



Ful-Ful Approach: Becoming a Mindful, Meaningful, and Joyful Learner Through Deep Learning

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Abstract: *This research explores the concept of the Ful-Ful approach in deep learning, which integrates three key elements: Mindful Learning, Meaningful Learning, and Joyful Learning. The study aims to systematically review existing literature from the past five years to understand the contribution of these elements in enhancing deep learning processes. The Systematic Literature Review methodology is employed to identify, evaluate, and synthesize relevant studies. The findings highlight that Mindful Learning promotes focused attention and emotional regulation, while Meaningful Learning fosters deeper engagement by linking new knowledge to real-life contexts. Joyful Learning creates a positive and motivating learning environment that boosts intrinsic motivation. The integration of these three elements contributes significantly to a more effective and engaging learning experience. The research underscores the importance of incorporating these elements in educational practices to foster holistic and deep learning outcomes.*

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1. INTRODUCTION

Deep learning has become an increasingly popular concept in education, in line with the shift in educational paradigms that focus on deeper understanding and the ability to apply knowledge in real-life situations. This concept focuses on developing a more comprehensive understanding, rather than simply memorizing or recalling information superficially. Deep learning focuses not only on the accumulation of knowledge but also on developing critical thinking skills, analysis, and the application of knowledge in broader contexts (Biggs & Tang, 2011).

However, while deep learning has the potential to lead to deeper understanding, the process often faces various challenges. In some cases, students are not sufficiently emotionally or intellectually engaged in their learning, which can hinder the achievement of deep learning. One solution to address this challenge is through a more holistic and integrated approach, which can improve the quality of learning. The Ful-Ful approach, which consists of three main elements: Mindful, Meaningful, and Joyful, offers a way to create more meaningful, conscious, and enjoyable learning experiences, which in turn can support deep learning.

Mindful learning focuses on full awareness of the ongoing learning experience. In mindful learning, students are encouraged to pay close attention to their learning process, both physically and emotionally. They are trained to be fully present in the learning experience, with a heightened awareness of how they think and feel during learning. As explained by Zeidan et al. (2010), mindfulness refers to the ability to maintain attention in the present moment, without judgment or being distracted by external distractions. In an educational context, this approach allows students to engage more deeply in their learning process and encourages the development of greater reflection on how they process information.

Research by Roeser et al. (2013) shows that mindful learning can increase student attention and engagement, as well as reduce stress and anxiety, which often hinder effective learning. Mindful learning provides students with the opportunity to refine their thinking, improve emotional management, and foster a sense of responsibility for their learning process. Thus, mindful learning focuses not only on the end result but also on how students experience and manage their learning journey, creating a more profound and meaningful experience.

The second element of the Ful-Ful approach is Meaningful Learning, which refers to the importance of making learning relevant and meaningful to students. Meaningful learning occurs when students can connect the material they learn to their daily lives or to real-world problems. This aligns with the constructivist learning concept proposed by Piaget and Vygotsky, which emphasizes the importance of experience and context in the learning process (Piaget, 1973; Vygotsky, 1978). Meaningful learning can also increase students' intrinsic motivation, as they perceive that what they learn has value and can be applied in broader contexts.

According to Puentedura (2013), meaningful learning focuses on creating a relevant context for students, allowing them to see the connection between the material being taught and the real world. This can be achieved through various strategies, such as problem-based learning, projects, and activities that combine theory and practice. Meaningful learning also involves developing critical and analytical thinking skills, enabling students to not only remember information but also

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to understand, analyze, and apply it in more complex situations. Similarly, research by Herrington et al. (2014) shows that meaningful learning promotes deeper understanding and strengthens student engagement in the learning process.

The third element of the Ful-Ful approach is Joyful Learning, which emphasizes the importance of creating enjoyable and enjoyable learning experiences. Joyful learning not only keeps students more engaged and motivated, but can also enhance their cognitive processes, strengthen emotional engagement, and improve memory. As explained by Csikszentmihalyi (1990), joyful learning experiences occur when students feel engaged in activities that provide challenges appropriate to their abilities, allowing them to experience a state of "flow," where they are fully immersed in the activity. Joyful learning helps create a positive atmosphere, which can boost self-confidence and improve learning outcomes.

Regarding enjoyable learning, Deterding et al. (2011) proposed the concept of "gamification," which is the application of game elements in a learning context to increase student engagement and motivation. This approach suggests that enjoyable learning can be achieved through the use of elements such as competition, rewards, and challenges that are tailored to students' needs and interests. Enjoyable learning can also facilitate the creation of more immersive experiences, as students are engaged not only cognitively but also emotionally, creating a more holistic learning experience.

The Ful-Ful approach integrates these three elements to create deeper, more effective, and more meaningful learning. Mindful, meaningful, and joyful learning complement each other, creating a more holistic learning experience and encouraging students to engage more actively and emotionally in their learning. When students engage in mindful learning, they are more aware of their learning process and can better manage their emotions and stress. When the material they learn becomes meaningful, they can see the relevance of the learning to real life and feel more motivated to learn. Finally, when learning is enjoyable, students feel more connected to their learning experience, which promotes better engagement and knowledge retention.

The combination of these three elements can create a learning environment that supports deeper learning, where students not only retain information but also understand, connect, and apply knowledge in broader contexts. By incorporating mindful, meaningful, and joyful approaches into deep learning, we can create more meaningful and impactful learning experiences for students,

ultimately supporting the educational goal of producing more critical, creative, and adaptable learners.

2. METHOD

This research methodology uses a Systematic Literature Review (SLR) approach to examine various relevant literature related to the application of the Ful-Ful approach in deep learning, specifically the Mindful, Meaningful, and Joyful elements. SLR is a systematic method for identifying, evaluating, and synthesizing existing research findings in a transparent and structured manner (Liberati et al., 2009).

The process begins with determining literature inclusion and exclusion criteria based on the relevance and quality of the research, encompassing journals, books, and scientific articles published within the last five years. The selected literature is then analyzed in depth to identify key findings related to the application of the three elements in a deep learning context. This method aims to provide a comprehensive understanding of the contribution of these elements to improving the quality of deep learning. SLR also allows researchers to summarize trends, challenges, and opportunities for further research in this field.

3. RESULTS AND DISCUSSION

Based on an analysis of various relevant literature, it was found that these three elements significantly contribute to supporting the deep learning process, each in unique and complementary ways. This discussion will also explore how each of these elements plays a role in improving the quality of learning to be more holistic, in-depth, and impactful for students.

Mindful, Meaningful, and Joyful Contributions in Deep Learning

In deep learning, elements such as mindfulness, deep relevance, and emotional excitement play a crucial role in supporting students' cognitive and emotional engagement. Based on the research reviewed, the implementation of the Ful-Ful approach, which integrates these three elements, has been shown to positively impact the effectiveness of deep learning. Each element contributes differently, yet they are interconnected in improving the overall quality of learning.

The contributions of these three elements complement each other and enrich the student learning experience, creating a more holistic and effective learning environment. Mindful learning allows students to fully focus on the learning process, reducing distractions, and improving their ability to remember and understand information more deeply. The meaningful learning element emphasizes the importance of connecting learning to relevant contexts for students, which not only

makes the material easier to digest but also makes it more valuable to their lives. By understanding how knowledge can be applied in the real world, students feel more connected and motivated to learn more deeply. Meanwhile, joyful learning plays a crucial role in creating an enjoyable learning experience, which increases enthusiasm and a desire to continue learning. With an uplifting atmosphere, students tend to be more active in the learning process and are able to persevere in the face of challenges, resulting in maximum learning outcomes.

Mindful Learning: Focused and Conscious Learning

The first element of the Ful-Ful approach, Mindful Learning, focuses on the importance of full attention and awareness in the learning process. Mindfulness in the context of learning refers to students' ability to focus fully on their learning experience, without distraction from irrelevant thoughts or feelings. Numerous recent studies have shown that mindfulness has a positive impact on improving students' ability to engage deeply with learning materials and reducing anxiety and stress levels that can interfere with learning.

Research by Zeidan et al. (2010) shows that mindfulness practice can improve students' cognitive abilities and attention. By paying full attention to the material being studied, students are not only able to absorb information better but also to reflect on and integrate it into a deeper understanding. In the context of deep learning, mindfulness helps students manage internal and external distractions that might hinder the learning process, allowing them to focus on higher-level learning goals.

Furthermore, Roeser et al. (2013) emphasize that mindfulness not only improves attention but also influences emotional management. Mindful learning enables students to overcome emotional challenges that can arise during the learning process, such as frustration or anxiety, which often interfere with concentration and motivation. For example, in demanding learning contexts, such as deep learning, students trained in mindfulness are better able to manage stress and stay focused on their learning goals. This allows them to more successfully process information deeply and develop a more solid understanding of the material being taught.

Mindfulness Mindfulness in learning can also improve students' self-reflection skills, which are essential for deep learning. By engaging in mindfulness practices, students can become more aware of their learning strengths and weaknesses, and better equipped to evaluate and adjust their learning strategies. Research by Zeidan et al. (2010) also shows that mindfulness can improve

students' working memory, which plays a crucial role in long-term information processing. With this increased self-awareness, students not only learn better but are also better able to relate new information to pre-existing knowledge, enriching their learning process.

Mindfulness practice also helps create a calmer and more organized learning environment, supporting students in maintaining focus even when faced with complex challenges. For example, in learning that requires critical and analytical thinking, such as deep learning, the ability to remain calm and focused is crucial. This allows students to analyze information more deeply, develop a more comprehensive understanding, and integrate previously disparate concepts. Therefore, mindfulness is not just about managing attention; it is also a skill that enriches students' cognitive and emotional abilities when facing difficult and challenging material.

Meaningful Learning: Relevant and Meaningful Learning

The second element of the Ful-Ful approach, Meaningful Learning, emphasizes the importance of making learning relevant and meaningful to students. Meaningful learning occurs when the material taught can be connected to students' prior knowledge and experiences and is relevant to their real-life contexts. The application of the concept of meaningful learning in deep learning is crucial, as meaningful learning can increase student engagement and enable them to gain deeper understanding.

According to Ausubel (1968), meaningful learning occurs when students can relate new information to existing knowledge in their memory. This encourages students to engage more actively in more complex cognitive processes, such as analysis, synthesis, and evaluation. Puentedura (2013) further developed this idea by proposing that meaningful learning is more effective if students can see how the information they learn can be applied to their daily lives. In the context of deep learning, this means that the material being taught must be viewed by students as something that can be used to solve real-world problems, not simply as abstract information.

Research by Herrington et al. (2014) confirms that meaningful learning can be achieved through problem-based and project-based learning approaches, which enable students to apply their knowledge in relevant and contextualized contexts. In deep learning, meaningful learning relies not only on theory and abstract concepts but also provides opportunities for students to experience and apply that knowledge in real-world situations. This learning that connects theory with practice helps students gain a deeper understanding of how the knowledge they acquire can be used to solve problems in society or in their professional lives.

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Meaningful learning also encourages students to develop critical and creative thinking skills. By connecting course material to real-life experiences or relevant situations, students not only learn to retain information but also to apply it in broader contexts. This can strengthen their understanding of the concepts taught and improve their ability to make informed, evidence-based decisions. For example, in deep learning, students who can see the connection between the theory they learn and its practical application are more likely to explore the material with greater enthusiasm, seek innovative solutions to complex problems, and be better prepared to face real-world challenges.

Furthermore, meaningful learning can deepen students' sense of ownership over their learning process. When students feel that the material they're learning has a direct impact on their lives, they tend to feel more motivated and committed to continuing to learn and develop their knowledge. This creates a more sustainable and comprehensive learning experience, which in turn can lead to more effective and meaningful learning outcomes.

Joyful Learning: Fun and Exciting Learning

The third element of the Ful-Ful approach is Joyful Learning, which focuses on creating enjoyable and exciting learning experiences for students. Joyful learning can create high emotional engagement, which in turn increases students' intrinsic motivation to learn. In research conducted by Csikszentmihalyi (1990), the concept of flow was introduced to describe a state in which a person is fully immersed in an activity, perceives challenges appropriate to their abilities, and deeply enjoys the experience. Joyful learning strives to create this kind of flowing learning experience, where students feel engaged, motivated, and challenged.

Gamification, the use of game elements in learning, has been shown to be effective in increasing student engagement and creating a fun atmosphere. Deterding et al. (2011) stated that gamification can increase students' intrinsic motivation by providing challenges that match their abilities, as well as providing rewards and feedback that reinforce a sense of accomplishment. In deep learning, this fun atmosphere is important because it can help students stay motivated, especially when facing complex and challenging tasks. By creating a fun learning experience, students become more interested and emotionally engaged, which in turn improves the quality of their learning.

Fredrickson (2001) also emphasized that a positive and enjoyable learning environment can improve students' psychological well-being, which supports more effective learning. Enjoyable

learning provides opportunities for students to be creative, work in teams, and celebrate their achievements, which not only leads to better learning outcomes but also to the development of important social and emotional skills.

Enjoyable learning creates an atmosphere that encourages students to feel comfortable exploring new ideas and making mistakes without fear. When students feel valued and accepted in a positive learning environment, they are more willing to take risks and try new approaches to learning. This is especially relevant in the context of deep learning, where deepening understanding often requires experimenting with untested ideas. By creating a space for students to learn through enjoyable experiences, they also learn to view failure as a natural part of the learning process, which can encourage them to persist and persevere.

Furthermore, the concept of joyful learning can also be implemented through the use of technology that supports more interactive and enjoyable learning experiences. Educational technology, such as multimedia-based learning applications or virtual learning, can offer more engaging and enjoyable learning experiences for students. For example, simulations or educational games allow students to learn in a more realistic and engaging context, making learning not only more effective but also more enjoyable.

Gamification and the use of this technology can reduce the boredom often present in conventional learning and provide a more dynamic learning experience. By increasing students' emotional and cognitive engagement, joyful learning significantly contributes to the quality of their in-depth learning experience. Therefore, a joyful learning approach not only increases student motivation but also deepens their understanding of the material being taught, ultimately supporting the achievement of more optimal learning outcomes.

4. CONCLUSION

Based on the findings discussed above, it is clear that the Ful-Ful approach, which involves three main elements (mindful, meaningful, and joyful), has a significant contribution to supporting the deep learning process. Mindful learning enables students to focus and better manage their emotions, while meaningful learning connects material to students' experiences and needs, and provides a relevant context for the learning. Joyful learning adds a positive emotional dimension, creates a pleasant atmosphere, and increases students' intrinsic motivation to learn.

The interconnectedness of these three elements demonstrates that deep learning relies not only on cognitive processes but also on emotional and reflective dimensions. When students feel present,

engaged, and enjoying their learning experiences, they are more likely to gain deeper understanding and retain knowledge long-term.

Thus, the implementation of the Ful-Ful approach in learning is expected to create a more holistic learning experience, simultaneously engaging students' cognitive, emotional, and social aspects. This deeper and more meaningful learning will positively impact students' academic and personal development and prepare them to face greater challenges in the future.

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