

Developing Responsible Business Leaders: Engaging PRME Community Members in Creative
and Playful Pedagogies for Sustainable Development

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Responsible business leaders are undeniably the most important catalysts in creating a sustainable world. In the wake of a global pandemic, economic crises, rising inequalities, and environmental disasters, it has become increasingly clear that leaders with holistic skill sets are desperately needed to fill the sustainability skills gap in the workforce. Traditional business and management education prioritized an instrumental and cognitive approach but failed to educate managers in sustainability skills. Based on an extensive theoretical review, this study shows that the development of a holistic skill set for business school students is needed to develop the next generation of responsible business leaders. The paper provides the introduction and analysis of an impactful pedagogical approach—the Impactful Five (i5) Pedagogy—based on social, meaningful, joyful, iterative, and actively engaging methods. Finally, the paper suggests how impactful pedagogy can be applied throughout the educational environment in higher education institutions (HEIs).

Introduction

The biggest issues of our time continue to multiply each year. Rising inequalities, economic crises, and environmental disasters have become commonplace in our society. The business leaders of tomorrow must play an important role in tackling these global sustainability challenges (Haertle *et al.*, 2017). Business schools are in a unique position to influence the mindsets and actions of some of the most powerful organizations and leaders on the planet (Parkes, Buono and Howaidy, 2017). However, Harvard Professor Khurana (2010) pointed out that business schools have failed to educate managers in support of societal betterment because they have prioritized an instrumental and cognitive approach. This reduces future managers to ‘mere craftsmen’ with limited skill sets where the definition of ‘corporate success’ is maximum short-term economic profit for the company and the best possible salary for the manager (Nohria and Khurana, 2010). Thus, business school students are not educated to practice the breadth of skills that is so urgently needed to address the challenges of the 21st century.

Today, more organizations and schools have committed to responsible management education (RME) through teaching, researching, and practicing responsible management. Principles for Responsible Management Education (PRME) was founded in 2007 at the UN Global Compact Leaders Summit in Geneva, Switzerland to lead the push in prioritizing responsibility in the decision-making of business leaders (Parkes, Buono and Howaidy, 2017). To date, PRME has become the largest bridge between management higher education institutions (HEIs) and the United Nations (PRME, 2023). Collaborating with business schools through different workstreams, including PRME Champion schools, chapter development, SDGs-focused working groups, and PRME Global Students (PGS), PRME enhances the sustainability profile of business schools individually, institutionally, and collectively as a community and inspires responsible management education globally (Escudero and Alcaraz, 2010; Parkes, Buono and Howaidy, 2017). Aware of the restrictions of traditional pedagogy in business and management education, PRME addresses the four main strategies which support business schools in developing students’ holistic skills, including curriculum change, skillset development, practical relevance, and global impact (PRME, 2023).

Building on the PRME community’s practice of RME and The LEGO Foundation’s research on playful learning, synergies between the work were identified and developed into a new strategy to advance sustainable and responsible business practices. The foundation for the Impactful Five (i5) Pedagogy is based on The LEGO Foundation’s (2021) core research on five skills of holistic development that students need to thrive in today’s complex world, including cognitive skills, creative skills, physical skills, social skills, and emotional skills. Through play research, The LEGO Foundation was able to identify several key findings that summarize the importance of learning through play at every level.

Play helps learners to have positive experiences which allow them to develop their social, emotional, cognitive, and physical abilities. Play can be used as a learning tool in (a) early childhood development, when neuroscience arose for responsive and rich social growth; (b) by connecting play and education so that students can apply and build from their knowledge-based traditional lessons; and (c) throughout lifelong learning where play can be used as sensemaking to respond and adapt to challenges around them (Zosh, et. al., 2018). Research from The LEGO

Foundation demonstrates the power of play across many ages, styles of learning, types of engagement, and context of learners.

Introducing play at schools has shown great advantages to the learner experiences, but it is not without its challenges. To increase the usability of play in teaching, a number of key approaches to teaching play are noted in the research. Play creates an “agentic learning context” creating an optimized environment for knowledge sharing and skills development within childhood, youth, and adulthood (Zosh et. al., 2018). The five characteristics that best help students learn were identified as: actively engaging, meaningful, socially interactive, iterative, and joyful (Wright, Hirsh-Pasek and Thomsen, 2022) learning. By applying these characteristics to learners of any age, learners are able to apply sensemaking, engage critically, and develop real world skills.

After adopting the LEGO Foundation’s playful learning research and developing creative pedagogy in the context of business and management education, PRME has rolled out piloting initiatives including geographically represented pilot members from PRME Chapters, issues-experts from PRME Working Groups and student representatives, and institutional engagement through PRME Champions. Through these pilots, PRME has evidenced the relevance of the LEGO Foundation research in the adult learning context of business school education. As more educators institute this pedagogy into practice through successful pilots, PRME has received feedback of positive changes in individual classrooms and at the institutional level across the globe. As one of the early adopters in a PRME signatory school said, “this creative and playful pedagogy is game-changing in business schools.” By starting to implement these tools, business schools can foster creative and playful learning.

This paper seeks to build from the findings of The LEGO Foundation framework, adjusting the language to suit a business school context; and share pedagogy and praxis that has been introduced through the piloting phase of the project. While this paper aims to maintain a theoretical framework, it does hope to introduce an action research driven approach to understanding the Impactful Five (i5) Pedagogy in practice.

Further, this paper will explore the skill gaps that exist in business and management education today, review the root reasons behind the skills gap, and present innovative pedagogy to contribute to business school students’ holistic skill set development. The rest of the paper is structured as follows: Section 2 briefly reviews the skills gap in business schools today and presents the root reasons behind it through the literature review. Section 3 presents and analyzes how creative and playful pedagogy contributes to the responsible leadership development of business school students. Section 4 discusses the role of creative and playful pedagogy in training responsible future leaders in an age of uncertainty. Section 5 provides implications and recommends practices with a focus on how to implement and develop i5 pedagogy in the classroom. Finally, Section 6 concludes and advances the theoretical insights in the context of responsible and management education.

Literature Review

The skill set gap in business schools today

Despite contents including corporate social responsibility and business ethics incorporated into the curricula of business and management education, graduates often enter the workforce with inefficient skills to practice sustainable and responsible business. Before the pandemic, the International Commission on Financing Global Education Opportunity stated that more than half of the young people and children around the world would not have the skills necessary to contribute to our global workforce, a statistic of nearly 825 million youth (The International Commission on Financing Global Education Opportunity, no date). The LinkedIn Green Jobs report highlighted that green jobs grew at a rate of 8 percent over the last five years while the talent pool grew at only 6 percent (Microsoft, 2022). This gap is causing a need for far more talent with sustainability skills than is currently being trained, and CEOs around the world are taking notice. In 2022, the top global challenge for businesses was talent scarcity according to 96 percent of CEOs surveyed with 91 percent pointing to a lack of sustainability talent (United Nations Global Compact, 2023). More than ever before, the workforce needs quality sustainability skills training to ensure businesses are equipped to handle today's challenges. Members of the workforce are being called upon to sharpen "sustainability skills:" skills and competencies which include systems thinking, futures thinking, circular thinking, design thinking, sustainability science, digital skills, transdisciplinary, and change management (Microsoft, 2022).

Business schools are the key to educating responsible managers. However, education systems struggle to equip students with the skills and knowledge that are needed to address the global challenges of today (The LEGO Foundation, 2021). It is necessary to intentionally reflect on how we can best educate responsible leaders of tomorrow (Lozano, 2012). Haertle and other scholars pointed out that a new vision is needed for business schools to meet the changing demands of the decades to come (Haertle *et al.*, 2017). They further highlighted the failure of traditional approaches to preparing graduates to respond to the demands of a more sustainable way to manage companies. Scholars argue that business schools have perpetuated a flawed focus on growth, profit, and greed, which is seen as the root cause of the financial crash (Haertle *et al.*, 2017).

Besides the criticism of the growth-focused value in management and business education, scholars also highlighted the issues in current pedagogy, such as the focus on discipline and lack of connection to the real world. Tracing back to the establishment of business schools, Mcgrath argued that legitimacy comes at a price (Mcgrath, 2007). Many business schools preferred hiring young faculty with backgrounds in disciplines, rather than practical experience in the management field, meanwhile encouraging faculty to get promoted through publishing articles in prestigious journals (Mcgrath, 2007). The highly discipline-focused education system led many business schools to replace or abandon the generalized practice of management for a discipline-minded approach (Mintzberg, 20024, cited in Kelley and Nahser, 2014). The profound impact is that business school students are trained to work on theoretical and conceptual problems, which are often not applicable to real-world situations (Kelley and Nahser, 2014; Allen, Cunliffe and Easterby-Smith, 2019). Despite the growing interest in sustainability in

business schools, many see sustainability as a separate topic that is not pressing for a career after graduation (Weybrecht, 2015). Furthermore, the lack of multidisciplinary thinking hinders students' ability to tackle complex sustainability problems, such as climate change and sustainable development. After a careful review of traditional approaches to teaching in business schools, a more impactful and innovative pedagogy is needed to empower students' holistic skill set development.

The need for holistic skill set development

Although today's challenges demand that business leaders employ a breadth of holistic skills, this multidimensional skill set remains largely underdeveloped by business schools. The need to fill the gap in education with sustainability skills has been noted in research (Beddewela *et al.*, 2017; Brundiers *et al.*, 2021) and in business school education for sustainable development (PRME, 2023).

Studies continue to identify the competencies business schools need to develop. Leadership development is a key theme in the literature (Waldman, Siegel, and Javidan, 2006, cited in Storey, Killian and O'Regan, 2017). Leadership development strengthens an organization's ethical decision-making. Additionally, the need for a multidisciplinary skill set is addressed in several studies (Van Der Vegt and Bunderson, 2005; Aspling, 2013; Terjesen and Politis, 2015; Annan-Diab and Molinari, 2017). Terjesen and Politis argued in their research that the world's problems require a multidisciplinary skill set, which combines different disciplines into a topic (Terjesen and Politis, 2015). They further pointed out that focusing on one discipline disconnects research from real-life problems, and thereby has little lasting impact on management practice (Terjesen and Politis, 2015).

Recently, a shift in education systems has been seen toward holistic skill set development beyond traditional disciplines. What skills do business leaders of tomorrow need to tackle global sustainability issues? The Brookings Institution did an initial scan of 102 countries to understand what skills were deemed important for students to acquire (Care, Anderson and Kim, 2016). Their research shows that most countries acknowledge the importance of a breadth of skills. Communication, creativity, critical thinking, and problem-solving are the 21st-century skills most frequently identified by countries. These holistic skills were also addressed by UNESCO in 2016 as "transversal competencies," which need to be deliberately taught in schools, with teachers as the key (UNESCO, 2016).

Zooming into business and management education, a similar need for a holistic skill set development is identified in the Future of Jobs Report published by the World Economic Forum in 2020 (World Economic Forum, 2020). The report indicates that skill gaps continue to be a high priority in the next five years, and the top skills which employers see as rising in importance are critical thinking and analysis, problem-solving, and skills in self-management, such as active learning, resilience, stress tolerance, and flexibility. Furthermore, OECD specifically highlighted the importance of creativity and critical thinking in the labor market with the development of artificial intelligence and robotics today (Vincent-Lancrin *et al.*, 2019). As The LEGO Foundation (2021) correctly pointed out, focusing on how students learn, not just what they learn, is key to closing the skills gap. Furthermore, because the human and natural environment

is changing every day, security comes from the method that keeps generating, improving, and preparing students for complex challenges (Kelley and Nahser, 2014). Consequently, an innovative pedagogy that prioritizes developing students' holistic skills rather than focusing knowledge in one discipline is urgently needed in business schools.

The i5 Pedagogy

How to successfully catalyze student learning is fundamental to education. Social norms, purposes, and standards defined by the society guide teaching practices (Wenger, 1998). In order to develop a holistic learning experience, the development of transferable skills, knowledge, and attitudes through innovative teaching methods and pedagogical approaches is key. Pedagogical methods for developing responsible leaders must cultivate and nurture a range of ethical, cultural, and systems-oriented competencies (Gosling and Grodecki, 2020; Laasch *et al.*, 2020; Muff *et al.*, 2022). Self-awareness of values, collaborative envisioning, and complex reasoning are among a few characteristics of responsible leadership that students need to learn in order to develop holistic skill sets. Developing such competencies form the purpose of this pedagogical method.

The i5 pedagogy drew inspiration from the LEGO Foundation's long-standing research on playful learning. Children are born to learn through play. Furthermore, play offers a supportive and rich context for learning throughout life. Coping and thriving in a fast-changing society may require today's students to prioritize different skills. Playful and creative pedagogy is more than ever becoming an effective approach for students to not only enjoy their life but also acquire the holistic skill set needed for the future (Zosh *et al.*, 2017). The LEGO Foundation proposed a multidimensional definition of play that puts play into a spectrum from free play, guided play, games, to direct instruction (Zosh *et al.*, 2018). Regardless of the type of playful experience, research found that the optimal learning happens when a playful activity has the five major characteristics: joyful, meaningful, actively engaging, iterative, and socially interactive (Zosh *et al.*, 2017).

Building upon reviews of playful learning research (Lui *et al.*, 2017; Zosh *et al.*, 2017), this paper translates i5 pedagogy in the business and management education context, and applies the five playful learning characteristics, including joyful, meaningful, actively engaging, iterative, and socially interactive, into signature moves that educators can use to apply and develop responsible leadership in HEI classrooms.

Impactful Five Pedagogy Five Methods and Signature Moves

Key Characteristics:

1. Foster Joy and Well-being
2. Make Learning Meaningful
3. Facilitate Active Engagement
4. Design for Iteration
5. Develop Supportive Social Interaction

Signature Moves to apply the characteristic:

1. Foster Joy and Well-being
 - 1.1. Rippling
 - 1.2. Contemplating
 - 1.3. Sensing
 - 1.4. Delighting
2. Make Learning Meaningful
 - 2.1. Role Modeling
 - 2.2. Personalizing
 - 2.3. Surfacing
 - 2.4. Sustaining
3. Facilitate Active Engagement
 - 3.1. Animating
 - 3.2. Linking
 - 3.3. Teaching
 - 3.4. Authenticating
4. Design for Iteration
 - 4.1. Messing
 - 4.2. Revisiting
 - 4.3. Prototyping
 - 4.4. Compassing
5. Develop Supportive Social Interaction
 - 5.1. Braving
 - 5.2. Bridging
 - 5.3. Teaming
 - 5.4. Communifying

Source: PRME Impactful Five i5 Project Playbook

Each characteristic contributes to a holistic skill set development and a multidisciplinary approach to education that must be broken down by noting the significance of the individual methods. The following sections will further develop the relevance of each competence beyond its initial framing in The LEGO Foundation research. Reference to adult learning and the PRME community should be considered in the following theoretical framings.

Foster Joy and Well-being

Learning involves moments in which students experience positive emotions such as delight, enjoyment, and satisfaction during their studies. Feeling joy can stem from pride in one's achievement, the excitement of a novel experience, or the enthusiasm for working with peers. By incorporating more holistic teaching methods in the classroom, students can experience more instances of joy, which is utilized in promoting the mental and physical well-being of students.

Positive emotional states have important roles in human development and learning. States of happiness and fulfillment serve as a basis for several cognitive processes such as motivation, attention, long-term memory, and sustained mental engagement (Damascio, 2000; Ryan & Deci, 2000; Seligman & Csikszentmihaly, 2000). According to the LEGO Foundation's research, 90 percent of parents say play helps their kids develop vital life skills, including creativity, communication, problem-solving, and confidence (The LEGO Foundation, 2022). Developing positive reinforcement within and with others is a critical component of responsible leadership. As organizational scholar de Vries (2001) emphasizes, experiencing joy is an essential dimension of both organizational and individual mental health. Further, Ghoshal (2005) asserts that one of the reasons businesses have performed so immorally in the past is that business education has traditionally reduced business to simplistic models of inputs and outputs, largely ignoring mental phenomena—like ethical reasoning and morality—or the intricacies of human interaction. Business classrooms that bypass critical reflection of self, others, and systems risk developing individuals who lack the sensitivity to challenge the status quo, thereby perpetuating irresponsible leadership practices. Taken together, a range of research suggests that positive and joyful experiences are core elements that promote effective learning and responsible leadership.

When thinking about how joy can manifest in the classroom, the i5 pedagogy outlines four moves educators can apply when working with students: rippling, contemplating, sensing, and delighting. These words are meant to delve deeper into how fostering joy can manifest in a classroom and explain ways educators can engage with this principle.

Signature Teaching Moves of Foster Joy & Well-being

Foster Joy and Well-being

1. Rippling
Explanation: Understanding an individual's role in the larger system
2. Contemplating
Explanation: Guiding students in reflection
3. Sensing
Explanation: Allowing space for students to navigate emotions
4. Delighting
Explanation: Incorporating fun into the teaching and learning experience

Source: PRME Impactful Five (i5) Project Playbook

Make Learning Meaningful

Making learning meaningful requires providing space to emphasize existing student knowledge and experiences. Meaningful experiences stem from incorporating an individual's values and interests into new concepts and lessons. Decades of research by scholars in psychology and cognitive science suggest that meaningful experiences are fundamental to human learning and development. Studies in adult development reveal that how adults engage in interpreting and reinterpreting meaning is a crucial skill in lifelong learning (Kegan, 1982; Mezirow, 1990).

Throughout life, new experiences allow for opportunities to reflect on assumptions, values, biases, and beliefs that can foster meaningful conclusions.

Responsible leadership hinges upon meaning. Several literature reviews reveal that critical self-awareness of one's attitudes, values, and areas of personal growth are cornerstone competencies of responsible leadership (Gosling & Grodecki, 2020; Laasch *et al.*, 2020; Muff *et al.*, 2022). Focusing on making learning meaningful aims to develop responsible leadership competencies such as self-awareness, introspection, values clarification, fostering investment and motivation, moral and ethical reasoning, lifelong learning, and critical reflection on assumptions, beliefs and biases. In addition, studies by Klein (1997, 1998, 2009) reveal how leaders connect past experiences and scenarios to real time data in order to effectively diagnose situations and evaluate appropriate strategies. Meaningful experiences form bedrock opportunities for the critical reflection and ethical sense-making in responsible leadership. As suggested by Allen, Cunliffe, and Easterby-Smith (2019), teachers can incorporate sustainability in management education by encouraging students to challenge assumptions underpinning sustainability and to engage in debate around the 'sustainability paradox.'

Meaning is fundamental to sustaining learning. By exhibiting role-modeling, personalization, surfacing, and sustainability, educators will be equipped with explanations for meaning in the classroom and be able to promote the longevity of responsible management education for students.

Signature Teaching Moves of Making Learning Meaningful

Making Learning Meaningful

1. Role-Modeling
Explanation: Demonstrating responsible leadership to students
2. Personalizing
Explanation: Giving students agency to design their learning
3. Surfacing
Explanation: Uncovering the norms and biases that exist
4. Sustaining
Explanation: Supporting the individual identities of students

Source: PRME Impactful Five (i5) Project Playbook

Facilitate Active Engagement

Facilitating active engagement means making the classroom a place that allows for student participation and expression. Decades of research in psychology and cognitive sciences reinforce the positive effects of active engagement in human development and learning. Research in higher educational settings suggests that opportunities to develop and demonstrate empowerment lead to increases in student learning outcomes across a variety of disciplines (Freeman *et al.*, 2014; Munna & Kalam, 2021; Yannier, 2021).

Today's business challenges leave little room for leaders to be inattentive, distracted, or apathetic. Responsible leaders need culturally appropriate skills of focus, assertiveness, and the ability to negotiate distractions (Hennig & Schiller, 2021; Ma & Tsui, 2015). Shifting entrenched dynamics may require envisioning futures that could emerge but do not yet exist (Scharmer, 2007). Such speculation is challenging in many turbulent workplaces, driven by the rapid production of knowledge, new technologies, globalization, and the competition for the attention of all stakeholders (Uhl-Bien and Arena, 2007; Allen *et al.*, 2022).

Siqueira and Ramos pointed out that active engagement prepares responsible future leaders by engaging students in pursuit of social or sustainability goals (Siqueira and Ramos, 2014). Awaysheh and Bonfiglio used the experiential learning case in an MBA program to illustrate that active engagement with reality helps students transfer the acquired theoretical knowledge into actionable knowledge, breaking out of a functional silo (Awaysheh and Bonfiglio, 2017). A similar study shows that proactive pedagogy practices, such as in-class experiential learning of corporate social responsibility (CSR), increased students' engagement and led students to understand how the course could apply to their future development (Burga, Leblanc and Rezanian, 2017).

Looking to the future, effective leadership will continue to call for high levels of active engagement in the physical and virtual worlds (Allen *et al.*, 2022). In business and business education, attention, contemplation, and communication are increasingly mediated through various software, digital media, and online collaborative platforms (Guthrie & Callahan, 2016). Being able to take action and maneuver these new challenges and advancing technologies is an essential skill set.

To successfully establish an action-oriented approach to developing students' holistic skill sets, four applications are recommended. Action requires animating, authenticating, linking, and teching to keep up with an ever changing world. Explanations of why these actions can develop strong leaders will start the multidisciplinary conversations.

Signature Teaching Moves of Facilitate Active Engagement

Facilitate Action Engagement

1. Animating
Explanation: Utilizing activities that energize and focus students' attention
2. Authenticating
Explanation: Highlighting student experiences that are relevant to their current realities
3. Linking
Explanation: Building connections between students and industry leaders
4. Teching
Explanation: Implementing digital tools

Design for Iteration

To design for iteration means to engage in learning cycles: trialing concepts, making mistakes, giving and receiving feedback, and revising the initial concept. Iterative learning experiences involve trying out skills, practices, and ideas. They offer learners of leadership important moments to explore and experiment, adapting their hypotheses and theories to fit new discoveries.

Iterative learning experiences involve cycles of trying out skills, practices and ideas. The ability to iterate, including making mistakes, getting feedback, learning from mistakes, and revision is crucial in responsible leadership. As former Dean of Harvard Business School Nitan Nohria (2019) notes, “Today’s business school students who don’t identify and correct what they are doing wrong are tomorrow’s chief executives making the same mistakes with a large C company.” When facing complex challenges, leadership roles require adaptive responses such as probing, sensing, and experimenting with others over time (Snowden and Rancati, 2021). Many contemporary challenges are interconnected and complex, making it difficult to clearly define and understand before moving into problem-solving mode (Dreier, *et al.*, 2019; Heifetz, 1994). Iteration invites testing provisional theories in ways that minimize biases and uncover potential flaws in thinking (Luca & Bazerman, 2020). Leaders enable cognitive flexibility with others by creating practices that support groups to successfully navigate uncertainty such as phased planning, just-in-time feedback, and rapid prototyping (De Meyer *et al.*, 2002). Such approaches to leadership often involve improvisation in real time as leaders closely read and react to unfolding situations (Vera & Crossan, 2005, 2009). The skills and mindsets to iterate are essential elements in contemporary responsible leadership.

Learning requires cycles of iteration to grow and develop. By messing, revisiting, prototyping, and compassing, students are able to expand their world view and learn in innovative ways. These moves allow educators to instill the values of iteration that can then be applied to real world problems.

Signature Teaching Moves of Design for Iteration

Design for Iteration

1. Messing
Explanation: Designing open-ended learning experiences to experiment
2. Revisiting
Explanation: Analyzing previous thinking to reveal the progression of understanding
3. Prototyping
Explanation: Embedding cycles into assignments and learning experiences
4. Compassing
Explanation: Focusing on the learning journey rather than testing

Develop Supportive Social Interaction

One of the most powerful forces in a classroom is the people – the connections they can make, the ways they offer support and empathy, and the eureka and aha moments that arrive through their exchange. Learning is a social activity done in fields of practice in which we observe, communicate, and act with others. Developing supportive social interactions means providing opportunities in which learners can gather, observe, listen, think, communicate, negotiate, and engage with others with different perspectives, practices, and cultures. By interacting with those from different backgrounds, learners are given the space to develop a deeper conceptual understanding and foster stronger relationships.

In a globalized world, responsible leadership fundamentally depends on quality social interactions and understanding. When facing complex and systemic challenges, effective problem-framing and problem-solving hinges on collaborative processes that demand cross-cultural competencies (Dugan & Komives, 2007; Guthrie & Callahan, 2016). Research suggests that successful leaders are attuned to implicit cultural values and skillful at understanding multiple, competing perspectives (Brandenburger and Nalebuff, 1997; Maldonado *et al.*, 2018; Maldonado & Vera, 2014). They engage various stakeholders early on to understand the experienced issue, identify potential solutions, and explore how actions might influence the system (Dreier *et al.*, 2019; Foster-Fishman & Watson, 2017; Kim, 2001; Seelos, 2020). Senge, Hamilton, and Kania (2015, p. 31) noted that effective leaders create a space for people to share their problems, exchange ideas, reflect and explore solutions, and change through this process over time. Fundamental to this approach is understanding, building, and sustaining the networks of social interactions that will support learning and change (Centola, 2021; Centola & Macy, 2007).

In an increasingly digital world, instilling supportive social interactions in the classroom is vital. This pedagogy provides four means for educators to explain the value of social interactions through communifying, braving, bridging, and teaming to students. Students that develop fundamental social skills become leaders that prioritize them in businesses.

Signature Teaching Moves of Develop Supportive Social Interaction

Design for Develop Supportive Social Interaction

1. Communifying
Explanation: Establishing a community of learning for engagement
2. Braving
Explanation: Engaging in difficult conversations
3. Bridging
Explanation: Cross-cultural connections and dialogues
4. Teaming

Explanation: Group interactions to develop communication and interpersonal skills

Source: PRME Impactful Five (i5) Project Playbook

Discussion

This paper aimed at demonstrating the importance of holistic skill set development to tackle education for sustainable development, as argued by several authors (Aspling, 2013; Siqueira and Ramos, 2014; Beddewela *et al.*, 2017; Brundiers *et al.*, 2021). It goes further to introduce a playful and creative pedagogy to advance RME in business schools.

Business schools have taken a crucial role in educating the business leaders of tomorrow for nearly one hundred years. During the past one hundred years, the world has gone through dramatic changes from rapid economic development to detrimental challenges to global sustainable development. Aspling (2003) pointed out that the real world is interconnected between people, organizations, nations, regions, and the natural environment. Business schools are an essential part of this deeply connected network. Criticism has long existed around discipline-based education in business schools and the lack of relevance to real-world practice (Mcgrath, 2007). In facing interconnected and urgent sustainability issues, such as poverty and climate change, the globalization of the world urges the transformation of business and management education from a focus on growth and profit to responsibility and sustainability. Thus, an innovative teaching method in business schools is needed.

This paper explored a creative and playful pedagogy – the Impactful Five (i5) Pedagogy– and its role in addressing the skill set development of business school students. By incorporating the five characteristics–fostering joy and well-being, making learning meaningful, facilitating active engagement, designing for iteration, and developing supportive social interaction–into different disciplines in business and management education, it doesn't change what students learn; it changes how students learn. Finally, it strives to equip them with a holistic skill set that is needed in the real world to tackle global sustainability issues.

Besides equipping business school students with a holistic skill set at the individual level, i5 pedagogy contributes to building a connection between business schools, home, community, society, and nature. The interconnectedness is embedded in i5 pedagogy, as the Director of Teaching and Learning at Portland Children's Museum, Susan Mackay, highlights that learning through play connects students' life and the wider world (Zosh *et al.*, 2017). In the context of HEIs, i5 pedagogy practices inspire students to explore, reflect, connect themselves with community and beyond, which may trigger students' learning ecosystem to shift towards a more interconnected world.

The i5 pedagogy helps to address the challenges business schools are facing by closing the sustainability skills gap. This creative and playful positioning for a pedagogy is relatively novel for a business school curriculum, of course with outliers in the gamification, case study, and action research space. The ambition of the project suggests a systems thinking, future-oriented approach that collects inputs from the PRME community members to create novel and engaging praxis, through pedagogical contemplation and connection as a few business schools have started

to instill the pedagogies of the i5 project. Building on the theoretical framework discussed in this paper, future studies could focus on monitoring and evaluating the impact of this pedagogy in business and management education. Further research and practice are encouraged to advance the pedagogy transformation in business schools locally and globally in order to train responsible future leaders in an age of uncertainty.

Implication

Implementing the Impactful Five (i5) Pedagogy's characteristics in business and management education will not replace current curriculum structures. Instead, the i5 project seeks to augment existing curricula or challenge educators to consider how they can cultivate responsible leadership and prioritize RME. PRME has long sought to link the work of the United Nations and management HEIs to nurture a community focused on connection and collaboration. The i5 pedagogy has the transformative potential to unite educators on a shared journey towards education for sustainable development in business schools. Business education for sustainable development can be introduced, reconsidered or revitalized in classroom curricula, project planning, and assessment modality (Storey *et. al.*, 2019). Pedagogy and content need to mutually reinforce each other in order to best support the knowledge, skills and mindsets of responsible leadership (Hermes & Rimanoczy, 2018; Ivanova & Rimanoczy, 2021; Rimanoczy, 2020). The i5 pedagogy builds on these foundations of responsibility and respects the unique ecosystem of the classroom. It also provides the flexibility to adapt these characteristics to meet the specific needs of students, institutions, and communities. This work has the potential to encourage educators to prioritize pedagogical approaches in transforming their classrooms to be spaces of growth and transformation for future responsible innovative leaders.

Drawing on lessons from more than fifty business schools' practice and experience with this pedagogical approach in the past year, PRME provides some recommendations for educators before they begin the journey. While the target group of change is educators in business and management HEIs, the group that ultimately benefits is business school students (ages 18-28). This age range is a key consideration when thinking about how to adapt these playful characteristics, and how to consider the sensemaking process and experiences that these students bring to the classroom.

Reflection is a fundamental first step. Beginning in small manageable ways is often a smarter way to begin and maintain momentum. This has been noted in pilot contributions where educators shared instances where one or more of the characteristics were already present in their classroom. By identifying the starting point for one's own pedagogy and praxis, educators can build from a familiar space and subject to develop deeper engagement with themes of meaning, joy, active engagement, social inclusion, and iteration. Beyond these i5 characteristics, educators can reflect upon their own process and context to further develop the holistic skill set of their students.

The process of sensemaking for students and educators alike reinforces the process of learning that comes with the i5 project engagement. All engaged stakeholders have the opportunity to coalesce around the challenge of infusing meaning, joy, and these "soft skills" into their values. While there will be no 'one size fits all' method for engagement, the i5 itself creates a puzzle for

each individual to solve and a moment of collective engagement on this common puzzle. The i5 process allows educators to articulate a new way for considering responsible management education in their classroom, and the challenges of sustainable development more broadly. Reconsidering the issues of sustainability through the lens of play may allow teachers and students alike to conceptualize the grand challenges of today in new ways, with creativity and problem-solving at the heart of the discussion.

The long-term sustainability of the methodology will provide a new avenue for different types of pedagogical approaches to become globally scalable. By building from the foundation and praxis of the five characteristics, engagement and connection of i5 interventions are possible. The world is demanding that education adapts. Students are demanding a change to traditional learning structures. Educators are demanding meaningful engagement and connection. PRME seeks to meet these demands by filling the gap, and the i5 pedagogy makes the changes necessary accessible.

Conclusion

The Impactful Five (i5) Pedagogy is being piloted in the PRME community as an innovative solution to address RME challenges, disciplinary shortcomings, and global crises through educational development. The i5 pedagogy is directly geared towards achieving sustainable development globally. To prepare students to be the effective leaders the world needs, this approach imagines business educators at all levels and in all subjects engaged in innovative pedagogical approaches—using five holistic, student-centered, action-oriented methods for developing responsible leaders. This paper seeks to shed light on how a pedagogical approach based on social, meaningful, joyful, iterative, and actively engaging methods can generate leaders, who are innovative, and curious, and ultimately share a goal of achieving positive systemic impact and long-term prosperity for the world. Business as usual isn't able to tackle the new challenges of the 21st century. To truly achieve disruptive sustainability, the next generation of leaders and managers must be equipped with holistic skills that will fill the sustainability gap and educators willing to prioritize these playful and creative pedagogies.

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