The Posthuman Pedagogy: A Learning Centric Educational Dimension

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The article is based on a thematic analysis of available literature on posthuman educational practices and opportunities. It asserts that the posthuman context does not demoralize human space, but rather strengthens educational practices by going beyond formal and informal education and surpassing teacher-centered or student-centered teaching-learning activities. The article discusses perceptions of the posthuman context in general, as well as common educational practices about the posthuman context. Its primary focus is on posthuman pedagogical considerations and a method to incorporate digital realities as a strength to posthuman pedagogue. It proposes a multisensory pedagogy that incorporates human and nonhuman realities to promote lifelong learning procedures. It also asserts the concept of a diffractive teacher who transforms into a barycentric mass collaborating and functioning in a relational approach.

Keywords: Posthuman pedagogy, digital humanism, posthumanism, diffractive pedagogue

Posthuman Educational Practice: An Introduction

A teacher is a living organism who carries out educational objectives in real-world settings, according to the broader educational realm. As researchers, we believe that the role of the teacher is to connect past and present generations, to transfer social-cultural-

human values, and to equip future generations with skills and knowledge relevant to their future. We have noticed that the world is progressing in artificial intelligence and robotic experiments at this point in new-generation education. Humanists and educators are also concerned about whether it will challenge or replace human intelligence, as well as the space of the human agent in the educational realm. The twenty-first century's debate over such binary realities (i.e., artificial intelligence vs. human intelligence) necessitates a progressive and creative framework. This approach will be a useful synthesis of the best features of both domains, establishing performative and transformative educational practices.

This article focuses on the general debates surrounding posthumanism. Its primary focus will be on posthuman educational concerns and potential pedagogies for future education. Posthumanism has since concentrated on how humans and technologies interact to generate ideas or efficient life performances. Human engagement with emerging technologies for thinking and producing knowledge is the most important concern in posthumanism (Ranisch & Sorgner, 2014). We consider the potential integration conditions and practices that would position a teacher as a key agent for educational practices and technological applications. Various disciplines, including history, philosophy, and literature, recognize that humans can shape and reshape the world structure, with humans and human rationality at the center. The anthropocentric concept, however, may not apply to educational engagements in today's changing generation. We have discovered, as English language educators, that educational practice in applied linguistics, which is thought to exist alongside history, philosophy, and literature, focuses on the central role of human language in human relations (Pennycook, 2018). With the presence of posthumanism, whether in the form of digital humanism or the extreme concept of transhumanism, such an anthropocentric viewpoint is challenged. It rejects the notion that "man is the measure

of all things," instead viewing digital artifacts and human beings as the world's dual essence. Such dual world system components necessitate additional academic research to provide a relational formation between technologies and humans for the future (Philbeck, 2014). This article examines the future world through the lens of posthuman influences in educational sectors, focusing on pedagogy and pedagogical practices. I have used posthumanism, digital humanism, and digital humanities as interconnected codes to refer to the posthuman context in this discussion.

Posthuman Discourse

Discussions about entering a changing phenomenal reality frequently defy conventional practices. On the other hand, the change is intended to push human practices forward. We've noticed that change always draws on past strengths and creates a sense of change in practice for advancements. So, while debating the contents of the posthuman era, we cannot ignore humanism's conceptual framework. In conjunction with this framing, Ranisch and Sorgner (2014) discuss how the German theologian and philosopher Friedrich I. Niethammer coined the term humanism (Humanismus) in 1808 in the context of educational curricula, as it is derived from the Latin word humanitas. Thus, humanism is inextricably linked to educational practices that care for and share the humanistic essence in every generation. It has shaped and reshaped educational practices in favor of human fulfillment in the future. Humanistic psychology impacted education in the 1970s and 1980s, causing a shift from teacher-centered to student-centered educational practices. It is still influential in language teaching and learning because communicative language learning is a product of human-centered psychology (Ranisch & Sorgner, 2014). The question now is whether the posthuman context, with its emphasis on technologies, demoralizes future generations' educational needs and practices. While discussing posthuman applied

linguistics, Pennycook (2008) states that posthumanism is not about abandoning humans or proclaiming the end of humanity; instead, it is about rethinking the relationship between humans and the rest of the world. It has not challenged traditional educational practices, but it is attempting to integrate human and nonhuman agents for better practice consolidation in the education system. It indicates the need to reconsider human-centric essentialism in education, as digital accessibility has emerged to change educational phenomena far and wide.

Digital humanism is a subset of posthuman consciousness that manifests itself as a discursive artifact that does not explain knowledge but transparently demonstrates something else that may convey knowledge (Ramsay & Rockwell, 2012). The primary dimension of digital humanities is the interaction of human agents with nonhuman agents, such as ecology and technology. In the process of integrating humans, ecology, and technology in educational practice, considering whole technology as a tool or part of the education system has been/can be debated. Ramsay and Rockwell debate the feasibility of using digital humanities as a traditional theoretical tool. Since they believe that digital humanities serve as a foundation for research explanation rather than as an explanation for research phenomena, this consideration assumes the necessity of incorporating nonhuman agents into educational practices. As a coexisting phenomenon, this integration in the posthuman context necessitates its application in education, research, and the knowledge industry. Because scholarship or pedagogy is explicit in the educational system, we see the digital humanities debate as an academic concern. It introduces various academic practices to which "we are generally unaccustomed" with such infrastructure that forces us to go deeper and "live an active, 24-7 life online" for an academic cause. It aspires to be a human agent capable of utilizing technology. We can see it as socially responsible

pedagogy and scholarship because it has been "working together, sharing research, arguing, competing, and collaborating for many years" in advanced ways to bring humans together in academic forums (Kirschenbaum, 2012; Matthew, 2012). Recent practices have improved their performance in the global educational system. To consolidate posthuman concepts and put them into practice, a willingness to reframe human-centric assumptions is required so that posthuman pedagogy can align local needs with global practices. By emphasizing the importance of collaboration in digital framing, the discussion will convey a posthuman context fact.

In academia, digital humanism is proposed as a reconciling element to reconfigure and reform the global divide created in the name of 'globality' as the formation of a homogenized global community.' Such globality is seen as a rotten formation created by "neocapitalists/neocolonialists" that can be corrected and readjusted with equal identities in human society by accepting digital humanities as a friend (Sarce, 2019). It implies that the issue of digitized practices may compel us to fall under global aspiration and contribute to the development of local realities while promoting human-nonhuman integrated academic practice. This debate considers the possibility of incorporating technology's influence into human identity, as integration is a progressive prelude to the future world. It determines existence in the context of local and global realities and human and nonhuman integration. Transhumanism and posthumanism have attempted to contribute to techno-human integration by mediating us in our daily lives, allowing us to access the world, and extending our potentiality with additional skills in the present context. It is unclear whether social concern focuses on memes or group influences; however, posthumanism is moving forward to connect all aspects of human identity as an integral component (Ranisch & Sorgner, 2014). The goal is to integrate technological components with human efficiencies into a global system, which will result in advancements

in human and nonhuman existence. Educational practice is the best way to reframe attitudes, skills, and practices in reality as posthuman age aspirations. It necessitates that the academic sector considers technological realities and their contribution to shrinking global space through the assembly of local connectivity.

It is assumed that ordinary human capabilities will not be able to make it possible because human knowledge and intellect require the assistance of supporting agencies in order to bring about implacable practices. These organizations are typically the result of recent advanced practices that have demonstrated transformation in worldly realities. Transhumanism is now recognized as an academic value in addition to technological behavior. According to Philbeck (2014), transhumanism is a position that advocates for a radical transformation of human biological aptitudes and social conditions through the use of technology. Technologies shape human and social conditions by serving as instrumental values in posthuman identities. Posthumanism has questioned anthropocentric knowledge, ethics, action, and intention, as well as human arrogance, human minds, and human relationships to other creatures and objects in the universe (Pennycook, 2018). It does not aspire to surpass human-fabricated social and academic values, as Pennycook argued on the goal of posthuman reality, not as an intention for a world without humans, nor does it assert that language and literacy could take place without humans.

Furthermore, he emphasized that posthuman agency aspires to restructure and rebalance human centrality norms to bring in the more-than-human world. As a result, in posthuman discourse, we move beyond human concerns to bring relational content from existing and emerging phenomena such as digital realities, socio-cultural realities, and ecological content. Pennycook (2018) and Ceder (2019) have fully justified posthumanism as a shift in how humans think about themselves and their responsibilities to others. Others in this context refer to ecological beings and digital objects.

The posthuman position has shifted away from the individualistic self and self-interest. Posthuman discourse has thus elaborated and expanded the context for identifying the technological means for relational performances acting from and for human and nonhuman agents.

Educational Concern in Posthuman Context

In general, we find that a digital phenomenon plays a significant role. These components keep us more frequently engaged in this posthuman context. In the digital phenomenon, academic existence is widely accepted. In this regard, one of the digital humanities groups advocated to the digital humanities community that as a responsible human being, one must use digital technology creatively to advance research and teaching in education. They also claimed that in times of crisis, the digital humanities help sustain academic life because academic life is directly engaged in generating alternatives (Gold, 2012). Academicians investigate hybrid or multimodal features in the search for alternatives for educational and academic practices in the posthuman context. Since then, traditional humanities have been abstractly mixed and intertwined with computational and systematic orders and processes of technology. There is a need for open-mindedness to accept "deferentializations" that are visible and plausible in the presence of digital realities to adapt and develop "better ways to teach and educate" youths for the Future (Sarce, 2019). In this posthuman context, education for the future looks to more research-oriented practices to be adaptive to multiple realities. Posthuman practice-based research is more concerned with unraveling discursiveness in human and nonhuman assemblages than discovering the underlying episteme (Charteris & Nye, 2019). Since digital humanities contextualize the multidimensional values of education concerning human and more-than-human features, this article projects educational concerns with their discursive practices

as pedagogical assumptions in a posthuman context and redefines posthuman pedagogue.

Pedagogical Assumptions in Posthuman Context

The posthuman context propelled educational alternatives that went beyond existing anthropocentric educational practices. By revisiting humanism's norms and limitations, as well as reframing educational pedagogy to incorporate relationships between ecological beings, machines, and phenomenal things of human life; and by exploring ever-changing new dimensions in educational practices, from curriculum to pedagogy, it is possible to use posthumanism to transform educational thought, practice, and research (Snaza, et. al, 2014). In this vein, Baofu (2011) discusses a heterodox theory of education in order to meet beyond human-centric educational practices in a posthuman context. Furthermore, Baofu proposes four concentrations while developing heterodox educational practices for use in a posthuman context. The emphasis is on developing perspective by combining mind, nature, society, and culture to maintain human presence while expanding perspectives. Second, it is a continuous progressive element because it is not based on a specific theory and does not bolster its strength by incorporating other theoretical norms. Third, it aspires to transcend teacher-centered and student-centered educational practices, so that education becomes dialectic content shared by all parties involved for everyone to collaborate. Finally, incorporating 16 major principles from various knowledge domains exemplifies a more dynamic approach to education (Baofu, 2011). We will not go into detail about the principles; however, the central assumption is that we will go beyond the traditional mode of education by redefining research methodology and educational practice.

It is based on 'diffraction,' which is fundamentally opposed to reflexivity; educational research methodology in the posthuman

context does not proceed with reflexivity. Diffraction differs from reflexivity. Diffraction explores new patterns and ideas for every moment in the present context through entanglement and intra-actions, whereas reflexivity focuses on self-interactive modules for recent actions. The educational practice tends to gather potential reforming agencies for effecting change and advancement. It evolves as a result of entanglement with phenomenal realities, i.e. the presence of socio-cultural, ecological, and technological presence over contextualized practices. In this sense, methodological entanglement grows while human concern is maintained alongside digital and nonhuman contents that promote intra-actions. There is an intra-action between human and nonhuman agents as a single entity to advance educational progress.

Critics argue about educational research pedagogy by using the metaphor of diffraction for thinking methodology and adhering to a posthuman understanding of entanglement (Ceder, 2019). It demonstrates how dynamics in a posthuman pedagogical approach are reconsidered as intra-actions that contextualize educational practice. In the case of applied linguistics, Pennycook (2018) asserts that questions raised in applied linguistics about our understanding of language, humans, objects, and agency contribute to posthuman pedagogy by reframing understanding aspects for appropriate educational purposes.

By discussing linguistic assumptions, we can process the posthuman pedagogical consideration. Since then, language learning has evolved into deeper "semiotic assemblages" with sensory engagements in the broadest sense. When we speak of sensory engagements, we acknowledge the presence of multiple realities in front of our awareness. Posthuman consideration grows pedagogically by broadening the concept of perception in multiple realities with the concept of "attunements" for understanding with "adjustments, interpretations, connections, affiliations, and

adaptations" within human, other-than-human, and object dimensions (Pennycook, 2018). Pennycook describes it as a challenge to human-centric language learning, which holds that the human brain codes and decodes language use to foster learning capabilities. He claimed that if we look forward in local language practices, we will see an assemblage that grows with sensory enactments and attunements while connecting and interacting with multiple phenomenal realities. He also emphasized that critical applied linguistics faces challenges in navigating the context of humans in a posthuman world, which includes an ecological approach to language and relations to objects (Pennycook, 2018). It emphasizes the importance of aligning human and nonhuman realities by adapting educational practice to the needs of the posthuman context. We can discuss such a multimodal approach to rethinking pedagogical practice, which has resulted in an applicable posthuman pedagogy known as flipped class: a collaborative pedagogical practice involving human and technological efforts.

In flipped classes, technology connects out-of-class and in-class activities. Because students practice the instructional directions and materials at home or in their spare time using technological resources, in-class activities become more productive, interactive, and personalized. It is defined by Bergmann and Sams (2015) as an achievement above and beyond ordinary anticipation in which a learner becomes dynamic by engaging in a short video instructional activity at home and descriptive interactions with productive tasks in the classroom. It provides more group and individual attention so that participants benefit; it is also interesting and flexible in order to engage them. Its adaptability expands learners' opportunities to learn at their own pace and in their own space; however, there is some concern about involving each learner in a different context for interactive sessions because they find materials and content in their own

space (Sit & Gu, 2019). It liberates them from teacher-centred and student-centric ideas by allowing them to use their free time to explore content resources teachers provide in their online system.

According to Bergmann and Sams (2012), the classroom is a personalized space for teachers to deal with the personal learning issues of learners with content. Students use the classroom to engage in interactive group discussions. Bergmann and Sams, as teachers, highlight the demand of a few students who asked them to create an individual support system for their students, such as one who could not attend regular class, another who is a slow learner, and another who requires extra input for their individualized learning situations. The teachers devise a solution by incorporating technology that provides content for home practice and restructures the classroom space to support those students who require conceptual clarity on an individual basis. As posthuman technologies have begun multisensory (using all sense perceptions) teaching-learning activities, the dynamism in flip class, a different educational pedagogy, has made educational practices more effective. It is common knowledge that by stimulating multisensory perceptions in teaching-learning activities, we can achieve more profound understanding and beneficial learning (The Open University, 2020). It demonstrates that posthuman pedagogy can contribute to a more flexible and interesting learning process and that human agents can work productively with technologies.

As stated in a UNESCO report (2015), the use of technology in education can develop students' lifelong learning competencies by providing them with learning opportunities anywhere, anytime, and anyway. It is possible by going beyond the constraints of formal and informal educational practices. Baofu (2011) elaborates on the need for formal and informal pedagogical practices to be transcended as transformative educational practices for the future. He proposes four different educational practices: the first is more illustrative and

less exhaustive online education; the second is virtual education by allowing information to be uploaded into the brain via technological advancements; and the third is holistic education in accordance with the future evolutions of the mind in relation to perception, conception, imagination, intuition, emotions, and behaviors; and finally, spiritual education is needed to sustain human agents as well as their responsibility to the environment and other nonhuman agents. It clearly shows that there are practices and opportunities to shift educational pedagogy in the posthuman context for a better future educational system in the local and global arena. The focus is on a pedagogue who collaborates with technological advancements to ensure the success of posthuman pedagogy.

Posthuman pedagogue

The discussion begins with apprehension about a teacher's professional viability in a posthuman world. Artificial intelligence, a product of posthuman consciousness, has challenged the professional space for teachers. The teacher has become inactive as a result of the development of various feasible technological and machinery devices that are rich in educational resources. Nonetheless, the report Innovating Pedagogy 2020 criticizes such assumptions, claiming that the presence of artificial intelligence will assist teachers in improving their teaching abilities. It argues for the preservation of unique human characteristics such as critical thinking, creativity, communication, and collaboration skills, which can be instilled in teachers and students through teacher-facing artificial intelligence applications (The Open University, 2020). As a result, teachers must be willing to adopt and implement multisensory practices and technologies. This digital humanities pedagogy concept strengthens teachers' positions by integrating humanities and computational technologies and providing teachers with digital methodologies to transform and improve teaching (Sit & Gu, 2019).

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The debate over the human-teacher position continues; however, the need for transforming education through teachers is essential. Murris (2018) discusses the possibility of integrating the role of the teacher, who represents culture as a human, with an analogy of a heron representing nature. The posthuman context has blurred the nature/culture divide, allowing ecological, human, and material homology to function as a diffractive teacher. The diffractive teacher adds the individualized existence of subjects and objects to generate new thoughts and ideas for the present and future. There have been discussions about posthuman teachers being cyborgs or zombies; however, a posthuman teacher is passionate about adopting and integrating learning resources (Cook, 2016). Learning resources can be found as entanglements in both human and nonhuman spaces. Entanglements bring together human and nonhuman agents, with a teacher serving as a major agent in assembling resources as an integral part of the educational environment. It is all about collapsing binaries, which is a kind of confluence that integrates multiple realities as a homogeneous essence to impart progressive education; for this, we require a pedagogue who can play the role of more-than-human.

In the anthropocentric educational paradigm, the role of a pedagogue differs from that of a typical teacher. Posthuman pedagogy is defined by Cooks (2016) as "barycentric pedagogy," in which human bodies are portrayed as heavenly bodies due to their "gravitational pull." As a mass, such a human body possesses a "mixture of knowledge, skills, and abilities" that can entice another mass in intra-action negotiation. As they continue to orbit one another, the heavenly bodies become the center of one another in this barycentric pedagogical process. Cooks claims that teachers and students form a mass by combining their skills, knowledge, and abilities. It continues to innovate a pedagogy in which teachers and students collaborate to assemble educational practices in a

super system. In search of reformulating educational pedagogy, the posthuman teacher integrates within the mass of learners and follows barycentric pedagogy, which has two attributes: distributed and reflexive natures to be adopted in an ever-changing educational process. To sustain distributed and reflexive natures throughout the educational system, the teacher becomes an agent of barycentric pedagogy. According to Cooks, in barycentric pedagogy, a posthuman teacher moves in the orbits of consciousness, unconsciousness, bodies, technologies, the environment, objects, and other (post) humans to engage in continuous and homogeneous intra-actions for better educational practices.

These debates over the posthuman pedagogue, whether as a teacher with and for a multisensory pedagogy, a diffractive teacher to stop binary and bring forth intra-actions in learning mechanisms, or a barycentric teacher who works with the available systems as integral parts of conscious and unconscious entities, all bring hope for the future of education. Since then, Chithra (2019) has argued that teachers perform technologically augmented learning processes that are "distinctly learner-oriented," thereby altering the overall educational paradigm. The future of education will be entirely focused on learning, with human and nonhuman agents, contents, and contributions.

Conclusion

The posthuman context and relevant educational transformations were discussed in this article using the concepts of posthuman pedagogy and a posthuman pedagogue. Knowledge, teacher, and student have been prioritized as three critical components of the education system, which have been implemented through various methodological adaptations. We discovered the existence of formal and informal educational practices, as well as teacher-centric and student-centric practices. As a result, a

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number of methodological approaches to making language learning communicative and functional emerged. Nonhuman agents were only used as a tool in these adaptations, so students were prepared to take on anthropocentric tasks. Nonetheless, technological advancements have brought the issues of ecological existence and technological access into academic discourse as equally important realities. Because technology is so intertwined with educational practices, educational discourse cannot create a discourse on educational advancements while ignoring digital realities. Posthuman pedagogy aims to integrate human and nonhuman agents into educational practices to enrich and focus learning by engaging in multiple resources. In posthuman education, three characteristics must be considered: a) Posthuman education is possible with more-than-human attributes and an assemblage of human and nonhuman realities; b) posthuman education has a relational quality as intra-actions; and c) the posthuman pedagogue functions as 'barycentric,' avoiding binary positions of teacher/student focus. Posthuman education's reality and future projection is the integration of technologies, resulting in more profound and effective multisensory educational practices. Based on this, it is a claim that posthuman educational practice is not about suspending the human space, but it is all about integration of and responding to a relational approach to multiple phenomenal realities to bring diffraction in teaching and training and equipping a pedagogue from such limelight. More research on perceptions and practices of educational advancements in the posthuman context is required to make human and nonhuman agents adequately integrate into the educational system.

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