

## Balancing Innovation and Psyche:

### Human-Machine Partnerships for Personalized English Learning Experiences

A. Pon Jerofin

Research scholar, St. John's College, Palayamkottai.

Dr. A. Rathina Prabhu

Assistant Professor, St. John's College, Palayamkottai.

#### ABSTRACT

This study explores psyche-centric human-machine partnerships in English Language Teaching (ELT), balancing technological innovation with learners' psychological needs through Critical Pedagogy. Pronunciation inconsistencies, instructor workload overload, inadequate customized feedback, and motivational deficiencies are some of the problems that traditional English language learning frequently faces, especially among diverse learners. These challenges aggravate educational disparities by impeding speaking, writing, and understanding skills. Implementing Critical Pedagogy in ELT classrooms enables students to cultivate psychological resilience (psyche) across diverse scenarios. Psyche-centric design, guided by Critical Pedagogy, empowers students to interrogate AI biases, cultivate psychological resilience, and navigate power dynamics in digital classrooms. Through digital platforms and human-AI partnerships, they critically analyze power dynamics, develop adaptive strategies for real-world challenges, and gain confidence in handling complex situations with empowered awareness. Because of its advanced natural language processing, students can successfully improve their English skills through intelligent interactions

and customized support. Self-Determination Theory posits that those three basic psychological needs autonomy, competence, and relatedness foster learners' positive attitudes toward learning. By creating activities like self-judging error causes, avoiding an excessive reliance on technology, and guaranteeing the development of higher-order cognitive skills, you can strike a balance between learner autonomy and human-machine collaboration.

Keywords: Critical pedagogy, Digital classroom, English language learning, Self-determination theory.

## INTRODUCTION

This article explores how critical digital pedagogy and Self-Determination Theory can enlighten psyche centric layout for English Language Teaching (ELT) in classrooms. In the world of expeditiously growing educational technologies, traditional language teaching commonly faces challenges with instruction, feedbacks and motivational disengagements, particularly between diverse learners. The study focuses on Paulo Freire's critical pedagogy and Edward Deci and Richard Ryan's Self-Determination Theory, a human-machine collab model such as 1) Autonomy 2) Competence 3) Relatedness at the core of tech-driven English learning. By means of combining critical consciousness with supportive digital pedagogy the future development of learners is envisioned.

### **Critical Digital Pedagogy**

Critical Digital Pedagogy was developed by Paulo Regulus Neves Freire, Brazilian educator and Marxist philosopher. He was best known for his work *Pedagogy of the Oppressed* (1968), which is a foundational text of traditional critical pedagogy. Traditional teaching style is very passive, where teachers

are information providers and advocates for critical dialogues. “The banking concept of education, in which the scope of action allowed to the students is only as far as receiving, filing, and storing the deposits” (Paulo Freire on Education). In the banking concept of education, the students were only allowed to memorize and fail with the information, which views the student as a blank slate that needs to be filled by the teacher.

In this method, the Teacher takes the role of a narrator, expositor and information depositor, imparting disconnected facts and information to passive students by controlling their thoughts and behaviours. He notes that “it transforms students into receiving objects. The banking model of education attempts to control the thinking and action of students, thus leading men and women to adjust to the world, and inhibiting their creative power” (Freire 77). As a result, people start to fit in a controlled environment, give up their natural creativity power and internalize oppression without difficulty. According to Freire, this model of education transforms their authentic humanity and adopts to this current global order. The blind memorization of vocabulary and grammar rules lead to lack of communication in language education.

Freire promotes critical thinking as its foundation. It significantly influences learners’ critical thinking ability. It develops resilience, self-awareness, and emotional intelligence by equipping learners to critically think ideologies, power structures, and social realities. By critically assessing premises, learners develop cognitive thinking, which allows them to respond to real-world circumstances carefully as opposed in conformity. Giroux emphasizes that “students should be encouraged to take risks, fulfil their social responsibility, and engage with the world critically and transformatively.” (Giroux 2011). This psychological empowerment extends learners as socially responsible and converts them from silent observers to active participants in all environmental crises. It generates personal control, prompting learners to interrogate injustices, ethical decision making and transformative action. This method challenges learners to review their way of seeing or analysing world critically.

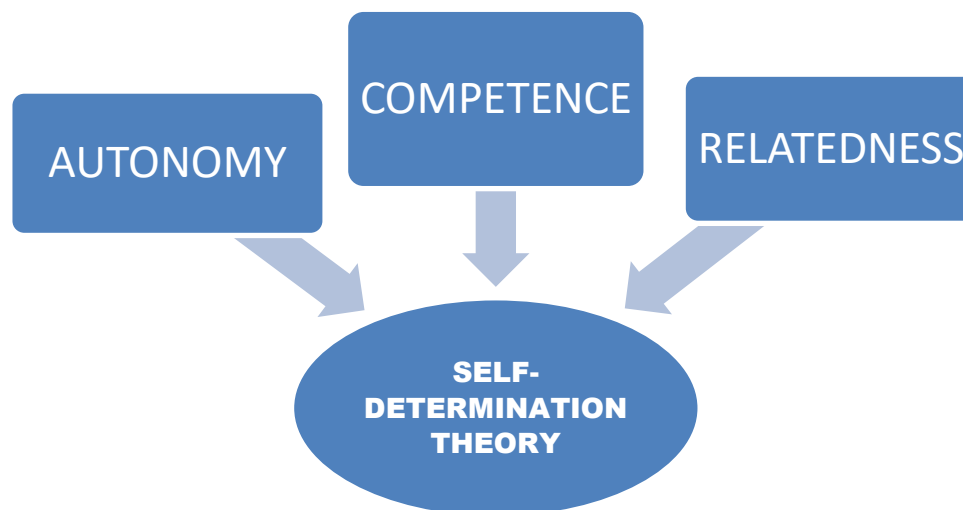
The combination of critical and digital pedagogy enables learners to develop their critical thinking in the classroom itself. This method of pedagogy pushes students to question critically with the help of digital technology. The field of study focuses on social justice principles such as equity, access, participation, and human rights through interactive digital whiteboards, live polls, and quizzes, which makes learners cognitively present in the classrooms. "In critical digital pedagogy, they guide students toward critically engaging with digital tools and content, cultivating a democratized learning environment" (Ros 18). Teachers play a vital role in critical digital pedagogy. The main aim of them is to balance cognitive, social engagement in the classroom. It shapes students towards deep, analytical interactions with digital technologies and suitable materials. In the Community of Inquiry model, instructors are essential for balancing cognitive, social, and teaching presence to foster meaningful online interactions (Garrison et al.). Rather than dictating content, they encourage learners to interrogate the underlying power dynamics, biases, and affordances of digital platforms such as algorithms, social media, or learning management systems, developing critical thinking on how these tools shape their knowledge, problem solving skill and identity. Teachers cultivate ethical norms, shaping students as active digital citizens, who can question oppressive structures in virtual environment through modelling reflexivity and ethical tech use. So, the social psyche of the learners is developed by an equitable learning space where authority is shared, and hierarchies are deconstructed, all of their voices contributed equally.

In digital classrooms, immediate feedback provides learners with real time monitoring and insights, assisting teachers to come to know about their students' level of thinking in social circumstances and in their academic knowledge. "Similarly, teachers have an opportunity to implement innovative approaches, monitor students' performance in real time and give immediate feedback through educational technologies" (Yadav). Critical digital pedagogy is notable in fostering enhanced digital literacy. This enhancement is very important

in today's technology-driven world, ensuring learners are not only proficient with current digital tools but also as a socially developed person. "Such pedagogy also sharpens critical thinking and problem-solving skills, preparing learners for complex, real-world challenges" (Ros 18). This type of participatory learning spotlight interaction and mutual engagement act as core to education. This type of collaboration serves dual purposes for attaining learning outcomes.

### **Self-Determination Theory (SDT)**

Self-Determination Theory (SDT) was developed by psychologists Edward Deci and Richard Ryan. It serves as a macro theory of human motivation and personality, addressing individuals' natural inclinations toward growth and their core psychological needs. It examines the drivers of choice when free from external pressures or distractions, emphasizing how much human behaviour remains self-motivated and autonomously regulated. SDT has six mini-theories, such as Cognitive evaluation theory (CET), Organismic integration theory (OIT), Causality orientations theory (COT), Basic needs theory (BNT), Goal contents theory (GCT), and Relationship motivation theory (RMT). One mini-theory of SDT includes basic psychological needs theory, which proposes three basic psychological needs that must be satisfied to foster well-being and health. It is a framework explaining human motivation through three innate psychological needs: autonomy, competence, and relatedness. These universal needs drive intrinsic motivation, our natural tendency to engage in activities for their inherent satisfaction, which, when fulfilled, leads to optimal growth, well-being, and performance.



## Psychological Needs

### 1) Autonomy

In Self-Determination Theory (SDT), “autonomy” means the need to feel that one’s actions arise from personal interests, values, and choices, not from external pressure or control. It reflects acting with a sense of volition and ownership, rather than being driven by rewards, punishments, or demands that feel imposed from outside the self. Autonomy-supportive teachers will encourage and facilitate students to pursue their own learning goals and endorse students’ choices of behaviours and learning approaches in the classroom (Assor et al.). Teachers create a supportive classroom where students feel trusted and respected in their learning. Instead of imposing tasks, these teachers help students identify their own learning goals and invite them to choose how they work (e.g., topics, methods, or ways of demonstrating understanding), which supports both autonomy and psyche of the learner. Use self-paced learning platforms (e.g., LMS modules or adaptive apps) where students choose topics, order of tasks, and type of assignments (video, text, quiz), and set personal learning goals. By acknowledging students’

perspectives and giving meaningful rationales, such teachers foster ownership, intrinsic motivation, and deeper engagement with learning.

## 2) Competence

Competence is about providing well-designed learning materials to learners. Here student can change or switch the challenge level according to their competence, for example, they can switch from hard to easy or easy to hard. Competence-supportive teachers will provide clear and specific guidance for learning, delineate the boundaries of learning activities, express confidence in students' abilities, and give learning-relevant feedback (Chiu). Design gamified quizzes, badges, and progress dashboards that give instant feedback and scaffolded challenges so learners can see growth and master skills step by step. Competence develops their psyche by giving Instant positive feedback, and scorecards enable students to believe in themselves as they can learn any difficult lessons, grammatical rules, and pronunciation easily. Giving positive feedback on a task serves only to increase people's intrinsic motivation and decrease extrinsic motivation for the task.

## 3) Relatedness

Relatedness means being involved interpersonally; teachers support emotional connections by fostering peer relationships. Relatedness-supportive teachers will develop close and caring teacher–student and student–student relationships by creating and maintaining warm, affectionate, and joyful learning environments (Chiu; Skinner et al., 2008). If students feel more connected with other individuals, they start learning more and also become more involved. These environments stimulate students' socialising psyche by promoting authentic interaction, mutual respect, and

emotional bonds. They help learners feel accepted, valued, and emotionally secure, fostering a sense of belonging within the classroom community. Facilitate collaborative digital projects (e.g., group blogs, shared slides, or discussion boards) and breakout-room video tasks that encourage peer feedback, dialogue, and community-building in online spaces. Such conditions encourage students to engage openly with peers and teachers, strengthening their social confidence and willingness to participate in collaborative learning activities.

## **Conclusion**

This paper analyses critical digital pedagogy and Self-Determination Theory (SDT) to review teaching in digital learning environments. Drawing Freire's concept of "banking education" and his focus on memorized and failed information, it debates that digital pedagogy transforms learners from passive towards critically engagement with technology, power and ideology. On the other hand, SDT's psychological needs: autonomy, competence and relatedness covered digital pedagogy nurtures learners' inner psyche and social development. These psychological needs infuse digital learning which are co-designed in learning path, and help learners scaffold mastery through feedback-rich tools, stimulating students' socializing psyche. Yet, these methods have some disadvantages too. It makes students share their feelings to AI-bots. This may affect them emotionally, psychologically and physically. Critical digital pedagogy and Self-Determination Theory (SDT) unite on a shared vision: education as being Dialogical, empowering and transformative process in which learners become not only digitally literate but also critically aware and socially responsible.



## Works Cited

Freire, Paulo. *Pedagogy of the Oppressed*. Translated by Myra Bergman Ramos, Continuum, 1970.

Giroux, Henry A. *On Critical Pedagogy*. Continuum, 2011.

Garrison, D. Randy, et al. "Critical Inquiry in a Text-Based Environment: Computer Conferencing in Higher Education." *The Internet and Higher Education*, vol. 2, no. 2-3, 1999, pp. 87-105.

Ros, Timothy J. "Improving Critical Digital Pedagogy in the Virtual Classroom." *Online Journal for Workforce Education and Development*, vol. 12, no. 1, May 2024, [opensiuc.lib.siu.edu/ojwed/vol12/iss1/3](https://opensiuc.lib.siu.edu/ojwed/vol12/iss1/3).

Deci, Edward L., and Richard M. Ryan. *Intrinsic Motivation and Self-Determination in Human Behavior*. Plenum Press, 1985.

"Self-determination theory." *Wikipedia*, Wikimedia Foundation, 20 Mar. 2026, [en.wikipedia.org/wiki/Self-determination\\_theory](https://en.wikipedia.org/wiki/Self-determination_theory). Accessed 20 Mar. 2026.

Assor, Avi, et al. "The Development of Autonomy over the Adolescent Years: A Cross-Cultural Study." *Journal of Educational Psychology*, vol. 94, no. 4, 2002, pp. 753-70.

Chiu, Thomas K. F. "Digital Support for Student Engagement in Blended Learning..." *Computers & Education*, vol. 169, 2021b, article 104211.

Skinner, Ellen A., et al. "Beyond the Concept of Self-Determination: Defining Motivational Privacy in the

National Conference on *Human Psyche and Literary Narratives*, at St. John's College, Palayamkottai, on 06-03-2026.

Classroom." *Journal of Educational Psychology*, vol. 100, no. 4, 2008, pp. 815–30.

Yadav, N. "The Impact of Digital Learning on Education." *International Journal of Multidisciplinary*

*Research in Arts, Science and Technology*, vol. 2, no. 1, 2024, pp. 24-34.