedness are essential to motivation and personal growth (Ryan & Deci, 2000).

Figure 2: Self- Determination Theory



Note Self-Determination Theory offers insights into human motivation, emphasizing Competence, Autonomy, and Relatedness as key to personal development and well-being.

In education, fostering competence, autonomy, and relatedness from the Self-Determination Theory (Figure 2) enhance intrinsic motivation and student growth. illustrates how these principles align with innovative teaching methods, such as flipped classrooms and experiential learning, which empower students to take control of their learning, build competence, and collaborate effectively.

Research indicates that students who engage in flipped, and simulation-based learning environments often demonstrate higher levels of engagement, improved critical thinking and problem-solving skills, and greater confidence in leadership roles upon graduation. These active, experiential methods provide students with practical experiences that increase their readiness for leadership challenges and enhance long-term career impact (Touchton, 2015; Bishop & Verleger, 2013; Freeman et al., 2014).

Behavioral simulations, another key tool in business education, further deepen students' leadership capabilities. Unlike traditional lectures, simulations offer immersive experiences that replicate real-world business challenges, requiring students to make strategic decisions, assess

risks, allocate resources, and manage teams—all within a controlled environment where mistakes become learning opportunities (Bandura et al., 1999). By practicing these leadership skills under pressure, students build critical competencies such as resilience, adaptability, and decision-making acumen, which are vital for effective leadership in today’s business landscape (Hattie et al., 2016). Additionally, simulations offer a unique opportunity for students to experiment with various leadership styles and strategies, testing their approaches in situations that mirror professional challenges but without the high stakes associated with real-world failures (Johnson & Johnson, 1999).

Project-based and inquiry-based learning approaches are also gaining traction, encouraging students to explore topics through real-world applications and self-directed research. These methods not only increase student engagement but also help develop crucial skills such as collaboration, communication, and adaptability (Deutscher et al, 2021; Duke et al, 2020).

Project-Based Learning (PBL) offers significant benefits for students, including improved academic achievement and the development of essential 21st-century skills. Research shows that students in PBL-based courses, such as Advanced Placement classes, are more likely to earn passing scores on standardized tests. PBL also enhances critical thinking, problem-solving, and higher-order thinking skills, while increasing student engagement, motivation, and knowledge retention across diverse disciplines and backgrounds.

Beyond academics, PBL prepares students for real-world challenges by fostering collaboration, communication, leadership, and adaptability. It helps students see the relevance of their learning, supports interdisciplinary connections, and equips them with skills that are directly transferable to professional and lifelong learning contexts (Table 1). These long-term benefits make PBL a powerful approach for promoting equity, preparing students for unpredictable careers, and supporting their success well beyond graduation.

Table 1: Highlights the benefits of using Project Based Learning (PBL)

Improved Academic Achievement	Students in PBL Advanced Placement courses had an 8-10 percentage point higher probability of earning a passing score on AP tests. PBL has been shown to improve student performance across different disciplines, including STEM fields.
Development of 21st Century Skills	PBL fosters deeper learning and skills like collaboration, communication, and critical thinking, which are crucial in today's workforce. Students develop key abilities such as leadership and confidence.
Real-World Application	PBL allows students to make sense of why content is useful and how it might be applied in real-world situations. It prepares students for lives and careers that are difficult to predict, much like open-ended projects.

Long-term Benefits	Longitudinal studies indicate that students in PBL environments are more successful over the long term. PBL prepares students not just for their first jobs, but for lifelong learning and adaptability.
Professional Preparation	PBL experiences help students transfer skills seamlessly to their professional lives after graduation
Enhanced Thinking Skills	PBL significantly improves students' critical thinking, problem-solving, and higher-order thinking skills. It builds students' creative capacity to work through difficult or ill-structured problems.
Improved Engagement and Retention	Students in PBL environments demonstrate increased engagement and higher retention of knowledge. PBL leads to reduced absenteeism in STEM and STEAM schools.
Effectiveness Across Diverse Groups	PBL has shown positive impacts across different disciplinary practices and for students from all types of backgrounds. It can be a powerful lever for improving equity in education.
Interdisciplinary Learning	PBL often involves working across disciplines, which enhances students' ability to make connections and transfer knowledge.
Improved Motivation	PBL positively influences students' intrinsic motivation to learn (Vivo, 2022).

Note: For the purpose of this paper, ten unique benefits have been captured to showcase the student learning experience with the inclusion of Project-Based Learning.

Instructors play a pivotal role in guiding students through simulations, offering feedback that connects students' experiences to broader leadership concepts and encouraging reflective thinking to solidify learning. By observing and interacting with professors who exemplify adaptability, strategic thinking, and resilience, students learn not only through direct experience but also through modeled behavior, a core concept of Bandura's Social Learning Theory. Instructors thus transition from traditional lecturers to facilitators of leadership development, actively embodying the qualities they aim to instill in their students (Levesque et al., 2004). Behavioral simulations become more than educational tools—they are transformative experiences that build students' capacity to think and act like leaders in unpredictable, high-stakes situations.

Furthermore, the rise of virtual learning environments enables the cultivation of leadership skills within digital spaces, mirroring the increasingly remote and interconnected nature of today's business world. These virtual platforms allow students to collaborate across digital and physical boundaries, preparing them for the complexities of managing remote teams, engaging with global

stakeholders, and leveraging digital tools for effective communication and decision-making (Dillenbourg et al., 2009). Instructors lead students through these virtual environments, teaching them how to manage the nuances of cross-cultural teams, communicate across time zones, and solve problems in asynchronous settings. By doing so, professors model essential skills for digital leadership, equipping students to thrive in an era of remote work and international collaboration (Mishra & Koehler, 2006).

As professors integrate these innovative methods into their teaching, the classroom transforms into a laboratory for leadership development where students experience firsthand the challenges and rewards of modern business environments. By offering students opportunities to engage actively through flipped classrooms, behavioral simulations, and virtual learning platforms, professors help students develop essential leadership qualities such as self-direction, adaptability, collaboration, and strategic problem-solving. These methods also support the development of emotional intelligence, empathy, and cultural awareness—skills that are increasingly valued in leadership roles and essential for navigating today’s interconnected and diverse professional landscapes (Lombardi & Oblinger, 2007).

For instance, at Harvard Business School, the use of behavioral simulations within leadership courses immerses students in realistic business scenarios that demand immediate problem-solving and collaboration. Through these exercises, students experience the pressures and decision-making processes they will encounter in leadership roles, receiving feedback that helps them refine their approaches. This case-based approach demonstrates how experiential learning fosters adaptability and confidence in future business leaders

Table 2: Traditional Vs. Innovative Teaching Methods

Teaching Method	Student Engagement	Skill Development	Leadership Focus
Traditional Lectures	Low (Passive)	Knowledge Retention	Minimal
Flipped Classrooms	High (Active)	Critical Thinking, Application	Moderate
Behavioral Simulations	High (Experiential)	Decision-Making, Adaptability	High
Collaborative Projects	High (Interactive)	Teamwork, Leadership	High

Note The table compares traditional lectures with innovative methods like flipped classrooms and behavioral simulations, highlighting differences in student engagement, skill development, and leadership focus.

Table 2 showcases the contrast between traditional lecture-based methods with innovative approaches like flipped classrooms and behavioral simulations, illustrating key differences in student engagement, skill development, and leadership focus. Traditional lectures often emphasize passive information absorption, offering limited opportunities for application or active engagement with content. In contrast, flipped classrooms and simulations prioritize active learning, where students engage in meaningful practice and are challenged to apply concepts in

realistic scenarios. By creating learning environments where students actively test and refine their leadership skills, these methods transform the educational experience from knowledge transfer to leadership cultivation, making innovative teaching a foundational element in effective business education today.

Table 2 highlights varying degrees of leadership focus across different teaching methods. Traditional lectures offer minimal emphasis on leadership, concentrating mainly on knowledge retention with passive student engagement. Flipped classrooms provide a moderate leadership focus by promoting active learning and critical thinking, which can help develop some leadership skills. In contrast, behavioral simulations and collaborative projects both have a high leadership focus. Behavioral simulations engage students experientially, enhancing decision-making and adaptability—key leadership qualities. Similarly, collaborative projects emphasize teamwork and leadership by requiring students to interact and often assume leadership roles within groups. Overall, teaching methods that encourage active, experiential, and interactive learning tend to foster leadership development more effectively than traditional lecture-based approaches.

Through these hands-on teaching methods, students begin to cultivate leadership qualities within an academic setting. As a result, the classroom itself becomes a foundational environment for leadership development, where students are guided by educators who prioritize self-discovery, collaboration, and adaptability.

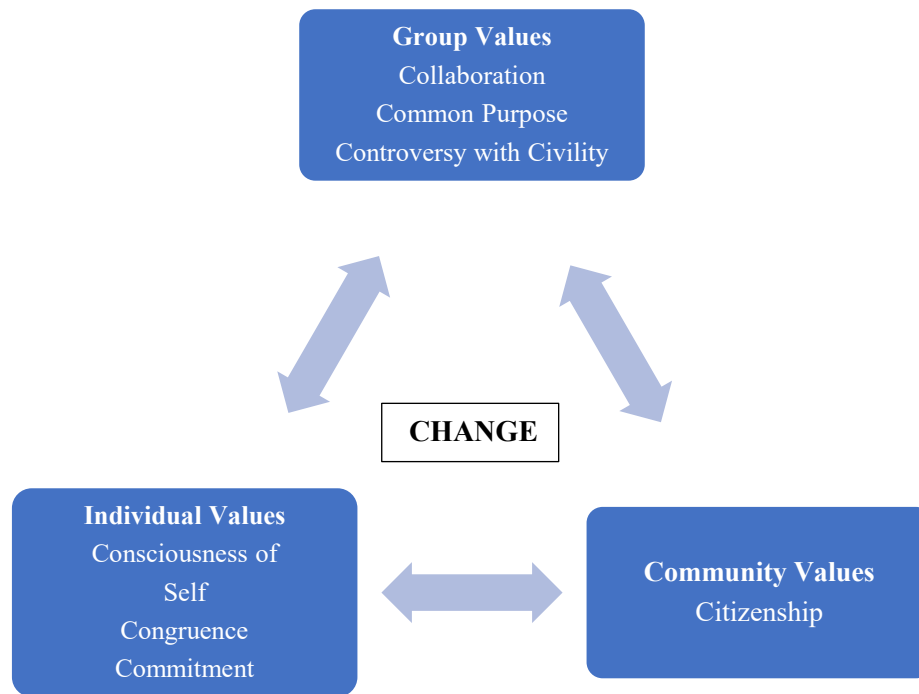
LEADERSHIP DEVELOPMENT

In today's increasingly complex business environment, the development of leadership skills is no longer confined to the boardroom—it begins in the classroom. As the business world evolves, there is a growing recognition that leadership development must start early in a student's academic journey, with professors playing a pivotal role in shaping future business leaders (Hattie et al., 2016). This shift reflects a broader transition from traditional, instructor-centered pedagogies to approaches that emphasize student empowerment, autonomy, and collaborative learning (Leithwood et al., 2008). By fostering leadership within the academic environment, professors lay the groundwork for students to develop the skills necessary for navigating the complexities of modern business. This early exposure helps students internalize leadership principles in practical, low-risk environments, building confidence and experience that transfer seamlessly to their professional lives.

The Social Change Model of Leadership Development

The Social Change Model of Leadership Development, which emphasizes personal growth, ethical behavior, collaboration, and positive social change (Figure 3). Widely used in leadership and educational programs, this model empowers individuals and groups to make meaningful contributions to society. With its focus on individual, group, and societal values, the model encourages self-awareness, collaboration, and responsibility, aligning with the shift toward student empowerment and collaborative learning in preparing future business leaders.

Figure 3: Social Change Model of Leadership Development



Note The figure illustrates the Social Change Model of Leadership Development, which emphasizes personal growth, ethical behavior, collaboration, and positive social change.

To cultivate these leadership qualities, educators must create learning environments that encourage students to take ownership of their educational experiences. This requires moving away from hierarchical, top-down instruction and embracing more collaborative approaches, where students are empowered to lead discussions, manage group projects, and participate in decision-making processes. In this setting, professors act as facilitators of leadership, guiding students while providing them with the autonomy to explore and develop their unique leadership styles (Cameron, 2013). Such autonomy fosters self-confidence and critical thinking, allowing students to experiment with different approaches to leadership in a safe, supportive space. The shift from passive learning to active participation helps students internalize key leadership concepts, as they learn to apply their knowledge in practical, real-world scenarios, making the classroom a testing ground for strategies they may later employ in their careers (Bandura et al., 1999).

Case Study: The Wharton School's 'Leadership Venture Program' on Experiential Learning

The Wharton School's Leadership Venture Program, part of the McNulty Leadership Program, is a flagship experiential learning initiative designed to immerse students in challenging, real-world environments to develop and refine their leadership skills. The program offers both short-term intensives and longer expeditions, often in remote or unfamiliar settings, where students confront complex challenges, lead teams, and engage in structured reflection and feedback.

Key Benefits for Experiential Learning

- **Immersive, Real-World Challenges:**
Participants are placed in dynamic, often unpredictable environments, such as wilderness expeditions or international settings, where they must solve problems, make decisions under uncertainty, and lead diverse teams. This practical exposure is considered highly effective for developing authentic leadership capabilities.
- **Personal and Team Development:**
The program emphasizes self-discovery, character development, and the mastery of both individual and team leadership skills. Students consistently report transformative personal growth, increased self-awareness, and a deeper understanding of their leadership style and limitations.
- **Structured Reflection and Feedback:**
Each venture incorporates daily reflection sessions and after-action reviews, allowing participants to analyze their decisions, receive honest peer feedback, and internalize lessons learned. This iterative process is crucial for translating experience into lasting leadership insight.
- **Peer and Mentor Support:**
Ventures are facilitated by trained Venture Fellows—second-year students who serve as coaches, mentors, and facilitators. This peer-led model fosters a supportive learning community and ensures continuous improvement of the program.
- **Accessibility and Inclusivity:**
Wharton provides need-based funding to ensure that financial barriers do not prevent students from participating in these high-impact programs, broadening access to experiential learning opportunities (MBA leadership ventures, 2025).

The Leadership Venture Program is closely linked with Wharton's broader leadership curriculum, reinforcing academic concepts such as influence, emotional intelligence, and decision-making through hands-on application. This integration ensures that experiential learning complements and deepens classroom instruction.

The Wharton School's Leadership Venture Program is a highly effective model for experiential learning, providing students with unique, challenging, and supportive environments to test and develop their leadership skills. Through immersive experiences, structured reflection, and strong peer mentorship, the program delivers lasting personal and professional growth, making it a cornerstone of Wharton's leadership education. This program is a great example for institutions to follow and integrate experiential learning into the curriculum (Experiential learning, 2025).

Group-based Learning

Group-based learning has proven particularly effective for fostering leadership in the classroom. Group projects and team-based assignments mirror the collaborative nature of modern business, requiring students to navigate interpersonal dynamics, delegate tasks, and manage conflicts—all critical leadership skills (Johnson & Johnson, 1999). By assigning specific leadership roles within these groups, professors create opportunities for students to practice leading teams, making strategic decisions, and driving results. This form of experiential learning

encourages students to think critically and take initiative, simulating the challenges they will encounter in their future careers (Dillenbourg et al., 2009). These experiences also emphasize the importance of emotional intelligence, empathy, and adaptability, as students learn to communicate effectively, resolve disputes, and maintain team morale—traits highly valued in contemporary business leaders.

Group-based and simulation learning outcomes are also strongly associated with students' capacity to manage team dynamics, navigate complex decision-making, and apply strategic thinking in professional settings. This alignment between classroom experience and real-world application enables students to enter the workforce as capable, agile leaders (Johnson & Johnson, 1999; Salas et al., 2009; Fletcher & Tobias, 2006).

Incorporating real-world challenges into the curriculum further enhances leadership development by providing students with meaningful contexts in which to apply their skills. Case studies, business simulations, and project-based learning activities engage students with practical problems, prompting them to think creatively, innovate, and take calculated risks—core attributes of effective leadership (Burns, 2022). These activities not only develop strategic thinking and problem-solving skills but also allow students to experiment with visionary leadership, learning how to inspire teams and drive innovation. Professors, in guiding students through these exercises, demonstrate that leadership extends beyond managing people to include making strategic decisions and navigating uncertainty (Levesque et al., 2004). Through these simulations, students are encouraged to view challenges as opportunities, build resilience, and practice articulating a clear vision—key skills for leaders faced with the unpredictable nature of the global business environment.

This focus on leadership development also aligns with the increasing demand from employers for graduates who possess strong leadership capabilities. As businesses become more global and interconnected, the ability to lead through ambiguity, drive innovation, and manage diverse teams is essential for success (Leithwood et al., 2008). By fostering these leadership skills in the classroom, professors are not only preparing students for their initial entry into the workforce but also for long-term leadership roles throughout their careers. The development of such skills equips students to face the challenges of a fast-paced, rapidly changing business environment with confidence and strategic insight (Hattie et al., 2016). Moreover, as students enter professional environments, their early experiences in leadership roles allow them to adapt more quickly and contribute effectively to team goals, making them valuable assets to any organization.

In this way, the academic setting becomes a launchpad for cultivating leadership potential, where professors serve not only as educators but as mentors who guide students through the nuances of leading with integrity, resilience, and vision. Through the adoption of innovative teaching methods and collaborative learning environments, professors ensure that leadership development is integrated into the very fabric of business education, preparing students to take on the challenges and opportunities of the business world with skill and insight.

CONCLUSION AND RECOMMENDATIONS

As the landscape of business education continues to evolve, the role of educators as transformative leaders becomes more essential than ever. The complexities of today's global

business environment demand that professors go beyond merely imparting knowledge; they must model the leadership qualities—such as adaptability, resilience, and strategic thinking—that students will need to succeed in their careers. By integrating innovative teaching methods, such as behavioral simulations, flipped classrooms, and virtual learning environments, educators create dynamic, immersive learning experiences that foster critical thinking, collaboration, and leadership development (Cameron, 2013; Leithwood et al., 2008). These methods provide students with a foundation in practical leadership skills, preparing them to navigate the demands of a business world characterized by constant change, technological disruption, and global interdependency.

In this evolving context, the classroom transforms from a traditional learning environment into a training ground for leadership, where students are encouraged to experiment, innovate, and develop their unique leadership styles. Professors act as facilitators, guiding students through real-world challenges that mirror the complexity and uncertainty they will face in modern business (Bandura et al., 1999). This shift necessitates that educators continuously adapt their teaching strategies, moving away from hierarchical, lecture-based instruction and embracing more student-centered approaches that empower students to take ownership of their learning, lead within collaborative settings, and develop the resilience required to tackle future challenges (Johnson & Johnson, 1999). Such an environment not only supports students' academic growth but also shapes them into well-rounded individuals prepared to make strategic contributions to their organizations and communities.

Looking ahead, the future of business education will depend on its ability to continuously innovate and evolve in response to the rapidly changing demands of the global business landscape. Educators must remain committed to incorporating new technologies and pedagogical methods that reflect the realities of the modern business world, including digital transformation, global collaboration, and ethical leadership (Mishra & Koehler, 2006). By doing so, they not only enhance the educational experience but also ensure that students are equipped with the skills they need to lead through complexity, drive innovation, and manage change in diverse, interconnected environments (Lombardi & Oblinger, 2007).

The role of business educators extends beyond preparing students for professional success; it shapes leaders who can make meaningful contributions to society. By fostering ethical, adaptable, and innovative leadership qualities, business education can drive positive change, equipping students not only to excel in their careers but also to address pressing global issues and lead with purpose. This broader impact reaffirms the importance of transformative leadership in education as a catalyst for societal advancement.

To achieve these outcomes, several strategies are recommended for business educators:

1. **Embrace Technology-Enhanced Learning:** Educators should actively integrate digital platforms and virtual environments into their teaching, allowing students to engage in global collaboration and digital leadership experiences that reflect the interconnected nature of modern business (Dillenbourg et al., 2009). Leveraging technologies such as collaborative project management tools, virtual simulation platforms, and video conferencing allows students to develop the digital fluency needed to lead in technology-driven industries. In these environments, students practice leading remote teams, making

data-driven decisions, and communicating across digital channels—skills that are increasingly essential as business becomes more virtual and globalized.

2. **Foster Collaborative and Experiential Learning:** By prioritizing group-based learning and behavioral simulations, professors can create opportunities for students to practice leadership in real-world contexts. This experiential approach prepares students for the interpersonal and decision-making challenges they will face as business leaders (Hattie et al., 2016). Collaborative projects that simulate business scenarios or industry challenges help students develop critical soft skills such as communication, conflict resolution, and teamwork, all while strengthening their problem-solving and strategic thinking capabilities. Experiential learning places students in situations where they must assume leadership roles, manage team dynamics, and make strategic decisions, thus building the confidence and practical experience necessary for future leadership roles.
3. **Promote Leadership Development Early:** Leadership development should be embedded in the curriculum from the outset, ensuring that students have ample opportunities to practice leadership throughout their academic journey. Encouraging autonomy, critical thinking, and strategic decision-making helps students build a strong leadership foundation that will serve them in their professional careers (Leithwood et al., 2008). Programs that introduce leadership theories, ethical decision-making frameworks, and opportunities for self-reflection and self-assessment early on allow students to progressively refine their skills. By beginning this development process early, educators ensure that students graduate not only with technical knowledge but with well-honed leadership skills suited to complex, fast-paced environments.
4. **Adopt Flexible and Hybrid Teaching Models:** The integration of hybrid learning models—which blend in-person instruction with online learning—allows professors to create flexible, adaptive learning environments that reflect the diverse, fast-paced nature of modern business. This approach not only enhances the student experience but also models the adaptability required in leadership roles today (Mishra & Koehler, 2006). Hybrid models help students learn to manage their time, navigate different learning platforms, and adapt to varied modes of instruction. In turn, this flexibility fosters a resilient mindset, as students learn to operate effectively in both digital and physical settings—mirroring the hybrid work environments prevalent in today’s business world.

By embracing these strategies, business educators can ensure that they are not only preparing students for their first roles in the workforce but also fostering the development of future business leaders who are equipped to navigate the challenges of a dynamic, complex, and technology-driven business world. The transformative role of educators in this process cannot be overstated. By leading with vision, modeling resilience, and inspiring innovation, professors set the stage for a new generation of business leaders who are prepared to lead organizations, shape industries, and make meaningful contributions to society. Through these efforts, educators fulfill a dual purpose: advancing business education and developing future leaders capable of thriving amid the demands of a global economy.

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SYNERGIES OF CONSCIOUSNESS: A MULTIFACETED ANALYSIS OF FACTORS ENHANCING DIVERSITY AND INCLUSION IN HUMAN INTERACTION

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ABSTRACT

Researchers conducted an online survey of 429 undergraduate business students using Qualtrics, of which 308 respondents were evaluated. The survey included 32 questions on self-awareness, reflection, respect, inclusion, advocacy, critical thinking, and cultural sensitivity related to diversity and inclusion. Findings emphasize the importance of embracing diverse beliefs and combating stereotypes, though challenges in discussing sensitive topics remain. Data indicates the value of cross-cultural understanding, relying on facts, and connecting with differences. Students acknowledge the negative impact of policies on non-majority cultures, highlighting the need for empathy and respect to foster an inclusive and welcoming environment.

Cultural competencies are effectively interacting and collaborating with individuals from diverse cultural backgrounds. Incorporating cultural competencies into the workforce is a strategic move that aligns with the broader goals of diversity, inclusion, and equity. It empowers employees to engage effectively with colleagues and clients from diverse backgrounds, enriches workplace interactions, and positions the organization for success in an interconnected global landscape. Building cultural competencies in college offers numerous benefits that extend to professional careers. In other words, developing cultural competencies exposes students to diverse communication styles and enhances their adaptability in expressing ideas and comprehending others. Moreover, it nurtures a global perspective, cultivating understanding and respect for varied worldviews. As organizations highly esteem adeptness in collaborating within diverse teams and navigating multicultural contexts, students with strong cultural competencies frequently distinguish themselves, increasing their prospects for leadership positions and international assignments in their future professional endeavors.

A foundation study by Awang et al. (2022) reported that students at their college experienced notable progress in all twelve areas of diversity and multicultural workforce-related knowledge, skills, and dispositions. The twelve areas of diversity and multicultural workforce-related knowledge, skills, and dispositions are the ability to “function effectively in a diverse team environment, apply critical thinking strategies to analyze diversity-related issues in business, develop cultural competency and respect for people from different backgrounds, demonstrate acceptance and appreciation of diverse backgrounds, ideas, and perspectives for an inclusive environment, evaluate opportunities and challenges for working in diverse and multicultural workforce environments and teams, develop an awareness of diversity-related issues and be able to make ethically sound decisions, examine country-specific dress, behavior, taboos, and other business and social customs as they related to conducting business with persons from other cultures, understand your own culture so that you recognize its influences on your communication habits, examine the role of managing cultural synergy within the global business environment, manage a diverse workforce and compete in a global marketplace, study other cultures so that you can appreciate cultural variations, and apply cultural intelligence skills to professional situations in a global environment” (Awang et al., 2022, pp. 21-22). Students reported substantial improvement in functioning in diverse team environments, applying critical thinking to diversity-related business issues, and developing cultural competency and respect for different backgrounds. While the initial findings provide insights into students' perceptions of progress in diversity-related aspects within the College of Business, further research is necessary to investigate whether the reported progress has a lasting impact on students' college careers and interactions in diverse work environments as students progress through the program. This research aims to extend this and similar work, focusing on a more comprehensive understanding of the impact of diversity education in the College of Business.

SIGNIFICANCE OF THE STUDY

Cultural competencies in today's workforce align closely with diversity, inclusion, and equity research, further enhancing the workplace environment. In an increasingly interconnected

world, workplaces often interact with partners, clients, and colleagues from around the globe. Cultural competencies enable employees to navigate cross-cultural communication challenges, fostering solid international relationships and successful collaborations. Furthermore, cultural competencies facilitate clear and respectful communication across cultures. Understanding different communication styles, norms, and nuances helps prevent misunderstandings and breakdowns in communication, leading to more effective teamwork and project execution. For example, customers come from diverse backgrounds, and cultural competencies allow employees to better understand customer preferences and needs. This understanding leads to personalized interactions and services, ultimately improving customer satisfaction and loyalty.

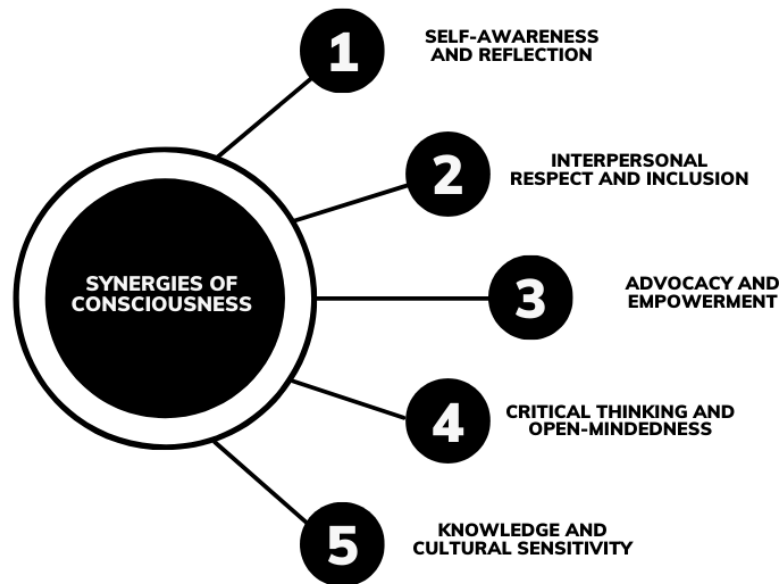
As societal perceptions of diversity, inclusion, and equity continuously evolve, organizations that embrace these principles gain a strategic advantage in accommodating changing norms and expectations (Clarke, 2023). Colleges are pivotal in equipping students with the cultural competencies necessary to meet these evolving demands. Through proactive initiatives that address biases, foster open dialogues, and celebrate cultural distinctions, colleges bridge the gap between theoretical understanding and practical application. By imparting these skills, colleges ensure that graduates are well-prepared to contribute to workplaces prioritizing diversity and inclusivity, allowing organizations to stay dynamic and relevant in a constantly evolving landscape.

The study was conducted at an AACSB-International accredited comprehensive regional higher education institution that publicly supports diversity in its strategic plan, core values, and diversity action plan. The College of Business's commitment to diversity is also evident in its mission, values, and student learning outcomes. However, students' perspectives on cultural competencies within the College of Business have yet to be investigated.

Purpose of the Study

The study aims to identify the College of Business students' perceptions of their ability to interact and collaborate with individuals from diverse cultural backgrounds. The study explores the students' perceptions of cultural competencies in (1) self-awareness and reflection, (2) interpersonal respect and inclusion, (3) advocacy and empowerment, (4) critical thinking and open-mindedness, and (5) knowledge and cultural sensitivity. Figure 1 presents the research framework.

Figure 1: Research Framework



These themes play a pivotal role in shaping a workplace that celebrates individuality, values diverse contributions, and fosters a sense of unity. By promoting self-awareness, respectful interactions, advocacy, critical thinking, and cultural sensitivity, organizations can create an environment where employees thrive, creativity flourishes, and lasting success is achieved. The study aims to answer the following research questions:

1. How does recognizing personal biases affect conversations about diversity?
2. What makes diverse relationships influential for inclusivity?
3. How does supporting diverse voices enhance equity?
4. Does embracing diverse perspectives reduce biases?
5. Can learning about cultures improve diversity appreciation?

REVIEW OF LITERATURE

The review of literature sections is divided into the categories of impact of organizational policies on diversity and inclusion, global perspective on diversity and inclusion, and diversity and cultural competence in higher education.

The Impact of Organizational Policies on Diversity and Inclusion

Substantial evidence indicates that the obstacles encountered in diversity efforts within higher education stem from poorly designed policies, plans, and objectives (Felix & Trinidad,

2020). These often suffer from inadequate strategic vision, intentionality, and insufficient allocation of resources (Garcia et al., 2021). While integrating diversity efforts with organizational strategic priorities can be beneficial, this integration alone doesn't ensure that the plans will receive adequate resources for effective implementation. Additionally, it doesn't guarantee that the plans' rhetoric aligns with the actual organizational reality and the commitments made at the practical level. In examining a quarter-century of policy documents tied to California's Student Equity Policy, Felix and Trinidad (2020) concluded that the policy was essentially an unfunded mandate. According to the state's assertion, no extra resources were deemed necessary as the equity regulations didn't introduce fresh state-mandated expenses. Additionally, diversity statements and plans often lacked deliberate planning and failed to outline clear goals or specific responsibilities for implementation (Visser, 2015).

The Global Perspectives on Diversity and Inclusion

According to neo-institutional theory, which posits that global practices in organizations often reflect dominant cultural norms rather than functional needs, the spread of diversity in higher education is viewed as a worldwide trend shaped by Western ideals of equality, even when educational systems differ in structure or context (Wiseman & Chase-Mayoral, 2014). Applying neo-institutional theory, Pineda and Mishra (2023) discovered that diversity and inclusion discourses are predominant in numerous Western countries, such as the USA, Canada, the UK, Ireland, and Europe, yet are notably absent in other geographical areas, including Asia, Africa, the Middle East, and Latin America. The existing literature on diversity often presumes that the idea has uniformly spread throughout global higher education systems, adopting comparable meanings, definitions, and terminologies. Specifically, neo-institutionalists suggest that the expansion of diversity within and beyond higher education has been widespread and aligned with Westernized principles and concepts of equality despite noticeable variations among different higher education systems (Ramirez et al., 2009). Therefore, prior literature exploring diversity and inclusion frequently assumes universal and global trends. This is done by leaning on standardized terminology or semantics to address the spectrum of human diversity. However, some researchers argue that diversity and inclusion have not been equally understood across various geographical regions worldwide (Frank & Meyer, 2020; Schofer et al., 2021).

Pineda and Mishra (2023) employed computer-supported analysis using VOSviewer, a tool for mapping research trends, authors, and keywords using bibliometric data, to examine whether diversity and inclusion-related research has become global or universal, or vice versa. They suggested several important findings. First, they computed the ratio of articles discussing diversity compared to the total number of published articles on higher education in Scopus, a multidisciplinary abstract and citation database of peer-reviewed literature, including journals, conference proceedings, and books for each region considered. They found that the publication trends indicate that the earliest works on diversity emerged in the 1970s in North America, notably in the USA, and much later, around the early 1990s, in other English-speaking nations.

In Asian countries, publications focusing on diversity in higher education remain scarce, particularly concerning the overall volume of publications in the higher education field from these regions. For instance, while China ranks third in the total number of publications in higher

education, few publications specifically address diversity in this field compared to the USA and the UK. Second, they investigated how researchers from various regions examined four prominent aspects of diversity: gender, race/ethnicity, cultural diversity, and inclusion. Only in the USA and Canada “LGBT” and “transgender” are frequently mentioned in the research. However, they often appear independently without many explicit connections to the broader semantic network in these regions. In addition, race has been integral to the early discussions on diversity, and alongside gender, it remains a prominent focus within the literature on diversity in the US.

Literature discussing diversity in higher education in the UK and Ireland emerged post-1998, experiencing a significant surge in publications after 2014. The themes revolved around implementing procedures, institutional policies, and practices to foster “equality” and “social justice” within higher education. Interestingly, this region stands out as the primary one referencing “age” within this context. In Oceania, publications on diversity have emerged recently, starting only after 2009. In this region, “culture” as a main node connects to ‘learning’ in the teaching subject. Unlike in the USA and Canada, conversations about diversity are often shaped around the concepts of community and culture rather than focusing explicitly on race. The concept of diversity only started to gain traction in European higher education literature by the late 2000, and it's still relatively uncommon today. European diversity literature predominantly focuses on inclusion, integration, and gender. Finally, the volume of scientific publications in higher education is rising in Asian countries. Still, diversity-related publications remain notably low compared to the overall increase. For instance, although Chinese academics rank third globally in general higher education literature publications after the USA and the UK/Ireland, this trend doesn't extend to diversity-focused publications. Most Chinese publications focused on student loans and access and the Chinese students’ experiences in the USA. Within Africa, the bulk of diversity-related articles (42 out of 50) originate from scholars in South Africa. They primarily concentrate on access and equity in digital education, highlighting the scarcity of demographic representation in higher education. Likewise, Brazil stands out in Latin America with the highest publication count on diversity. These publications delve into topics such as quality evaluation and address disability issues. Moving to the Middle East, Israel leads with the research. These initial articles predominantly explore diversity through the lens of multiculturalism, focusing primarily on Israeli Arabs and Jewish students.

In conclusion, Pineda and Mishra (2023) suggested that diversity semantics have not achieved global or universal acceptance. Adopting diversity-related terminology appears limited to countries in the Global North, revealing significant regional disparities in its conceptualization and the covered topics. The lack of universality and standardization in diversity's legitimacy as a research topic in higher education might be linked to a weaker global impact of Western liberalism than typically assumed by experts in diversity, higher education, and globalization literature (Ramirez et al., 2009; Tsutsui, 2017).

Diversity and Cultural Competence in Higher Education

Enyeart Smith et al. (2017) used a longitudinal study to identify the views of college seniors and graduate students about diversity and cultural acceptance. They wanted to identify strategies to increase opportunities for improved cultural competence in the higher education academic

environment. Students' responses to fifteen Likert scale items indicated that students agree that the department is modeling cultural competency, addressing diversity in the curriculum, and increasing knowledge of diversity. The data obtained was useful for the department to enhance opportunities designed to develop student cultural competency through activities. Suggestions were made by the participants in the study, stating, "Extra effort must be employed to increase cultural competency among faculty and students, such as providing additional practical experiences and opportunities for diverse community outreach, and to increase opportunities such as poverty simulations, panel discussions, and training on specific issues (e.g., disability and LGBTQ awareness)" (Enyeart Smith et al., 2017, p. 31). However, the study identified a positive trend toward improving students' cultural competency.

More recently, Barkley et al. (2022) researched students' attitudes toward diversity, the degree to which personal and academic characteristics influence attitudes, and how much experience students have had with persons with backgrounds different from their own during the COVID-19 pandemic. Barkley and colleagues aimed to measure the level of openness to diversity and challenge and the level of diversity experience among enrolled students. Diversity and challenge greatly impacted changes in student attitudes and learning and personal development outcomes. The major implication of the study results is that "the opportunity to influence student openness to diversity and challenge has been expanded through the implementation and promotion of diversity programming such as workshops and academic courses that increase the understanding of persons with different background experiences" (Barkley et al., 2022, p. 27). The study's results implied the need to expand diversity programming to provide more experiences with people from different backgrounds as a part of the university experience.

In a study, Mitchell and Vandegrift (2014) used qualitative focus groups to examine how U.S. business students experience the relationships among internationalization, multiculturalism, and diversity. The researchers considered the role of international business faculty in addressing this issue and offered recommendations for successfully integrating those perspectives into a curriculum. The study discovered that White students demonstrate a significant gap in competency about multiculturalism and internationalization. Many students do not naturally arrive with the skills needed to work in diverse domestic and global work environments. The researchers wanted to raise awareness among international business faculty about how most students navigate diversity and multiculturalism conversations. The major implication of the study results is that "The growing diversity of the world beyond the classroom, and the experiences of students of color within the academy, demand close attention to this problem (Mitchell & Vandegrift, 2014, p. 40). The results have implied that awareness about diversity and multiculturalism needs to be raised.

Hajro et al. (2022) clarified the grounds for integrating migration issues into management education and how to achieve it. The researchers discussed that teaching migration could provide a way to reshape students' ways of thinking about the complex relationships between companies, civil society, and industry. The researchers described migration as "a pressing global phenomenon, interconnected with human rights, sustainability, economic development, and geopolitics. It has important implications for firms' activities, strategies, structures, and decision-making processes (Hajro et al., 2022, p. 101). The researchers wanted migration to go into the business school curricula, where it is mainly absent and proposed that migration be addressed in the classroom as

a threshold concept. Hajro et al. (2022) proposed that introducing migration as a threshold concept could be challenging; it could also unpack stereotypical perspectives and contrast them with updated research. It was suggested that the relationship between business, migration, and society demands that business schools join the debate on migrant workforce management.

In another recent study, Browsers and Ho (2022) researched students' perceptions of university diversity initiatives and their value to the university environment. The researchers focused on raising awareness about the competency of diversity and inclusion. Focus-group interviews were conducted among undergraduate and graduate students from a public university in a rural area in the United States. The participants identified several positive attitudes toward diversity and inclusion, including acceptance and respect. However, it is significant that some participants are limited in their perceptions of culturally diverse backgrounds, which has resulted in some anxiety. This study guides current institution administrators in creating effective inclusive environments, and it could be treated as a model for other rural universities. The major implication of the study was, "The literature is clear that students' ability to embrace a changing global environment, with its many cultural differences, is a required competency to be successful as a post-graduate citizen (Browsers & Ho, 2022, p. 13).

Smith et al. (2021) discussed "diversity fatigue" and the importance of measuring attitudes toward diversity efforts in academia. The journal focused on "academia is grappling with how to address persistent underrepresentation and reduce inequities.... some within the academic community might experience "diversity fatigue" a construct we use to understand majority groups' feelings of weariness toward diversity efforts (Smith et al., 2021, p. 659). The results indicated that the mean levels of diversity fatigue were low overall. Still, diversity fatigue is dampening people's response to or enthusiasm for efforts that improve the experience of underrepresented people. Understanding this construct has implications for campus communities committed to diversity programs. The research results suggested that it is important that universities remain accountable for creating an inclusive and diverse learning environment and identify barriers that could prevent this environment from occurring.

Doucette et al. (2021) focused on culturally diverse graduate students' perceptions of multicultural education. This study concentrated on multicultural education to improve educators' understanding of the complexities of different cultures and the inherent intersectionality of race, gender, class, and exceptionality to liberate students from oppressive structures within society. The study aimed to "illuminate graduate students' perceptions of educational leadership regarding multicultural education and transformative leadership through the lens of critical pedagogy" (Doucette et al., 2021, p. 1259). This qualitative case study wanted to identify the factors that drove graduate students to seek further experiences with multicultural education. The study found that the participants discussed the importance of celebrating diversity. It acknowledged that it is difficult to do so within schools' constraints and that there was a disconnect between the idea of multicultural education and putting it into practice.

Braun et al. (2020) researched self-assessment of diversity competence as part of regular teaching evaluations in higher education. The study focused on "a procedure which can help raise awareness for diversity issues amongst staff and students and thereby foster diversity competence and facilitate the implementation of diversity strategies within higher education institutions: to include a self-assessment tool regarding diversity competence in the regular teaching evaluation"

(Braun et al., 2020, p. 171). The researchers used a well-established course evaluation tool widely used in Germany, the HESaCom, to measure subjective gains in diversity competence. The results found that students attending a cross-study course in which diversity had been a topic and attending courses in which no participant had experienced social discrimination reported significantly higher diversity competence gains than students from the remaining courses.

Acquah and Commins (2018) explored international students' perspectives of diverse classes on multiculturalism. The data were taken from reflective journals, course evaluations, and focus group interviews with forty-five students. These data resources were analyzed to identify students' significant learning experiences. The study "supports the value of diverse cultural experiences in developing intercultural competence. In addition, the diversity among students contributed to their growing understanding of cultural diversity" (Acquah & Commins, 2018, p. 193). These research findings contributed to the development of teacher preparation and the enhancement of curricula and practice.

RESEARCH DESIGN AND METHODOLOGY

This section outlines the study's population, data collection procedures, validity and reliability measures, and sources. The study used a descriptive or observational research design consisting of an online survey of undergraduate business students as the primary data source. The study employed a simple random sampling design. The researchers invited 429 business students enrolled in eight business courses to participate in the study through the announcement feature in Blackboard, the learning management system used by the College under study. Of those invited, 308 students responded, yielding a 72 percent response rate. The survey instrument comprised 32 items focused on cultural competency statements, with responses recorded on a five-point Likert scale. Details on respondent demographics and course disciplines are provided in the sections below.

A survey was constructed through Qualtrics and posted on the selected Blackboard course site from spring 2022 to fall 2023 semesters to obtain quantitative data to be analyzed. In a descriptive research design using surveys, data can be summarized using measures of central tendency and reported as frequencies and percentages. Frequencies and percentages represent the number of times a response occurs and the proportion of responses in each category, respectively, highlighting the distribution of responses. These techniques help the authors identify patterns in the survey data.

Validity and Reliability

International business professors and intercultural and international business education experts evaluated the survey instrument to ensure its content validity. We present the final instrument in Appendix A.

We evaluated the internal consistency of the research instruments using Cronbach's alpha, a widely utilized statistical measure of reliability. The instrument consisted of five sections:

- (1) Self-awareness and reflection,

- (2) Interpersonal respect and inclusion,
- (3) Advocacy and empowerment,
- (4) Critical thinking and open-mindedness, and
- (5) Knowledge and cultural sensitivity.

We calculated Cronbach's alpha separately for each section to assess the reliability of the items within each section. The value of Cronbach's alpha ranges from 0 to 1, with higher values indicating greater internal consistency. A score close to 1 indicates that the items in the questionnaire are highly correlated with each other and offer a consistent measure of the underlying construct.

Table 1 presents the results of Cronbach's alpha analysis for each of the five sections of the research instruments, which provide insight into the questionnaire's high reliability and internal consistency.

Table 1
Reliability of Scales

<i>Item</i>	<i>N</i>	<i>Cronbach's alpha</i>
Self-Awareness and Reflection	11	1
Interpersonal Respect and Inclusion	11	1
Advocacy and Empowerment	4	1
Critical Thinking and Open-Mindedness	4	1
Knowledge and Cultural Sensitivity	2	1

Respondents completed 32 inquiries about cultural competencies statements. We provided a five (5) point Likert scale for responses. We invited 429 students to participate in the study and received 308 usable responses, resulting in a 72 percent response rate for the survey. Their demographics are presented in Table 2 below.

Table 2
Respondent Characteristics

N = 308

<i>Category</i>	<i>Subcategory</i>	<i>Percent</i>	<i>Count</i>
Gender	Female	49.68	153
	Male	48.38	149
	Non-binary/Third Gender	0.32	1

Age	Prefer Not to Say	1.62	5
	Traditional Students	73.38	226
	Non-traditional Students	26.62	82
First-Generation	Not First-Generation	63.64	196
	First Generation	36.36	112
Sexual Orientation	Heterosexual or Straight	86.32	265
	Gay	2.28	7
	Lesbian	0.33	1
	Bisexual	8.14	25
	Prefer Not to Say	2.93	9
Race and Ethnicity	American Indian or Alaska Native	0.95	3
	Asian	2.86	9
	Black or African American	3.81	12
	Hispanic or Latino	2.54	8
	White	86.67	273
	Middle Eastern	0.63	2
	Two or More Races/Ethnicities	1.27	4
	Prefer Not to Say	1.27	4
College Classification	Freshmen	0.97	3
	Sophomores	13.64	42
	Juniors	39.29	121
	Seniors	45.45	140
	Graduate	0.65	2
Residency Classification	US Residents	96.93	253
	International Students	3.07	8
	Saudi Arabia, China, Thailand, Kosovo, Puerto Rico, and Bermuda		
Registered with the Disability Access Services			
	Yes	1.95	6
	No	98.05	302

The university under review is in a college town in the southeastern region of the United States, and White students, 86.67%, contribute to most of the university population. Most of the respondents were female, 49.68%; traditional students, 73.38%; not first-generation college students, 63.64%; heterosexual or straight, 86.32%; seniors, 45.45%; US residents, 96.93%; and not registered with the Disability Access Services, 98.05%.

The research participant pool included student respondents from eight separate classroom sections from various disciplines across the AACSB-accredited College of Business University:

- (1) Consumer Behavior in Marketing,
- (2) Essentials of Marketing,
- (3) Principles of Management,
- (4) International Business,
- (5) Essentials of Formal Communication,
- (6) Integrated Corporate Communication,
- (7) International Business Communication, and
- (8) Leading and Managing Human Capital (graduate course).

RESEARCH FINDINGS AND DISCUSSIONS

We divided the analysis of synergies of consciousness: A multifaceted analysis of factors enhancing diversity and inclusion in human Interaction, into the following five categories: (1) self-awareness and reflection, (2) interpersonal respect and inclusion, (3) advocacy and empowerment, (4) critical thinking and open-mindedness, and (5) knowledge and cultural sensitivity.

Self-Awareness and Reflection

Respondents completed 11 statements about self-awareness and reflection. We provided a five (5) point Likert scale for responses.

Most respondents, 61%, believed that people's experiences and backgrounds impacted how they interacted with and trusted them, 56.95% understood that they were products of their upbringing and believed there were valid beliefs other than their own, and 49.01% recognized and avoided language reinforcing stereotypes. However, only 29.14% of the respondents challenged others when they made racial/ethnic/sexually offensive comments or jokes, as presented in Table 3.

Table 3
Self-Awareness and Reflection
N = 308

Criteria	N	R	S	O	A	Mean
I know and accept that people's experiences and backgrounds impact how they interact with and trust me.	0	3 (1.00%)	34 (11.33%)	80 (26.67%)	183 (61%)	4.48
I understand that I'm a product of my upbringing and believe there are valid beliefs other than my own.	1 (0.33%)	4 (1.32%)	36 (11.92%)	89 (29.47%)	172 (56.95%)	4.41
I recognize and avoid language that reinforces stereotypes.	4 (1.32%)	9 (2.98%)	44 (14.57%)	97 (32.12%)	148 (49.01%)	4.25
I assume good intent and ask for clarification when I don't understand what was said or implied.	1 (0.33%)	9 (2.99%)	43 (14.29%)	115 (38.21%)	133 (44.19%)	4.23
I avoid assuming that others will have the same reaction as I do when discussing or viewing an issue.	3 (0.99%)	8 (2.65%)	57 (18.87%)	105 (34.77%)	129 (42.72%)	4.16
I can honestly assess my strengths and weaknesses in the area of diversity and try to improve myself.	1 (0.33%)	2 (0.66%)	58 (19.21%)	131 (43.34%)	110 (36.42%)	4.15
I understand the definition of internalized racism and how it impacts people of color.	4 (1.34%)	11 (3.68%)	59 (19.73%)	91 (30.43%)	134 (44.82%)	4.14
I know others' stereotypes associated with my ethnicity.	6 (1.99%)	9 (2.99%)	60 (19.87%)	105 (34.77%)	122 (40.40%)	4.09
I am aware of my own biases and how they affect my thinking.	2 (0.66%)	6 (1.99%)	59 (19.54%)	152 (50.33%)	83 (27.48%)	4.02
I believe that race is a social construct, not a scientific fact.	20 (6.73%)	17 (5.72%)	73 (24.58%)	85 (28.62%)	102 (34.34%)	3.78
I challenge others when they make racial/ethnic/sexually offensive comments or jokes.	10 (3.31%)	28 (9.27%)	76 (25.17%)	100 (33.11%)	88 (29.14%)	3.75

Note. N = Never R = Rarely S = Seldom O = Often A = Always

Most respondents recognize that people's experiences and backgrounds affect how they interact and establish trust. This finding suggests an awareness of individuals' diverse perspectives on social interactions. This skill is precious in college and real-world settings as it promotes

empathy, effective communication, and building meaningful connections. For instance, college students who understand how their background influences their perceptions can engage more constructively in group discussions and collaborations, fostering a supportive learning environment.

More than half recognized that their beliefs stem from upbringing and that diverse viewpoints are valid, highlighting humility and openness. This mindset fosters active college participation, enriching discussions, and aids professionals in teamwork and client relations. For example, a marketing team valuing diverse ideas crafts effective strategies through cultural perspectives. About half were conscious of stereotype-reinforcing language, grasping its bias-perpetuating impact. This skill aids in respectful college classrooms and fosters positive workplace and client interactions. A sensitivity-promoting company cultivates a safe space for employees to share ideas freely, ensuring a welcoming environment. Fewer respondents reported challenging offensive comments or jokes about race, ethnicity, or gender. While this indicates room for improvement, it's noteworthy that some respondents are willing to confront such behavior.

Background awareness, valuing diversity, avoiding stereotypes, and addressing offenses are vital in education and real life. They enhance communication, collaboration, and positive interactions, fostering cultural awareness, tolerance, and inclusivity. Integrating these skills in education and work drives rewarding academic and career paths.

Interpersonal Respect and Inclusion

Respondents completed 11 statements about interpersonal respect and inclusion. We provided a five (5) point Likert scale for responses.

Most respondents, 55.63%, realized that people of other cultures need to support one another and connect as a group, 50.33% did not make assumptions about a person or individual group until they had verified the facts on their own, and 48.68% connected easily with people who look different from themselves and could communicate easily with them. Interestingly, 51.16% did not believe having a friend of color meant they were culturally competent. Only 39.33% believed “color blindness” was counterproductive and devalued a person’s culture or history, as presented in Table 4.

Table 4
Interpersonal Respect and Inclusion
N = 308

Criteria	N	R	S	O	A	Mean
I realize that people of other cultures need to support one another and connect as a group.	0	4 (1.32%)	35 (11.59%)	95 (31.46%)	168 (55.63%)	4.41
I do not make assumptions about a person or individual group until I have verified the facts on my own	5 (1.66%)	7 (2.32%)	38 (12.58%)	100 (33.11%)	152 (50.33%)	4.28
I connect easily with people who look different from me and am able to communicate easily with them.	1 (0.33%)	9 (2.98%)	47 (15.56%)	98 (32.45%)	147 (48.68%)	4.26
I do not believe that having a friend of color means that I'm culturally competent.	15 (4.98%)	7 (2.33%)	51 (16.94%)	74 (24.58%)	154 (51.16%)	4.15
I speak up if I witness another person being humiliated or discriminated against.	1 (0.33%)	11 (3.64%)	69 (22.85%)	90 (29.80%)	131 (43.38%)	4.12
I have multiple friends from a variety of ethnicities and abilities.	1 (0.33%)	12 (3.97%)	65 (21.52%)	98 (32.45%)	126 (41.72%)	4.11
I try to learn about and appreciate the richness of other cultures and honor their holidays and events.	5 (1.66%)	9 (2.99%)	57 (18.94%)	108 (35.88%)	122 (40.53%)	4.11
I actively seek opportunities to connect with people who are different from me and seek to build rapport with them.	3 (1.00%)	20 (6.64%)	66 (21.93%)	95 (31.56%)	117 (38.87%)	4.01
I do not participate in jokes that are derogatory to any individual or group.	24 (7.95%)	23 (7.62%)	42 (13.91%)	61 (20.20%)	152 (50.33%)	3.97
I understand why a lack of diversity in my social circle may be perceived as excluding others.	16 (5.30%)	22 (7.28%)	62 (20.53%)	85 (28.15%)	117 (38.74%)	3.88
I believe "color blindness" is counterproductive and devalues a person's culture or history.	22 (7.33%)	18 (6.00%)	70 (23.33%)	72 (24.00%)	118 (39.33%)	3.82

Note. N = Never R = Rarely S = Seldom O = Often A = Always

Respondents acknowledged the significance of fostering mutual support and group connections among individuals from diverse cultures, showcasing an appreciation for shared

challenges that nurture unity within varied communities. This perspective highlights the importance of interpersonal respect and inclusion.

In a college context, this awareness cultivates empathy and contributes to a welcoming campus atmosphere where students of different backgrounds are embraced, thereby creating an inclusive learning environment. The inspiration and hope come from organizing cultural exchange events on campus encourages students to connect and learn from each other's experiences and strengthens the sense of community, fostering a brighter future of understanding and unity.

In the professional realm, this skill translates to fostering collaboration and teamwork across cultural divides. Workplace dynamics improve significantly when individuals appreciate connecting with people from different backgrounds. For instance, in a multinational company, employees who recognize the importance of mutual support can collaborate effectively, leading to innovative problem-solving and more harmonious interactions. Such cross-cultural connections lead to better understanding, reduce misunderstandings, and positively impact the work atmosphere.

Half of the respondents claimed withholding assumptions until personally verifying the facts. This approach indicates critical thinking and a commitment to fairness, stimulating intellectual growth. This skill enhances academic rigor in college by encouraging students to seek accurate information before forming opinions. Many respondents felt comfortable connecting with individuals who look different from themselves and communicating effectively with them. An intriguing finding is that over half of the respondents did not equate having a friend of color with being culturally competent. This finding reveals that personal relationships do not automatically translate to a deep understanding of cultural issues. Less than half of the respondents recognized that the concept of "color blindness" can undermine the value of a person's culture and history. This awareness highlights the importance of acknowledging and celebrating diversity rather than ignoring it.

The findings emphasize the importance of mutual support, critical thinking, cross-cultural connections, and awareness of cultural complexities. These skills have profound implications for fostering inclusive environments both in education and professional settings, ultimately contributing to enriched learning experiences and harmonious workplace dynamics.

Advocacy and Empowerment

Respondents completed four statements about advocacy and empowerment. We provided a five (5) point Likert scale for responses.

Most respondents, 57.72%, included people who were culturally different from themselves in team decision-making that impacted them; 49.67% worked to ensure people who were different from them were heard and accepted. However, 46.67% believed there were policies and practices in place that negatively impacted people outside the majority culture, as presented in Table 5.

Table 5
Advocacy and Empowerment
N = 308

Criteria	N	R	S	O	A	Mean
I include people who are culturally different from myself in team decision-making processes that impact them.	0	1 (0.34%)	35 (11.74%)	90 (30.20%)	172 (57.72%)	4.45
I work to make sure people who are different from me are heard and accepted.	1 (0.33%)	6 (1.99%)	55 (18.21%)	90 (29.80%)	150 (49.67%)	4.26
I encourage people culturally different from myself to speak out on their issues and concerns, and I validate them.	3 (0.99%)	9 (2.98%)	51 (16.89%)	106 (35.10%)	133 (44.04%)	4.18
I believe there are policies and practices in place that negatively impact people outside the majority culture	4 (1.33%)	15 (5.00%)	62 (20.67%)	79 (26.33%)	140 (46.67%)	4.12

Note. N = Never R = Rarely S = Seldom O = Often A = Always

Most respondents recognized the value of including culturally different individuals in team decision-making processes that affect them. This insight highlights a proactive approach to knowledge and understanding. It reflects the recognition that diverse perspectives enrich discussions and lead to more well-rounded decisions. In academic and professional contexts, incorporating diverse viewpoints fosters innovative problem-solving and more inclusive outcomes.

Most respondents actively ensured that individuals from diverse backgrounds were heard and accepted. This finding demonstrates cultural sensitivity and empathy. This effort cultivates an environment where every voice is valued in educational settings, leading to more engaging discussions and a sense of inclusivity. A notable percentage of respondents acknowledged the existence of policies and practices that negatively impact individuals outside the majority culture. This recognition highlights awareness of systemic issues related to cultural sensitivity and equity. Addressing these concerns in college and professional settings is essential to ensuring a fair and inclusive environment. By addressing policies perpetuating disparities, institutions and organizations can actively work toward a more just and equitable atmosphere.

The findings highlight the knowledge, cultural sensitivity, and recognition of individual merit. Respondents champion inclusive decisions, amplify voices, and address systemic issues, highlighting the importance of valuing diverse perspectives. This empowers individuals in education and work, enriching knowledge, honoring cultures, and fostering equitable and harmonious environments.

Critical Thinking and Open-Mindedness

Respondents completed four statements about critical thinking and open-mindedness. We provided a five (5) point Likert scale for responses.

Most respondents, 54.30%, were interested in the ideas and beliefs of people who did not think and believe as they did, and they respected their opinions even when they disagreed, 52.49% did not try to justify acts of discrimination to make the victim feel better, and they validated their assessment of what occurred, while 37.54% recognized that others stereotyped them and tried to overcome their perceptions, as presented in Table 6.

Table 6
Critical Thinking and Open-Mindedness

N = 302

Criteria	N	R	S	O	A	Mean
I am interested in the ideas and beliefs of people who don't think and believe as I do, and I respect their opinions even when I disagree.	1 (0.33%)	6 (1.99%)	38 (12.58%)	93 (30.79%)	164 (54.30%)	4.37
I do not try to justify acts of discrimination to make the victim feel better. I validate his/her assessment of what occurred.	4 (1.33%)	6 (1.99%)	50 (16.61%)	83 (27.57%)	158 (52.49%)	4.28
I avoid generalizing the behaviors or attitudes of one individual in a group to others.	2 (0.66%)	4 (1.33%)	51 (16.94%)	98 (32.56%)	146 (48.50%)	4.27
I recognize that others stereotype me, and I try to overcome their perceptions.	7 (2.33%)	11 (3.65%)	64 (21.26%)	106 (35.22%)	113 (37.54%)	4.02

Note. N = Never R = Rarely S = Seldom O = Often A = Always

The findings offer intriguing insights into respondents' attitudes and behaviors, shedding light on their critical thinking skills and open-mindedness. Most respondents were open to engaging with ideas and beliefs that differed from their own. Moreover, they showcased the capacity to respect opinions despite disagreements, illustrating a high level of open-mindedness and critical thinking. In both academic and real-world scenarios, this ability is invaluable. Open-minded individuals contribute to richer classroom discussions and collaborative learning in educational settings. In professional contexts, open-mindedness fosters more innovative problem-solving and effective decision-making as diverse viewpoints are considered.

Most respondents refused to justify acts of discrimination and instead sought to validate their assessment of the situation, emphasizing critical thinking and a commitment to ethical considerations. Such an approach is vital for promoting fairness and equality. Some respondents

acknowledged that others stereotyped them and took steps to overcome these perceptions, which reflects self-awareness and a proactive stance against bias.

The survey findings highlight the significance of critical thinking and open-mindedness in navigating diverse perspectives. Respondents' inclination to embrace differing ideas, refusal to justify discrimination, and efforts to overcome stereotypes reveal a thoughtful approach to understanding and interacting with others.

Knowledge and Cultural Sensitivity

Respondents completed two statements about knowledge and cultural sensitivity. We provided a five (5) point Likert scale for responses.

Most respondents, 60.67%, actively conveyed that employees or students of varying backgrounds were as skilled and competent as others. In comparison, 47.68% did not consider physical characteristics when interacting with others or making decisions about others' competence or ability, as presented in Table 7.

Table 7
Knowledge and Cultural Sensitivity
N = 300

Criteria	N	R	S	O	A	Mean
I actively convey that employees or students of varying backgrounds are as skilled and competent as others.	2 (0.67%)	6 (2.00%)	31 (10.33%)	79 (26.33%)	182 (60.67%)	4.44
I do not take physical characteristics into account when interacting with others or when making decisions about others' competence or ability.	9 (2.98%)	14 (4.64%)	42 (13.91%)	93 (30.79%)	144 (47.68%)	4.16

Note. N = Never R = Rarely S = Seldom O = Often A = Always

The findings indicate a positive perception of equality in terms of capability regardless of one's cultural or ethnic background, and respondents can look beyond outward appearances and focus on individual abilities and qualifications. The belief that people from various backgrounds possess comparable skills and competence is crucial in fostering diversity and inclusion in multiple settings such as workplaces and educational institutions.

Embracing diversity can lead to a more creative and innovative environment, as individuals with different experiences bring unique perspectives. For instance, a multinational corporation benefits from having employees with diverse cultural insights when expanding into global markets.

Many respondents disregard physical characteristics when assessing competence or making decisions, which indicates a move away from bias and stereotyping. This is essential in combating discrimination and promoting fairness. For example, focusing on a candidate's

qualifications and skills rather than their appearance in a job interview can lead to more equitable hiring decisions.

Viewing others as competent regardless of background enhances collaboration and communication among diverse groups. When individuals are confident in each other's abilities, they're more likely to share ideas and work together effectively. Students from different cultural backgrounds can contribute various perspectives to enrich classroom discussions. Cultural sensitivity skills are valuable and essential in promoting equality and understanding in various aspects of life.

CONCLUSIONS

We based the following conclusions on the study findings:

1. Recognizing personal biases crucially influences diversity conversations. Respondents' awareness of the impact of experiences, understanding of the influence of their upbringing, and acknowledgment of valid beliefs beyond their own highlight the significance of self-awareness. Avoiding stereotypes furthers respectful discussions. However, fewer respondents are challenging offensive comments, which shows the challenge of addressing sensitive topics, even with bias recognition.
2. Diverse relationships drive inclusivity. Respondents' understanding of cross-cultural support, fact-based assumptions, and ease of connecting with differences highlight their influence. Notably, having a friend of color doesn't ensure cultural competence, underscoring complexity. Additionally, recognizing "color blindness" devalues culture, emphasizing the need to embrace diversity.
3. Supporting diverse voices significantly advances equity. Respondents' inclusion of culturally different individuals in decision-making showcases an acknowledgment of the importance of diverse perspectives. Their efforts to ensure the acceptance and inclusion of those different from them highlight the role of empathy and openness. Moreover, recognizing policies that negatively affect non-majority cultures highlights the need for change.
4. Embracing diverse perspectives contributes to reducing biases. Respondents' openness to differing ideas, respect for opinions despite disagreements, and refusal to justify discrimination highlight the impact of cultivating diverse viewpoints.
5. Learning about cultures indeed enhances appreciation of diversity. Respondents' recognition of equal competence and disregard for physical characteristics highlights the impact of cultural understanding.

Recommendations and Implications for Business Education Classrooms

We make the following recommendations and implications for business education classrooms based on the conclusions:

1. Enhance the college curriculum with a self-awareness and bias recognition module. Teach students to understand and address personal biases, fostering more informed and respectful diversity conversations. Equip them with skills to navigate sensitive topics, promoting a productive and inclusive classroom environment.
2. In college classrooms, foster inclusivity by encouraging diverse relationships. Promote fact-based understanding and empathetic connections and discourage assumptions. Create an environment that values varied perspectives beyond surface interactions. This approach enriches learning and prepares students for diverse real-world experiences.
3. Establish a systematic review process to renew policies and practices for inclusivity. Ensure policies are evaluated through a diversity lens, seeking input from various backgrounds. Encourage open forums to discuss concerns and suggest modifications. Regularly update policies to reflect a diverse community's evolving needs and dynamics. This approach guarantees that policies foster equity and create a more inclusive environment.
4. To address unconscious biases, institute regular unconscious bias training. Create interactive workshops that explore the origins and effects of biases. Encourage self-reflection and provide practical strategies to counter biases. By actively engaging in such training, individuals can develop heightened awareness and skills to challenge their biases, leading to a more inclusive mindset.
5. Integrate cross-cultural competency training. Incorporate case studies and scenarios that highlight diverse workplace dynamics. Encourage students to engage in immersive experiences, such as internships or projects with culturally diverse teams. This approach equips future professionals with the skills and mindset needed to appreciate and leverage diversity for effective collaboration and innovation in the workforce.
6. Business educators must recognize the vital role of open discussions about biases. These dialogues unveil the profound influence biases and perceptions hold. By championing such conversations, we cultivate empathy and mutual respect, fostering an environment that embraces diversity.
7. Business educators must continue the initiatives encouraging cross-cultural connections because they enhance students' understanding of diverse viewpoints and amplify their value in the business landscape. Curriculum development must include lessons with diverse perspectives, broadening students' horizons and embracing differing viewpoints beyond academics, nurturing a comprehensive global perspective. Study abroad and cultural exchange programs must be supported because these experiences immerse students in enriching encounters, deepening their appreciation for global diversity.

The business education classroom holds the potential for open dialogue, empathy, cross-cultural connections, and diverse viewpoints. These elements foster an inclusive business environment, empowering future professionals to excel in a diverse world.

LIMITATIONS

This study has the following limitations that should be noted:

1. The respondent sample overrepresented White and traditionally aged college students (17-29 years of age). Therefore, data were broadly generalizable to the students who studied at the College of Business. However, when considering specific populations of students, these results most directly reflect the experiences of undergraduate students and traditionally aged college students due to their overrepresentation in the respondent sample. To address this limitation, future studies should strive for a more diverse respondent sample encompassing various ethnicities and age groups. This approach would enhance the study's applicability and provide a more comprehensive understanding of perspectives within the College of Business.
2. Double-barreled survey items were included, which combine two concepts in a single question with one response option. This may have led to varied interpretations and reduced response precision. While internal consistency remained acceptable, future research should revise these items to focus on single constructs, improving clarity, validity, and the accuracy of measuring cultural competency.

RECOMMENDATIONS FOR FUTURE RESEARCH

Future research should include the following:

1. Follow-up research could investigate whether the reported progress has a lasting impact on students' careers and interactions in diverse work environments. This would provide a more comprehensive understanding of the enduring effects of their education.
2. External validation is needed to determine if students' self-perceived progress aligns with actual competencies. Follow-up assessments could involve evaluations by faculty, employers, or performance in real-world scenarios.
3. Additional research can help identify specific teaching methods, courses, or interventions that contribute most to student progress. This information can guide curriculum development to further enhance diversity-related education.
4. Exploring employers' perspectives on the diversity-related competencies of recent graduates can validate the impact of the education provided and identify areas for improvement.

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APPENDIX A

1. Self-Awareness and Reflection:

1. I am aware of my own biases and how they affect my thinking.
2. I can honestly assess my strengths and weaknesses in the area of diversity and try to improve myself.
3. I assume good intent and ask for clarification when I don't understand what was said or implied.
4. I challenge others when they make racial/ethnic/sexually offensive comments or jokes.
5. I recognize and avoid language that reinforces stereotypes.
6. I know others stereotypes associated with my ethnicity.
7. I avoid assuming that others will have the same reaction as I do when discussing or viewing an issue.
8. I understand that I'm a product of my upbringing and believe there are valid beliefs other than my own.
9. I understand the definition of internalized racism and how it impacts people of color.
10. I believe that race is a social construct, not a scientific fact.
11. I know and accept that people's experiences and backgrounds impact how they interact with and trust me.

2. Interpersonal Respect and Inclusion:

1. I speak up if I witness another person being humiliated or discriminated against.
2. I do not participate in jokes that are derogatory to any individual or group.
3. I do not believe that having a friend of color means that I'm culturally competent.
4. I understand why a lack of diversity in my social circle may be perceived as excluding others.
5. I realize that people of other cultures have a need to support one another and connect as a group.
6. I do not make assumptions about a person or individual group until I have verified the facts on my own.
7. I have multiple friends from a variety of ethnicities and abilities.
8. I connect easily with people who look different from me and am able to communicate easily with them.
9. I actively seek opportunities to connect with people who are different from me and seek to build rapport with them.
10. I believe color blindness is counterproductive and devalues a person's culture or history.
11. I try to learn about and appreciate the richness of other cultures and honor their holidays and events.

3. Advocacy and Empowerment:

1. I encourage people who are culturally different from myself to speak out on their issues and concerns, and I validate them.
2. I include people who are culturally different from myself in team decision-making processes that impact them.

3. I work to make sure people who are different from me are heard and accepted.
 4. I believe that there are policies and practices in place that negatively impact people outside the majority culture.
4. Critical Thinking and Open-Mindedness:
1. I am interested in the ideas and beliefs of people who don't think and believe as I do, and I respect their opinions even when I disagree.
 2. I avoid generalizing the behaviors or attitudes of one individual in a group to others.
 3. I recognize that others stereotype me, and I try to overcome their perceptions.
 4. I do not try to justify acts of discrimination to make the victim feel better. I validate his/her assessment of what occurred.
5. Knowledge and Cultural Sensitivity:
1. I actively convey that employees or students of varying backgrounds are as skilled and competent as others.
 2. I do not take physical characteristics into account when interacting with others or when making decisions about others' competence or ability.

**PREDICTORS OF SUCCESS IN THE CAPSIM
BUSINESS SIMULATION GAME**

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ABSTRACT

Business simulation games are increasingly used to enhance students' critical thinking and decision-making skills. This study at Missouri Southern State University used the Capsim Capstone simulation in a senior Strategic Management course to assess integration skills across key business areas. Data from 73 students across 14 teams were analyzed using multiple regression to test 10 hypotheses. Significant predictors of performance included Capsim Login and grades in key prerequisite courses. The Balanced Scorecard was used as the performance metric. Future research should examine how these predictors interact over time and how simulation performance translates to real-world managerial competencies.

INTRODUCTION

One of the major problems plaguing tomorrow's workforce is the way students learn and are trained using traditional teaching tools, such as lectures, textbooks, slideshows, and webinars. Assessments fall short of preparing students for the job market and training employees to drive company culture and growth. Learning experiences must be relevant to the learner and to current or future job to help knowledge stick (Capsim, n.d.).

To address the issue between the study of business and the practice of business, business schools have adopted business simulation games (Faria et al., 2009). The challenge for teaching faculty is understanding the factors of student success in a business simulation game. One widely used business simulation in business and management education today is the Capsim's business simulation. Capsim is a business simulation that places each student in the role of a business decision-maker. Consequently, students manage a multi-million-dollar company in a highly competitive business environment (Morin & Tamberelli, 2021).

This research studies the possible underlying factors that predict student success. To that end, the researchers studied the impact of overall grade point average (GPA), Peregrine Exam grade, average grade on prerequisite courses, quality of work, the average number of logins on team performance using the Capsim business simulation, and the Capsim rehearsal quiz.

LITERATURE REVIEW

Business simulation games have been around for years and are becoming increasingly popular as an assessment tool to help sharpen students' critical thinking and decision-making skills (Hodgetts & Wolf, 1970). Simulation games go back to Mary Burstein in 1932. Simulations were used originally in manufacturing businesses to help solve problems in the production process (Faria et al., 2009).

The first two scored business simulation games were the Business Management Game (Andinger, 1958) and the Operating Management Game (Green & Sisson, 1959) which were the foundation for the business simulation games of today. In 1955 the first simulation games were developed for the mainframe computer called MONOPOLOGS (Jackson, 1959). Simulation

games have been utilized in university classes, but there is a distinction between the games and teaching objectives (Neuhauser, 1976).

Simulations were also utilized in industries for training purposes. Companies such as Wal-Mart have utilized simulations for training and development purposes (Morgan, 2019). Flight simulators have been utilized in pilot training for years and are becoming more advanced (Misra et al., 2022).

As business schools are asked to develop the decision-making ability of students, business simulations have become an increasingly valuable tool. Business simulations have a positive impact on the ability of student participants to critically develop decision-making skills and to model what-if scenarios (Barnaby et al., 2020).

As the use of business simulations continued to grow in business, educational institutions adapted pedagogy to include simulations (Anderson, 2005). Several studies have been conducted analyzing simulation scores and GPAs, with more research needed in this area. Business simulations have improved students' preparation for the real world (Borgese, 2003).

The Capstone business simulation (Capsim) is a widely adopted experiential learning tool in business education designed to simulate complex managerial environments. Through iterative decision-making across marketing, research and development (R & D), finance, human resources (HR), and operations, students apply theoretical knowledge in practice. Identifying what predicts student success in Capsim has gained academic interest, as it helps instructors enhance learning design and student engagement. This literature review examines key predictors of Capsim performance, categorized into individual characteristics, team composition and dynamics, strategic orientation and decision-making quality, and pedagogical design and instructional support.

Individual Characteristics

Academic Performance and Prior Knowledge

Academic background, particularly GPA and familiarity with core business subjects, plays a critical role in simulation performance. Anderson and Lawton (2009) found that students with a solid grounding in finance, operations, and marketing tend to excel in Capsim due to better analytical capabilities. Similarly, Feinstein and Cannon (2002) highlighted that academic performance positively correlates with decision-making effectiveness in simulations, especially when students are required to integrate financial forecasting and strategic planning.

Blackford and Shi (2015) studied the relationship between simulations in capstone management courses and standardized test scores. The researchers found scores on the simulation game were associated with higher GPAs, higher grades in the capstone course, and higher ACT scores. The simulation game was not significantly correlated with age, instructor for the course, or if the student had transferred to the university where the research was conducted.

Cognitive Ability and Learning Style

Cognitive skills such as analytical thinking, quantitative reasoning, and adaptability are important predictors of performance. Wolfe and Crookall (1998) noted that successful participants

demonstrate systems thinking and the ability to interpret feedback loops. Norris (2013) added that individual differences in learning styles, particularly active and reflective learners, impact how effectively students respond to Capsim's iterative decision-making environment. Kolb (2014) noted that an individual's learning style may influence the relationship between learning and performance.

Motivation and Self-Efficacy

Motivation also plays a significant role. Students with higher levels of intrinsic motivation and self-efficacy are more likely to take ownership of various simulation roles (Norris & Niebuhr, 2015). These individuals invest more time in analyzing data and are more consistent in applying a strategic vision.

Team Composition and Dynamics

Teamwork

Teamwork is also a factor that impacts the outcome of a business simulation game (Salas et al., 2005). Cater and Jones (2014) found that when a team accomplished its assigned tasks efficiently, the team would be successful. Teamwork was found to be essential for a simulation to be effective and to promote student learning (Vaidyanathan et al., 2008).

Several studies have been conducted to evaluate team-based performance (Gray, 2012). Several variables that may impact team performance in a simulator have been studied (McHaney et al., 2002) and (Banks & Milward, 2007). Salas et al. (2005) found several variables that may impact team performance in a simulation game. These factors include mentoring, procedural knowledge, team development, minority opinion, emotional intelligence, extraversion, orientation, trust, and conflict resolution.

Capsim's simulation is structured around team-based competition, making interpersonal and team-level predictors equally crucial. Parnell and Crandell (2021) analyzed data from 7,347 Capsim participants and found that the optional team size was four students and that teams performed better in the "Tournament" mode as compared to the "Footrace" mode. The researchers also found that team performance is higher with the completion of training modules and was higher in "official" rounds as opposed to "practice" rounds.

Gosen and Washbush (2004) found that teams with a diversity of functional skills outperformed homogeneous ones as the variety of perspectives leads to richer analysis and broader problem-solving approaches. These would include knowledge and skills in finance, marketing, management, economics, human resources, and accounting.

Anderson (2005) conducted a study of simulation games. The author evaluated individual perceptions of simulation team dynamics and the relationship to simulation performance. The author found that student effect was influenced by student team cohesion and student team independence. Student performance was also influenced by team heterogeneity, opportunistic practices, and hypothesis-driven thinking.

Vlachopolos and Makri (2017) studied the effect of games and simulations on higher education and recommended further research is needed with a focus on factors such as gender and different target groups.

Communication and Leadership

Effective communication within teams enables coordinated decisions and timely actions. Teams with clear leadership structures and distributed roles tend to navigate the simulation more strategically (Whiteley & Faria, 2005). Dysfunctional teams, marked by poor communication and unclear responsibility, often make contradictory or reactive decisions, leading to underperformance.

The impact of leadership on a business simulation is also a factor that should be considered (Chen, 2010). Other factors include commitment (Bishop et al., 2000). Commitment as a moderator was also studied by (Bishop et al., 2005) as well as (Foote et al., 2008).

Conflict Resolution and Collaboration

High-performing teams exhibit strong conflict resolution skills and capitalize on constructive disagreement. Hernandez (2015) found that psychological safety within teams was a key predictor of both performance and satisfaction in simulation participation.

Strategic Orientation and Decision-Making Quality

Consistency in Strategy

Strategic coherence is a key driver of success in Capsim. Keys and Wolfe (1990) emphasized that teams maintaining a consistent business strategy, such as cost leadership or product differentiation, tend to outperform those that frequently pivot or respond reactively to market changes. The ability to align decisions across departments (R&D, marketing, production, and finance) with strategic objectives is essential for long-term success.

Use of Analytical Tools and Forecasting

Successful teams utilize Capsim's analytical tools, including the Capstone Courier and industry reports, to forecast demand and assess competitor behavior (Cadotte, 2016). Palia et al. (2000) stressed that data-driven decisions lead to superior outcomes, especially in competitive rounds where small miscalculations can lead to large financial penalties.

Researchers continue to explore the impact simulation games have on student learning outcomes. To that end, a variety of assessment methods have been used to evaluate learning outcomes. Faisal et al. (2022) suggested research is still needed, especially on the effects of simulation games on employability and the transferability of skills.

Pedagogical Design and Instructor Support

Instructor Guidance and Feedback

The role of the instructor significantly influences student success. Anderson and Lawton (2004) found that structured guidance, regular debriefing sessions, and formative feedback enhance the learning curve. Instructors who contextualize simulation outcomes within broader business concepts help students draw connections and refine strategies.

Integration into Curriculum

Capsim is most effective when deeply embedded in the curriculum rather than used as a supplementary activity. Faria et al. (2009) noted that using simulations as capstone experiences, where students synthesize all prior learning, produces greater engagement and performance as opposed to using standalone exercises. The researchers also discovered that courses allocating sufficient time for simulation rounds tend to yield better learning outcomes than those that did not.

Assessment Structure

How success is defined and measured affects how students engage with Capsim. Wolfe and Crookall (1998) argued for multi-metric evaluations combining financial metrics (e.g., stock price, ROE), decision quality, peer evaluations, and reflective assessments. This holistic approach incentivizes both strategic thinking and collaborative effort.

Student Login Frequency

While student involvement in business simulation games is critical to student learning and to performance in the games, monitoring student involvement levels in the simulation activities remains a challenge for those who teach Strategic Management with the games. Zhang (2015) examined and evaluated whether student login frequency and consistency might serve as valid proxy measures of student involvement in the game activities. The researcher analyzed data collected from 219 undergraduate business students that participated in Capsim. The author found that student login consistency had a stronger relationship with student involvement than did student login frequency, which represented a better measure of student involvement in the games.

Huang et al. (2022) explored the effect of using a business simulation game on higher-order thinking skills. The researchers found that participation in simulations positively affects cognitive engagement, which is linked to improved academic performance. The study did not directly correlate login frequency with performance, but the researchers found the role of active participation did improve learning outcomes. Kilburn (2012) found in comparing individual high login rates and group average login rates with team performance that individual high logins have more impact than team average logins.

Conclusion to Literature Review

From the literature review, the researchers found suggestions for future research on simulations related to team performance, GPA, and other standardized assessment tools. Success in the Capsim business simulation game is shaped by a range of interrelated predictors. The researchers found individual traits such as (a) cognitive skills and motivation, (b) team factors like collaboration and diversity, (c) strategic behaviors involving consistency and data utilization, and (d) pedagogical elements including instructor involvement and curriculum design contribute significantly as predictors. Understanding how these predictors can guide instructors in designing more effective simulation-based courses and help students prepare more strategically for participation. Future research should examine how these predictors interact over time and how simulation performance translates to real-world managerial competencies.

Research Questions

1. To what extent does a team's average number of logins predict team performance on the Capsim Business Simulation?
2. To what extent does a team's rehearsal quiz score predict team performance on The Capsim Business Simulation?
3. To what extent does a team's average Peregrine's Comprehensive Business Administration Exam grade predict team performance on the Capsim Business Simulation?
4. To what extent does a team's average overall GPA predict team performance on the Capsim Business simulation?
5. To what extent does a team's average grade from the Managerial Finance (FIN 350) prerequisite course predict team performance on the Capsim Business simulation?
6. To what extent does a team's average grade from the Macro Economics (ECON 201) prerequisite course predict team performance on the Capsim Business Simulation?
7. To what extent does a team's average grade from the Micro Economics (ECON 202) prerequisite course predict team performance on the Capsim Business Simulation?
8. To what extent does a team's average grade from the Financial Accounting (ACC 201) prerequisite course predict team performance on the Capsim Business Simulation?
9. To what extent does a team's average grade from the Managerial Accounting (ACC 202) prerequisite course predict team performance on the Capsim Business Simulation?
10. To what extent does a team's average level of Capsim's Quality of Work and Contextual Performance predict team performance on the Capsim Business Simulation?

HYPOTHESES

H1: Capsim's average number of logins does not predict team performance on the Capsim Business Simulation.

HA: Capsim's average number of logins does predict team performance on the Capsim Business Simulation.

H2: Capsim's Rehearsal quiz does not predict team performance on the Capsim Business Simulation.

HA: Capsim's Rehearsal quiz does predict team performance on the Capsim Business Simulation.

H3: A team's Peregrine Comprehensive Business Administration Exam grade does not predict team performance on the Capsim Business Simulation.

HA: A team's Peregrine Comprehensive Business Administration Exam grade does predict team performance on the Capsim Business Simulation.

H4: A team's average overall GPA does not predict team performance on the Capsim Business Simulation.

HA: A team's average overall GPA does predict team performance on the Capsim Business Simulation.

H5: A team's average grade on the prerequisite course Managerial Finance (FIN 350) does not predict team performance on the Capsim Business Simulation.

HA: A team's average grade on the prerequisite course Managerial Finance (FIN 350) does predict team performance on the Capsim Business Simulation.

H6: A team's average grade on the prerequisite course Macro Economics (ECON 201) course does not predict team performance on the Capsim Business Simulation.

HA: A team's average grade on the prerequisite course Macro Economics (ECON 201) does predict team performance on the Capsim Business Simulation.

H7: A team's average grade on the prerequisite course Micro Economics (ECON 202) course does not predict team performance on the Capsim Business Simulation.

HA: A team's average grade on the prerequisite course Microeconomics (ECON 202) does predict team performance on the Capsim Business Simulation.

H8: A team's average grade on the prerequisite Financial Accounting (ACC 201) course does not predict team performance on the Capsim Business Simulation.

HA: A team's average grade on the prerequisite course Financial Accounting (ACC 201) does predict team performance on the Capsim Business Simulation.

H9: A team's average grade on the prerequisite course Managerial Accounting (ACC 202) course does not predict team performance on the Capsim Business Simulation.

HA: A team's average grade on the prerequisite course Managerial Accounting (ACC 202) does predict team performance on the Capsim Business Simulation.

H10: Capsim's average quality of work and contextual performance does not predict team performance on the Capsim Business Simulation.
HA: Capsim's average quality of work and contextual performance does predict team performance on the Capsim Business Simulation.

METHODOLOGY

To help professors of the Capsim Business Simulation better understand the predictors of success, a convenience sample of recent seniors preparing to graduate from Missouri Southern State University was used for this quantitative study. Capsim's "Tournament" business simulation as opposed to the company's "Footrace" simulation was used for this study. To that end, the business faculty at Missouri Southern State University were interested in assessing student integration of knowledge and skills in the key business functions of research and development, marketing, production, human resources management, and finance. The Capsim business simulation was utilized for outcomes assessment purposes in Strategic Management, the senior business capstone course.

The researchers conducted a multi-regression analysis on the 10 hypotheses noted above. The independent variables included the Capsim Login Report, the Capsim Rehearsal Quiz, the Peregrine Comprehensive Business Administration Exam, Team Averages of Overall GPA, the prerequisite courses (Principles of Managerial Finance, Macro Economics, Micro Economics, Principles of Financial Accounting, Principles of Managerial Accounting), and the Capsim Quality of work/Conceptual Performance. The dependent variable was the team Balanced Scorecard total as calculated by Capsim.

The regression showed that independent variables of Capsim Rehearsal Quiz, Peregrine Exam, Students Overall GPA, Principles of Financial Accounting and Quality of Work and Conceptual Performance had p-values greater than .15. Therefore, the researchers excluded research questions 2,3,4,8, and 10 because the dependent variable (Balanced Scorecard) could not be predicted.

Next, the researchers ran a multiple regression using only the independent variables of Login Report, Managerial Finance, Macro Economics, Micro Economics, and Principles of Managerial Accounting. The researchers determined the above independent variables could predict the dependent variable of the Balanced Scorecard Total because p-values were greater than .15.

Limitations to the Study

The study relied on student results from one mid-sized, public university located in southwest Missouri. This study was also limited by sample size and diversity, measurement constraints, lack of control over external variables, time constraints, and technological and platform-specific factors. While average team GPAs were similar, small variations in the calculation of average team GPA scores existed. In addition, minor variations in team member composition existed. For example, individual teams had minor differences in gender, age, race, major, and ethnic demographics.

Students in this study were grouped into 14 teams across multiple sections of the course. Professors organized teams based on average team GPA and diversity of majors. For example, each team was comprised of an accounting or finance major, a marketing major, a management major, and a human resource management major.

CONCLUSIONS

For the research questions below, the researchers found the following.

1. To what extent does a team's average number of logins predict team performance on the Capsim Business Simulation?

For research question one, the researchers accepted the null hypothesis ($r^2=.153$, $p=.782$) since the p-value was greater than a .05, and concluded there was sufficient evidence to say the alternative hypothesis was rejected.

5. To what extent does a team's average grade from the Managerial Finance (FIN 350) prerequisite course predict team performance on the Capsim Business simulation.

For research question five, the researchers rejected the alternative hypothesis ($r^2=.153$, $p=.916$) since the p-value was greater than a .05, and concluded there was sufficient evidence to say to say the alternative hypothesis was rejected.

6. To what extent does a team's average grade from the Macro Economics (ECON 201) prerequisite course predict team performance on the Capsim Business Simulation?

For research question six, the researchers accepted the null hypothesis a ($r^2=.153$, $p=.410$) since the p-value was greater than a .05, and concluded there was sufficient evidence to say the alternative hypothesis was rejected.

7. To what extent does a team's average grade from the Micro Economics (ECON 202) prerequisite course predict team performance on the Capsim Business Simulation?

For research question seven, the researchers accepted the null hypothesis ($r^2=.153$, $p=.530$) since the p-value was greater than a .05, and concluded there was sufficient evidence to say the alternative hypothesis was rejected.

9. To what extent does a team's average grade from the Managerial Accounting (ACC 202) prerequisite course predict team performance on the Capsim Business Simulation?

For research question nine, the researchers accepted the null hypothesis ($r^2=.153$, $p=.897$) since the p-value was greater than a .05, and concluded there was sufficient evidence to say the alternative hypothesis was rejected.

The Adjusted R² value (-0.571) suggests the model does not explain much variation in the dependent variable. The ANOVA table (Table 1) shows an F-statistic of 0.212 with a p-value of 0.961, indicating that the regression model is not statistically significant. All p-values for individual predictors are above 0.05, which means the variables do not significantly predict performance.

Table 1: Regression and ANOVA

Regression Statistics								
Multiple R	0.392421146							
R Square	0.153994356							
Adjusted R Square	-0.57115334							
Standard Error	282.8334697							
Observations	14							
ANOVA								
	df	SS	MS	F	Significance F			
Regression	6	101927.456	16987.9093	0.21236275	0.961123674			
Residual	7	559963.4011	79994.7716					
Total	13	661890.8571						
	Coefficients	Standard Error	t Stat	P-value	Lower 95%	Upper 95%	Lower 95.0%	Upper 95.0%
Intercept	-407.707	3426.136	-0.119	0.909	-8509.232	7693.817	-8509.232	7693.817
Log In Report	1.442	5.005	0.288	0.782	-10.393	13.277	-10.393	13.277
FIN 350	27.343	250.513	0.109	0.916	-565.027	619.713	-565.027	619.713
ECON 201	85.145	97.178	0.876	0.410	-144.643	314.934	-144.643	314.934
ECON 202	-53.031	80.352	-0.660	0.530	-243.033	136.970	-243.033	136.970
ACCT 202	33.458	248.887	0.134	0.897	-555.067	621.983	-555.067	621.983

Suggestions for Future Research

The researchers recommend including studying the difference between online, hybrid, and face-to-face learning. The researchers also recommend conducting replication using entrance and exit courses. For example, the simulation could be offered in the first course of the program (Introduction to Business) and the program exit class (Strategic Management). In the above case, a replication study could be conducted. Future studies might also include testing entrance scores such as the ACT/SAT and its predictability as an independent variable.

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EXAMINING THE IMPACT OF SELF-DETERMINATION THEORY ON HIGH IMPACT PRACTICES IN HIGHER EDUCATION

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ABSTRACT

This manuscript examines the impact of the three components of the self-determination theory (SDT) (e.g., autonomy, relatedness, and competence) on high impact practices (HIPs). One dozen studies published within the last twenty-seven years, including two meta-analyses, demonstrate the positive effect of HIPs as related to SDT. This review contains a variety of extensive, international, and individual studies with particular focus of HIPs in business education, (e.g., experiential service learning and simulations), with each study validating the notion that HIPs result in higher student motivation. This research effort concludes with an identification of limitations and provides suggestions for future research.

INTRODUCTION

Researchers concluded that the Covid-19 pandemic had a negative effect on motivation, engagement, and learning outcomes in college students (Besser, Flett & Zeigler-Hill, 2020; Lopez & Tadros, 2023). In fact, according to a 2023 research study (Liu, Xie, Sun, Liu, Yin & Shi, 2023), more than half of college students experience academic burnout. Factors such as gender, grade, monthly living expenses, smoking, parents' education level, study and life pressures, and the current degree of professional knowledge/interest significantly impact academic burnout.

For decades, colleges and universities deployed High Impact Practices (HIPs) to increase student engagement, thereby bolstering the factors that support motivation for students to succeed academically. However, according to the National Student Clearinghouse Research Center, the national persistence rate for students who started college in the fall of 2022 is 76.5 percent (+0.8 percentage points compared to fall 2021) and the national retention rate is 68.2 percent (+1.0 percentage point compared to fall 2021) (NSCRC, 2024). Although these numbers demonstrate improvement over the prior year, colleges and universities continue to monitor and employ best practices in attempts to motivate students.

Business programs also utilize HIPs as pedagogical tools to deliver effective instruction, enhance theoretical concepts, and motivate students. This article examines two High Impact Practices utilized in business education: Experiential service learning and simulations to identify how the three psychological needs identified in the self-determination theory (SDT) - autonomy, competence and relatedness - contribute to student motivation.

LITERATURE REVIEW

Within the context of higher education, student motivation is a critical component of retention and academic success. This paper reviews the literature of two HIPs in business education, experiential service learning and simulations, and examines how these practices reinforce student motivation specifically concepts related to self-determination theory.

Self-Determination Theory

The self-determination theory (SDT) first originated three decades ago by two psychologists, Edward Deci and Richard Ryan (1985). SDT refers to one's motivation. The theory states that individuals have the capacity to exercise both intrinsic and extrinsic motivation. Applied in academia, for example, consider a student who participates in a sport. If that student joins a team for social reasons (i.e., to make friends), extrinsic motivation is demonstrated. If that student joins a team to build skills (i.e., enjoying intense games and/or for the love of that sport), intrinsic motivation is demonstrated. Ryan, Williams, Patrick, and Deci (2009) illustrated SDT by depicting a continuum between intrinsic and extrinsic motivation. They accredited intrinsic motivation to the "inherent pleasure and satisfactions" (p. 109) of the endeavor. Similarly, they recognized extrinsic motivation when one is motivated by factors driven by outside forces. Outside forces are activities executed with the aim of receiving a benefit (tangible or intangible) or evading a negative consequence.

SDT proposes that people have three basic needs: Autonomy, competence and relatedness. Autonomy is essentially maintaining ownership of one's own behavior. Competence is the feeling of being effective in one's environment and experiencing opportunities to exercise and express one's capabilities. Relatedness refers to feeling connected to others or having a sense of belonging (Deci & Ryan, 2002).

High Impact Practices

In 2008, George Kuh advanced the notion of *high-impact practices* (HIPs) in higher education. HIPs include first-year seminars and experiences, common intellectual experiences, learning communities, writing-intensive courses, team-based projects and assignments, research, global learning, internships, service- or community-based learning, and capstone courses. However, it is imperative to recognize that these practices can be exercised in a variety of ways.

Like learning outcomes, HIPs are designed to improve student experiences. If not designed correctly, HIPs may not provide the positive expected student outcomes, particularly with international students (Katsumoto & Bowman, 2023). Moreover, HIPs are success markers demonstrated by various career checkpoints. For example, Chamberlin, Newton, and LePine (2018), performed a meta-analysis on various high impact managerial practices to determine whether they improved skills, motivation, and other professional opportunities, further demonstrating the importance of discovering what practices are worth replicating.

This article will focus on two of Kuh's HIPs: Experiential learning and simulations.

Experiential Learning

According to Gavillet (2019), research demonstrated that student learning is highest when students are actively involved in their education. Ludlow (2010) defined experiential learning as an "umbrella concept that includes... hands-on learning activities, including laboratory experiments, kinetic learning activities, professional internships, and course-related fieldwork" (p. 45). In higher education, experiential learning can assume many forms, including (but not limited to) fieldwork (e.g., internships, apprenticeships, clinical experiences, job shadowing, fellowships), classwork (e.g., study abroad, field trips, field trips, problem-based assignments, project-based activities), and service work (e.g., volunteering, donating skills to a bigger cause). Research correlates three critical learning connections. Specifically, Kolb (2014) links experiential learning as the process connecting education, work, and personal development.

Service Learning

Service learning is a form of experiential learning (Finley & Bowen, 2021) that intentionally produces an outcome towards a greater cause. Students actively participate by learning a new skill or building current skills towards an activity for the betterment of society. The three main components of the tenure track are teaching, scholarship, and service. It is a natural progression for instructors to incorporate service into their coursework.

Simulations (Collaborative Assignments and Projects)

Gros (2007) defined simulations as educational tools that provide digitally based scenarios in which students must achieve defined goals. According to Oliver and Herrington (2001), digital

learning provided students with an environment that allowed them to develop skills in self-initiated learning.

Sauvé, Renaud, Kaufman, and Marquis (2007) identified attributes of simulations as: A model of reality defined as a system; a dynamic model; a simplified model; and a model that has fidelity, accuracy and validity. Additionally, they surmised that simulations should directly address learning objectives.

The purpose of a simulated learning model is to expose students to an environment with conditions that require decision-making and feedback that will stimulate learning, putting theoretical concepts into practice. Lyons (2012) provided a comprehensive description of simulated learning environments with key points in the simulated learning process: Student-centered goal setting and activity introduction begin the process. Students engage with case scenarios requiring decision-making and problem-solving. Their responses update the simulation, reflecting real-life consequences and generating feedback that prompts further action and reflection, thus completing the learning loop.

RESEARCH

Service-Learning Research

Moreover, service learning should not be limited to higher education. Lakin and Mahoney (2006) conducted a service-based case study with sixty sixth graders and concluded that service-learning activities were empowering for the students and promoted a sense of community. Celio, Durlak, and Dymnicki (2011) reiterated the importance of service-learning education not only for college students, but also for elementary students as well. They conducted a meta-analysis consisting of 62 studies and nearly 12,000 students, resulting in “significant gains in five outcome areas: attitudes toward self, attitudes towards school and learning, civic engagement, social skills, and academic performance” (p. 164).

Parker-Gwin and Mabry (1998) conducted a service-learning study consisting of three models (placement-service optional, placement-service optional, and consulting group) with 557 college students. Overall, they recommended that instructors allow students the option to participate rather than requiring students to participate. Results demonstrated an improvement in civic attitudes and some students recognized that there were larger longer-term issues to resolve.

Levesque-Bristol and Stanek (2009) conducted research of U.S.-based university students in a service-learning research course, requiring both fifteen hours of service and a manuscript. Students were permitted to select among three community partners to perform their respective projects. Additionally, students were asked to provide their perception of their autonomy within the project. Students were also surveyed twice throughout the semester and completed an Intrinsic Motivation Inventory (Ryan, Koestner, & Deci, 1991). Moreover, “in addition to the increase in students’ levels of motivation, interest toward research, and value of the class, students also reported learning something” (p. 265). As such, the authors concluded parallels between SDT and this service-learning project. Students perceived the environment to be supportive and self-reported an increase in motivation and the value of the service-learning class.

Shin, Kim, Hwang, and Lee (2018) conducted a study of Korean-based university students to understand the effects of intrinsic motivation in a service-learning course. In their research, they concluded “that informative feedback positively affected commitment to purpose and social contribution, especially for students who had low intrinsic motivation. Intrinsic motivation and feedback both positively predicted students’ confidence in purpose. To positively influence students’ life purpose development, these results suggest(ed) the importance of providing college students with intrinsically motivated experiences plus informative feedback that supports their competence during service work” (p. 159). The Ministry of Interior of Korea noted an increase in service-learning courses jumped 12 percent from 1999 to 2008, and the authors noted the lack of service-learning opportunities prior to entering universities because students focus on college entrance.

Levesque-Bristol, Knapp, and Fisher (2010) expanded their research and used service-learning courses as a pedagogical tool to enhance the student learning experience. More than 600 U.S.-based university students participated in the Learning Climate Questionnaire, the Basic Needs Scale assessment, the Civic Skills Scale, and a State Academic Motivation Scale. Their results suggested that “motivation and civic skills can be positively affected” (p. 216) in a service-learning course. Furthermore, there was an indirect correlation between student motivation and external regulation. As student motivation rose over the course of the semester, external regulation decreased. The authors also “found that the autonomy supportiveness of the learning environment was positively associated with the satisfaction of the basic psychological needs of autonomy, competence, and relatedness” (p. 221).

Langlois (2019) conducted research on the Self-Determined Service-Learning (SDSL) framework in a graduate capstone course. To achieve student learning outcomes, a service-learning pedagogy was exercised. It was discovered that the primary drivers of the self-determination theory (i.e., autonomy, competence, and relatedness) “informed student choices (autonomy), opportunities to integrate and master knowledge (competence), and a sense of professional belonging (relatedness) are integral to internalized student self-efficacy (outcomes)” (p. 5).

These studies span the prior three decades demonstrating the impact of service-learning courses. Moreover, these studies examine students from elementary school through college. In each study, including one meta-analysis, positive outcomes were reported. Outcomes include students feeling empowered, an improvement in civic attitudes, motivation, autonomy, competence, relatedness, including self-efficacy.

Future recommendations included a supportive structure that allows students to determine how the project relates to course competencies while examining the broader impact on the community and profession.

Simulation (Collaborative Assignments and Projects) Research

Simulations help students develop a variety of skills and prepare them for the actual world of work. When deployed effectively, simulations have the potential to increase student motivation by fostering the basic needs posited by SDT: Competence, autonomy and relatedness.

In a comparison study of three common business education pedagogies (i.e., case study, lecture, and simulation), Farashahi and Tajeddin (2018) found that graduate business students

perceived simulation as the most effective teaching method for developing interpersonal skills and self-awareness followed by case study and lecture, respectively. Additionally, regarding problem solving skills, they found that simulation and case study were perceived as being similar but more effective than lectures.

Vlachopoulos and Makri (2017) conducted a meta-analysis studying the impact of games and simulations on achieving specific learning objectives in diverse subject areas. They identified three learning outcomes of integrating games and simulations into the learning environment: Cognitive, behavioral, and affective. In mapping the results, they found that games and simulations create supportive environments where students may acquire knowledge across subjects and disciplines. Simulations are perceived as enjoyable, requiring active and collaborative participation and contribute to the improvement of critical thinking and reasoning, higher-order and metacognitive thinking. “Simulations provide students the opportunity to observe the outcomes of their actions, and *take responsibility for decision-making via problem-solving competencies*, thus leading to a more active, transformative and experiential reception of knowledge” (p. 25).

Peterkova, Repaska, and Pracharova (2022) concluded that simulation games play an important role in digital education and in the learning process of university students studying business. They surveyed 148 students on student satisfaction and the usefulness of the Managerial Simulation Game. The research survey showed that the Managerial Simulation Game was beneficial for 117 of the 148 students. Specifically, students found the following factors to be beneficial: Learning to take risks, motivation to compete, and finding out whether they are well-suited to be managers. Their results demonstrated that teaching and learning processes in management courses using business simulations provided complex decision-making experiences and offered an effective and pleasant learning environment.

According to Maute and Melero (2016), simulations have the most positive impact with support from instructors, a high degree of learner motivation, and perceived fun. Their study analyzed learner emotions, individual personality traits and facilitative learning conditions as antecedents to learner attitudes toward the simulation game and present and future behavior. The research demonstrated that positive attitudes toward the simulation may be motivated by perceived usefulness, suggesting that most learners consider the simulation game to have been a useful educational tool and to have enhanced their learning experience. Furthermore, the researchers concluded that the simulation game has motivated learners to adopt a *proactive role* in their own learning processes as related to learner discretion and time constraints (e.g., autonomy). Additionally, their research noted that simulation fostered the development of *teamwork-related* skills (e.g., relatedness).

Vélez and Rico-González (2023) conducted a systematic review of research related to business-simulation games, investigating 329 studies and completing a full assessment of twelve studies. Their goals were to: (1) Analyze the relationship between the use of Business Simulation Games (BSGs) to develop intrinsic motivation and 2) To identify the aspects that could be promoted by the BSGs to develop intrinsic motivation. The review concluded that business simulation games encourage intrinsic motivation, specifically in relation to the three elements of the self-determination theory:

Autonomy: “The BSGs provide all the key information and game instructions to make decisions autonomously, and students can feel that they are in control of the situation experimenting freely” (p. 15).

Competence: “Participants gain new knowledge, and they have a feeling that they know how to do the tasks well, developing the competence required by the company” (p. 15).

Relatedness: “Students have a sensation of being interconnected to each other, communicating or having feedback or discussing within their teams, and they also have interaction with instructors” (p. 15).

The research concluded that well-designed, user-friendly business simulation games that provided feedback, competition, and interaction with other students coupled with the instructor, served as an effective link between theory and practice and raised the intrinsic motivation of students in the classroom.

In summary, simulations in business education enhance student motivation, engagement, and skill development. The above-referenced studies by Farashahi and Tajeddin (2018) and Vlachopoulos and Makri (2017) underscore the effectiveness of simulations in promoting cognitive, behavioral, and affective learning outcomes through active, experiential learning. More recently, Peterkova et al. (2022) found that simulation games support decision-making, risk-taking, and managerial aptitude. Additionally, Maute and Melero (2016) identified instructor support, learner motivation, and enjoyment as key factors influencing positive learner attitudes and autonomy. Finally, Vélez and Rico-González (2023) confirmed that business simulation games enhance intrinsic motivation by fulfilling the psychological needs of autonomy, competence, and relatedness, as outlined in Self-Determination Theory (SDT), thereby bridging theory and practice in an engaging and meaningful way.

LIMITATIONS AND RECOMMENDATIONS FOR FUTURE RESEARCH

One of the limitations and opportunities for future research in this article is the collection of research in higher education. While studies include both domestic and international, future research would benefit by increasing service-learning activities in high school or elementary education and measuring the application of the self-determination theory.

Another limitation is that the service-learning research is based over the course of one semester at a university. It would be interesting to conduct future research on longitudinal studies to see the impact that the service experience has on both students’ intrinsic motivation as well as on related learning outcomes.

Research on the use of simulations in higher education is limited by the lack of uniformity among business simulation games in education overall. Simulation experiences include semester-long experiences and shorter-term experiences that can take place in one or a few class periods. Additionally, simulations may relate to one area of business (leadership or marketing, for example), while other simulations may require multifaceted knowledge of multiple business concepts. Determining student motivation in different types of business simulation games is an area for future research.

CONCLUSION

Business education, with an emphasis on practical skill-building, is uniquely positioned to utilize experiential service learning and simulation experiences to augment curricular learning outcomes by increasing student motivation. The studies reviewed in this paper demonstrate that both service-learning experiences and simulations provide positive and valuable learning experiences for business students. Moreover, as HIPs, these experiences increase student motivation and specifically reinforce autonomy, competence and relatedness as concepts of self-determination theory.

Business programs should consider adding service learning and/or simulations not only for students to develop a variety of skills and become better prepared for the workplace, but also to increase student motivation and engagement in a time when college students report increasing rates of burnout.

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THE IMPACT OF UTILIZING DESIGN THINKING ON TEACHING ENTREPRENEURSHIP

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ABSTRACT

Translating customers' needs and wants into viable products and services is an ongoing challenge for most businesses. The empathic methodology of Design Thinking as a user-centered approach to problem-solving addresses the underlying issue of unearthing hidden customer needs and wants (Baldassarre & Calabretta, 2024; Quasir & Pandey, 2023). The five non-linear steps of Design Thinking (Empathize, Define, Ideate, Prototype, Test) were utilized as a framework for teaching an entrepreneurial mindset within an upper-level, undergraduate marketing course. Students were administered pre- and post-surveys to track the influence of experiencing a semester-long complex problem-solving assignment utilizing Design Thinking.

INTRODUCTION

Despite the long-standing debate over whether entrepreneurship can be effectively taught, there are currently over 3,000 institutions that offer entrepreneurship programs, resulting in the 21st century being referred to as “the century of the entrepreneur” (Baysal & Zeynep, 2024; Tarihi & Tarihi, 2022). Entrepreneurship education (EE) has increased in popularity during the past decade at most business schools as colleges continue to build Centers for Innovation and Creativity, host Innovation Challenges, and add or integrate multi-disciplinary courses that teach innovation, creativity, and entrepreneurship (Bhatia & Levina, 2020).

Considered essential to economic growth, entrepreneurship education has developed into a field of study over the past six decades during which entrepreneurship has been taught in engineering schools, universities, and business schools (Loi & Fayolle, 2022; (Woraphiphat & Roopsuwankun, 2023). One of the ISLOs (intended student learning outcomes) for entrepreneurial education is typically to foster an entrepreneurial mindset in students (Tarihi & Tarihi, 2022). There is not, however, a general consensus on how entrepreneurship should be taught or how to balance theory and practice in entrepreneurship education (Garcia & Cabanas, 2023; Loi & Fayolle, 2022). Current trends in globalization, digitization, and the changing socioeconomic environment signify a movement away from traditional teaching methods and towards self-directed, meaningful student projects (Woraphiphat & Roopsuwankun, 2023).

MKT3510 Entrepreneurship and Opportunity “Design Thinking”

American International College enrolls approximately 350 business students each academic year. All students have the option to minor in entrepreneurship, which includes three courses specifically focused on entrepreneurship: MKT3656 Entrepreneur Financial Management, MKT3550 Entrepreneurship Management, and MKT3510 Entrepreneurship and Opportunity. The intended student learning outcome of developing an entrepreneurial mindset of creativity and innovation was embedded into MKT3510, and the course was nicknamed “Design Thinking.” All majors and disciplines can benefit from an injection of innovation and creativity (Baldassarre, Calabretta, et al., 2024; Quaissr & Pandey, 2023). Therefore, students of any major are eligible to complete a minor in entrepreneurship.

Design Thinking refers to the systematic process for structuring a problem, gathering information, and generating alternatives or solutions (Quaissr & Pandey, 2023). It is a human-centered approach to defining, investigating, and solving complex, ill-structured problems (Baldassarre, Calabretta, et al., 2024; Quaissr & Pandey, 2023).

PURPOSE

Teaching entrepreneurship, creativity, and innovation to college students is inherently challenging, as EE contradicts many of the rational approaches of traditional business school paradigms (Bhatia & Levina, 2020). The steps of Design Thinking (Empathize, Define, Ideate, Prototype, Test) provide a roadmap to teach entrepreneurship and creativity in a classroom environment. The purpose of utilizing Design Thinking to teach entrepreneurship was to increase

the efficacy of the course MKT3510, which is to teach entrepreneurship skills and to develop an entrepreneurial mindset. Entrepreneurial competencies, such as critical thinking, creativity, perseverance, taking initiative and daring to take risks are all practiced and honed during the process of learning how to implement Design Thinking (Pratomo, Siswandari, & Wardani, 2021). Entrepreneurial education helps individuals to develop an entrepreneurial mindset and attitude that is conducive to recognizing and capitalizing on opportunities (Aransyah, Fourqoniah, & Riani, 2023).

The overarching research question is whether or not creativity can be taught. Having strong creative skills is helpful, and possibly necessary, for entrepreneurs to be successful (Baysal & Zeynep, 2024; Tarihi & Tarihi, 2022). The purpose of the study was to investigate whether or not utilizing Design Thinking in the context of teaching MKT3510 had any effect on students' perceptions of themselves as being personally creative and being capable of being creative in a purposeful group setting.

METHODOLOGY

At the beginning of the semester an anonymous questionnaire was given to the students (see Appendix A). Students were each assigned a number and then given the same questionnaire at the end of the semester. The questionnaires were matched up according to their numbers and the answers compared.

Limitations

The limitations of this study were the class size of 14 students and not all students were pursuing a minor in entrepreneurship. There was a wide variation in the degree of seriousness given to the group projects and the idea of entrepreneurship in general. Some steps in the Design Thinking Process that are meant to occur over a continuous period of time (for example, ideally 6-9 hours should be allotted for the Ideate Stage) had to be broken up into blocks to account for the shorter class periods. This resulted in a loss of traction during the brainstorming sessions. It was difficult for some groups to recreate the flow of brainstorming conversation from one class meeting to the next.

Additionally, there was no comparison for teaching MKT3510 without the framework of Design Thinking, as this was the instructor's first time teaching this particular course at AIC.

ANALYSIS AND FINDINGS

The first nine questions ask the student to rate their responses on a Likert scale of 1-5, each question giving further explanation as to what the scale represents (see Table 1). The final question, describe what you think the relationship is between creativity and entrepreneurship, called for an open-ended response.

Table 1

Question	Findings
(1) How much do you prefer working in groups?	Nearly one-third of the students reported an increase in their preference to working in groups, as opposed to working alone.
(2) How much do you prefer working on a structured task?	Slightly more students (21%) prefer less structure to a task, rather than more structure (14%). This may indicate the students became slightly more comfortable tackling a complex problem that had no established starting point.
(3) How creative do you consider yourself to be?	Overall, there was a net increase (+ 5) in how creative students considered themselves to be at the end of the semester compared to the beginning of the semester. The Ideate Stage of Design Thinking requires students to brainstorm unique responses to the “How Might We?” question. Some students mentioned they had never previously participated in a brainstorming session.
(4) How much do you enjoy solving complex problems?	There was a slight increase in how much the students enjoyed solving complex problems (2 students); one student enjoyed solving complex problems less; and the remainder of the students were unchanged. All three groups engaged in semester-long problem-solving activities focused on different topics that were chosen by the students. This question could be influenced by how well they got along with other group members and how well they personally liked the group’s topic.
(5) How important do you consider creativity to be a useful skill in the workplace?	More than one-third of the students (35.7%) increased their perception that creativity is a useful skill in the workplace.
(6) How likely are you to take risks in the context of solving a problem?	Three students (21%) were more inclined to take risks in the context of solving a problem than they were at the beginning of the semester. Two students (14%) were less likely. The remainder of the students were unchanged.

(7) How much do you agree with the idea that creativity can be taught?	Regarding the idea that creativity can be taught, the class was evenly split. Four students agreed more strongly that creativity can be taught; four students disagreed more that creativity can be taught; and six students had the same opinion at the end of the semester as they did at the beginning of the semester.
(8) How strongly do you think creativity and entrepreneur-ship are linked?	Half of the students (50%) agreed that there is a strong link between creativity and entrepreneurship at the end of the semester, an increase from only 14% who agreed with this statement at the beginning of the semester.
(9) How likely are you to start your own business at some point in the future?	Most students were unchanged in their likelihood of starting their own business in the future (11 students). One student was more likely, and one student was less likely. Additionally, one student reported already having started their own business (before the beginning of the semester).
(10) Describe what you think the relationship is between creativity and entrepreneur-ship.	Overall, students recognized that a strong relationship exists between creativity and entrepreneurship, citing creativity as a crucial skill. One student wrote, “The more creative you are, the easier it is to become an entrepreneur.” Students valued creative skills as part of entrepreneurship and identified creativity as the catalyst that drives new business ideas. Furthermore, they believed that creativity is necessary to keep a business going. They acknowledged that new businesses require new ideas, and it is the execution of new ideas that brings about new products and customers. Perhaps the most important outcome was that the students gained a new appreciation for the fact that creativity takes time and can be a process. Great ideas rarely just happen, and they often take a circuitous route from the very first brainstorming session to the final polished idea that finally makes it to market. Students pinpointed the relationships between creativity and innovation, and innovation and entrepreneurial success. A common response from the students was, “Entrepreneurship is often a leap of faith.” Students demonstrated the knowledge that in today’s marketplace, uniqueness is required for businesses to stand out amongst their competitors (unique selling proposition) and that creativity is what helps differentiate businesses and their products in crowded markets.

	Some students did concede that too much creativity can be detrimental if it causes ideas to become too extravagant or too costly, which could bankrupt a small business. The process of applying Design Thinking to a problem is a proven method of producing creative ideas.
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CONCLUSION

The most significant finding was an increase in the perception of the link between creativity and entrepreneurship (an increase from 14% to 50%). Following the steps of Design Thinking allowed the students to experience the connection between preliminary brainstorming sessions and the final, finished product. Systematically following the steps of Design Thinking also allowed the students to experience failure in a safe environment. The ability to accept failure and continue to persevere is part of the growth process for possessing an entrepreneurial mindset (Pratomo, Siswandari, & Wardani, 2021).

Another significant finding was an increase (one-third) in preference for working in groups. This is promising, as the workplace of the future requires more collaboration and teamwork for successful innovation (Heldal, 2023). This may have been influenced by the existing relationships with the other team members (students who they were already friends with); however, not all students knew each other at the beginning of the semester when the groups were assigned.

More than one-third (35.7%) increased their agreement that creativity is a useful skill in the workplace. The students who were the most influenced by participating in the Design Thinking course self-reported significant differences (2 to 5; 1 to 4, for example), which may represent a real change in how they approach creativity, innovation, and entrepreneurship in the future. One-point differences were the most common difference between the pre- and post-surveys, and while they also represent change, they may not be as pronounced.

Overall, the students reported a new or increased appreciation for the time commitment to truly be creative and to allow for enough time with the Design Thinking process to yield quality results. They also learned how the creative process is inherently an iterative process, and eventually they embraced the non-linear approach. Increased creativity skills can be developed when students dig deeper into each other's ideas, are more open to alternative thoughts, and are encouraged to explore other ideas (Pratomo, Siswandari & Wardani, 2021).

The students were frustrated at times when they were having brainstorming meetings, and the group discussions were just beginning to yield productive results, but then class abruptly ended. This happened several times throughout the semester, at least once to each of the three groups, and left the students feeling like they were just about to have a breakthrough but then had to stop and switch gears to go to a different class. One student mentioned that the time constraint of a 50-minute class was interrupting their "flow." Ideally, the steps of Design Thinking are

followed with a timeframe that allows as much time as possible for the brainstorming steps to have run their course of productivity. Teaching Design Thinking within the construct of three 5-minute class periods a week was the major limitation of this study.

Practicing Design Thinking may help students develop entrepreneurial alertness through three dimensions: scanning and search; association and connection; and evaluation and judgment (Pratomo, Siswandari & Wardani, 2021), valued skills in the 21st century workplace.

RECOMMENDATIONS

Utilizing Design Thinking can help instructors feel less intimidated about teaching a course in entrepreneurship because it provides a roadmap for an inherently elusive and non-structured discipline. It can also help students become more comfortable with approaching a non-structured task, because it provides a guideline to create solutions. Design Thinking can be especially useful with students who claim that they are not creative or are reluctant to attempt complex problem solving because they are not sure where to begin the process. Design Thinking is flexible enough to be used in solving a wide range of problems, which makes it a practical approach for many entrepreneurship courses (Aransyah, Fourqoniah, & Riani, 2023).

Training on teaching Design Thinking is available at many colleges, including Babson College, located in Wellesley, MA, the top-rated school for entrepreneurship education. Learning the steps of Design Thinking and then applying Design Thinking to solve a non-structured problem first, without the pressure of teaching students, is an effective way to learn how to become comfortable with the ambiguous parts of the process. Having the experience of struggling with each stage concerning a low-stakes problem will make it easier to effectively teach Design Thinking within the cadence of a semester.

SUMMARY

While teaching entrepreneurship can be a daunting task, as it is an inherently elusive and non-structured curricula, the framework of Design Thinking can help the instructor teach an entrepreneurial mindset more effectively. Following the steps of Design Thinking can help give students more confidence in trying to solve complex problems and learn how to be creative alone and within the context of a group. Creativity and entrepreneurship skills (problem solving, collaboration, empathy, and the ability to accept failure) can be learned and strengthened by experiencing Design Thinking and are a skillset that is valued by contemporary employers (Pratomo, Siswandari & Wardani, 2021). Entrepreneurship education (EE) is crucial to building a sustainable economy and society as it teaches how to identify opportunities and unmet needs in the marketplace and solve those needs by offering solutions (Aransyah, Fourqoniah, & Riani, 2023).

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APPENDIX A

MKT3510 Design Thinking Pre-Course Survey

Thank you for participating in this survey. Your answers will be kept anonymous and used in future research on the efficacy of teaching entrepreneurship and design thinking. You can write on the back of this sheet if you need more room for Question #10.

1. On a scale of 1-5, rate how much you prefer working in groups, 5 = very much prefer working in a group; 1 = prefer to always work alone
2. On a scale of 1-5, rate how much you prefer working on a structured task, 5 = I like the task to be very structured; 1 = I like the task to be non-structured
3. On a scale of 1-5, rate how creative you consider yourself to be, 5 = I am very creative; 1 = I do not consider myself to be a creative person
4. On a scale of 1-5, rate how much you enjoy solving complex problems, 5 = I enjoy solving complex problems; 1 = I never enjoy solving complex problems
5. On a scale of 1-5, rate how important you consider creativity to be a useful skill in the workplace, 5 = I consider creativity to be a very useful skill in the workplace; 1 = I do not think creativity is a useful skill in the workplace
6. On a scale of 1-5, rate yourself on how likely you are to take risks in the context of trying to solve a problem, 5 = I take risks all the time while trying to solve a problem; 1 = I never take risks when I'm trying to solve a problem
7. On a scale of 1-5, how much do you agree with the idea that creativity can be taught, 5 = I strongly agree that creativity can be taught; 1 = I think creativity cannot be taught (you are either creative or you're not)
8. On a scale of 1-5, how strongly do you think creativity and entrepreneurship are linked? 5 = Creativity and entrepreneurship are very strongly linked together; 1 = creativity has nothing to do with entrepreneurship
9. On a scale of 1-5, how likely are you to start your own business at some point in the future? 5 = I'm very likely to start my own business in the future; 1 = I'm not at all likely to start my own business in the future
10. Describe what you think the relationship is between creativity and entrepreneurship.

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