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Teach the AI - Vidyarthi Vijaya: Empowering Students Through Role Reversal in AI-Enabled Learning

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Abstract

This paper presents an innovative pedagogical practice titled "Teach the AI - Vidyarthi Vijaya" that reverses traditional classroom dynamics by positioning students as teachers to an AI-powered chatbot. Implemented in an MBA Digital Marketing course with 12 students, this initiative employed a customized chatbot created on Landbot.io, programmed as a blank canvas without external knowledge sources. Students assumed the role of educators, teaching the chatbot various concepts while the AI responded with questions and curiosity, simulating a genuine learning experience. This qualitative study reveals significant outcomes including enhanced conceptual mastery, improved communication skills, increased student confidence, and sustained engagement. Direct feedback indicated that all students thoroughly enjoyed the teaching experience, with many reporting continued exploration of the subject matter beyond classroom requirements. The practice successfully integrated traditional Indian pedagogical philosophy of guru-shishya parampara with contemporary AI technology, offering a scalable model for active learning across diverse academic disciplines. The findings demonstrate that AI-enabled role reversal can create non-judgmental learning spaces that foster self-discovery and deeper conceptual understanding.

Keywords **- Active learning; AI in Education; Digital Pedagogy; Role Reversal; Student Engagement; Teaching through Learning**

JETLP Category **- Practice - Innovative Use of AI for Higher Education**
Domain **- Personalised Learning & Student Engagement**

Introduction

The rapid integration of artificial intelligence in higher education has primarily focused on AI as a tutor, assistant, or knowledge provider to students (Chen et al., 2020; Holmes et al., 2023).

However, this conventional application often perpetuates passive learning paradigms where students remain recipients rather than active constructors of knowledge. Contemporary educational research emphasizes the importance of active learning strategies that position students as knowledge creators and critical thinkers (Freeman et al., 2014; Bonwell & Eison, 1991).

The pedagogy of learning-by-teaching has long been recognized as an effective educational strategy. Bargh and Schul (1980) demonstrated that students who prepare to teach content achieve deeper understanding than those who study for examinations. Fiorella and Mayer (2013) confirmed that generative learning activities, including teaching, significantly enhance retention and transfer of knowledge. Despite this evidence, traditional classroom constraints often limit opportunities for all students to experience teaching roles.

This paper introduces "Teach the AI - Vidyarthi Vijaya," an innovative practice that leverages AI technology not as a teacher, but as a student that learners must educate. By reversing conventional AI-education dynamics, this initiative addresses multiple pedagogical objectives: fostering deeper conceptual understanding through explanation, building communication confidence in private non-judgmental environments, and cultivating metacognitive awareness of one's own knowledge gaps.

The practice was implemented in an MBA classroom for Digital Marketing, where 12 students engaged with a customized AI chatbot designed specifically to function as a curious, inquisitive learner. Unlike conventional AI tools with vast knowledge databases, this chatbot was intentionally created as a blank canvas, capable of learning only what students explicitly taught it. This design ensured that the quality of the chatbot's responses directly reflected the clarity and depth of student explanations, creating an authentic feedback loop for self-assessment

Literature Review

Theoretical foundations of learning by teaching

The theoretical basis for learning-by-teaching draws from multiple educational frameworks. Vygotsky's (1978) social constructivism emphasizes that learning occurs through social interaction and knowledge construction. When students teach, they must externalize their internal understanding, transforming tacit knowledge into explicit explanations (Nonaka & Takeuchi, 1995). This process of articulation deepens comprehension and reveals conceptual gaps.

Biswas et al. (2005) proposed the "Teachable Agent" concept, where students learn by teaching virtual agents, demonstrating that this approach enhances motivation and learning outcomes. More recent research by Matsuda et al. (2023) found that teaching activities promote metacognitive reflection, as students must evaluate their own understanding to effectively communicate concepts to others. Chase et al. (2009) further documented that students who engage in peer teaching develop superior problem-solving skills and conceptual understanding compared to traditional instruction methods.

AI applications in higher education.

Current applications of AI in education predominantly focus on intelligent tutoring systems, automated assessment, and personalized learning pathways (Zawacki-Richter et al., 2019; Holmes et al., 2023). While these applications offer valuable support, they maintain traditional power dynamics where AI serves as the authority and students as learners. Luckin et al. (2022) argue that AI integration should empower students as active participants rather than passive consumers of AI-generated content.

Recent innovations have begun exploring alternative AI roles in education. Chatterjee and Bhattacharya (2024) examined AI as a collaborative learning partner, while Kasneci et al. (2023) investigated how large language models can facilitate Socratic dialogue. However, few studies have systematically explored AI functioning as a student that human learners must teach, particularly in higher education contexts.

Active learning and student engagement.

Active learning strategies consistently demonstrate superior outcomes compared to traditional lecture-based instruction (Freeman et al., 2014). However, implementation challenges persist, including student reluctance to participate due to fear of judgment, inadequate preparation, or social anxiety (Cashin & McKnight, 2017). Zayapragassarazan and Kumar (2012) identified that traditional active learning methods such as presentations and group discussions often fail to engage all students equally.

The concept of "safe learning spaces" has emerged as critical for effective active learning (Holley & Steiner, 2005). When students feel psychologically safe to take risks and make mistakes, learning deepens significantly (Edmondson, 1999). AI-mediated learning environments offer unique opportunities to create such spaces, as interaction with non-human agents reduces social evaluation anxiety (Pak & Verbeke, 2012).

Cultural context: Guru-shishya parampara and modern pedagogy.

The Indian educational tradition of guru-shishya parampara (teacher-disciple lineage) emphasizes personalized, relationship-based learning where knowledge transmission occurs through deep engagement between teacher and student (Kumar, 2017). This tradition values not merely the transfer of information but the transformation of the learner through dedicated guidance and experiential learning.

Modern adaptations of this philosophy can enrich contemporary pedagogy when thoughtfully integrated with technology (Nair & Nair, 2017). The "Teach the AI" initiative draws inspiration from this tradition by positioning students in the guru role, fostering the responsibility, mindfulness, and deep engagement characteristic of traditional Indian pedagogical values while employing cutting-edge AI technology.

Methodology

Research design.

This study employed a qualitative research design to explore the implementation and outcomes of the "Teach the AI - Vidyarthi Vijaya" initiative. Given the small sample size of 12 MBA students and the exploratory nature of the intervention, qualitative methods were most appropriate for capturing rich, descriptive data about student experiences, engagement patterns, and learning outcomes (Creswell & Poth, 2018). The study was conducted during one academic semester in a Digital Marketing course.

Chatbot design and platform.

The chatbot, named "Vidyarthi" (meaning "student" in Sanskrit), was created using Landbot.io, a conversational AI platform that allows customization without requiring programming expertise. The platform provides 100 conversation threads in its free version, which was adequate for this class of 12 students. For larger class implementations, premium subscriptions can expand conversation limits significantly. Alternative AI bot creation platforms are also available, including offering various features and pricing models suitable for educational contexts.

The chatbot was deliberately designed with several key characteristics. First, it functioned as a blank canvas with no access to external databases, search engines, or pre-loaded knowledge. Second, it was programmed to exhibit curiosity through follow-up questions, requests for clarification, and expressions of interest. Third, it admitted ignorance honestly when concepts had not been taught, responding with "I don't know" rather than generating fabricated responses. Fourth, the conversational interface employed respectful language and cultural protocols appropriate to Indian educational contexts, greeting students as teachers with proper etiquette.

The chatbot's programming included conditional logic that allowed it to reference previously taught concepts, ask comparative questions, and identify potential inconsistencies in explanations. This design ensured that students received authentic feedback reflecting the quality and coherence of their teaching.

Implementation process.

The practice was implemented over two 60-minute sessions following these steps. First, students were briefed about the activity without prior warning, emphasizing that they would assume the role of teachers to a virtual learner. The element of surprise was intentional, designed to capture authentic responses rather than rehearsed presentations. Second, each student received the chatbot link and was directed to individual computer stations, ensuring privacy and autonomy. Third, students were explicitly instructed not to use search engines, mobile devices, or reference materials during the teaching session, relying solely on their existing knowledge of Digital Marketing concepts.

During the teaching period, students interacted freely with the chatbot, explaining concepts, responding to questions, and refining their explanations based on the chatbot's curiosity and probing. The instructor monitored sessions unobtrusively, observing engagement levels and interaction patterns without intervening in the teaching process.

Following the student teaching sessions, the instructor personally interacted with the chatbot on each student's computer, asking conceptual questions to assess the knowledge the chatbot had acquired. This evaluation phase provided direct feedback to students, as successful chatbot responses indicated effective teaching while gaps revealed areas requiring improvement. Students received immediate, constructive feedback based on this assessment.

Ethical considerations.

Students provided informed consent for participation, understanding that conversation data would be used for educational research. The practice was integrated as a regular classroom activity, ensuring no student was disadvantaged by participation or non-participation.

Limitations.

The small sample size of 12 students limits generalizability of findings. As a qualitative study focused on depth rather than breadth, results reflect specific contextual factors of this particular MBA class and subject matter. The implementation provides insights into immediate engagement and outcomes but does not capture long-term learning retention. Future research with larger samples, control groups, and longitudinal designs would strengthen understanding of this pedagogical approach.

Results and Discussion

The implementation of "Teach the AI - Vidyarthi Vijaya" generated substantial qualitative evidence of positive learning outcomes across multiple dimensions.

Enhanced conceptual mastery through articulation.

Analysis of conversation transcripts revealed that the act of teaching the chatbot compelled students to reorganize their knowledge into structured, logical explanations. When the chatbot asked clarifying questions, students could not rely on vague generalities but had to provide specific examples, definitions, and explanations. For instance, when teaching about "Search Engine Optimization," students initially provided surface-level descriptions, but chatbot questions like "How exactly do search engines decide which websites to show first?" prompted deeper explanations involving algorithms, keywords, backlinks, and user experience factors.

This finding aligns with the generation effect in cognitive psychology, which demonstrates that producing content enhances memory and understanding more effectively than passive review (Slamecka & Graf, 1978). The chatbot's design ensured continuous generation demands, as students could not simply transmit information but had to actively construct explanations responsive to ongoing dialogue.

Students reported that explaining concepts to the chatbot revealed gaps in their own understanding. Several students noted moments of realization where they discovered they could not adequately explain concepts they thought they understood. This metacognitive awareness represents a critical learning outcome, as recognizing knowledge gaps is essential for targeted improvement (Flavell, 1979).

Transformation of classroom dynamics.

The initiative fundamentally altered traditional classroom power structures. Students transitioned from passive recipients of knowledge to active authorities responsible for another entity's learning. This role reversal fostered a sense of ownership and accountability absent in conventional learning activities. Observational data indicated that students approached the teaching task with seriousness and investment, taking responsibility for ensuring the chatbot "understood" properly.

The instructor's role evolved from knowledge-giver to facilitator and guide. Rather than lecturing, the instructor monitored individual progress, provided encouragement, and offered feedback based on the chatbot's acquired knowledge. This shift aligns with constructivist pedagogical principles that emphasize teachers as facilitators of learning rather than sole authorities (Brooks & Brooks, 1999).

Notably, this practice successfully addressed common barriers to active learning participation. In typical flipped classrooms, presentations, or peer teaching activities, students often resist participation due to inadequate preparation, fear of peer judgment, or public speaking anxiety (Cashin & McKnight, 2017). The private, one-on-one interaction with the AI chatbot eliminated these barriers. Students enjoyed complete autonomy over what to teach, how to explain, and at what pace to proceed, without concern for peer observation or criticism.

Development of confidence and communication skills.

Direct feedback collected from all students indicated unanimous enjoyment of the teaching experience. Students consistently reported increased confidence in articulating Digital Marketing concepts. Many noted that the activity helped them discover their ability to explain complex ideas clearly, an insight they had not gained through traditional studying or examination preparation.

The chatbot's respectful, curious demeanor contributed to this confidence building. By treating students as knowledgeable authorities and expressing genuine interest in their explanations, the chatbot created a positive emotional environment conducive to risk-taking and experimentation with different explanation strategies.

Communication skill development emerged as an unexpected but significant outcome. Students learned to adapt explanations based on feedback, simplify complex terminology, use analogies effectively, and structure information logically. These skills transfer directly to professional contexts where clear communication is essential, particularly in marketing fields where explaining strategies to clients or stakeholders is routine.

Sustained engagement and continued exploration.

The novelty of teaching an AI-driven learner generated substantial excitement and maintained high engagement throughout the activity. Observational data showed students fully absorbed in conversations, often exceeding the minimum time requirement and expressing disappointment when sessions concluded.

Significantly, direct feedback revealed that all students reported continued exploration of Digital Marketing concepts beyond the classroom session. Students indicated that the experience motivated them to deepen their understanding so they could "teach better" if given another opportunity. Several students requested additional sessions with the chatbot, suggesting intrinsic motivation to continue the teaching experience.

This sustained interest contrasts sharply with typical student responses to traditional assignments or readings. The personal connection students developed with "their" chatbot, which contained knowledge they personally imparted, created emotional investment in its learning success. This finding supports research on learning through teaching, which demonstrates that assuming responsibility for another's learning enhances personal motivation and engagement (Roscoe & Chi, 2007).

Cultural relevance and identity.

The positioning of the chatbot as "Vidyarthi Vijaya" (Student's Triumph) and its programming to use respectful, culturally appropriate language resonated strongly with students. Several students commented positively on how the chatbot "showed respect" through its communication style, employing honorifics and expressing gratitude appropriately.

This cultural adaptation represents a meaningful integration of indigenous identity with global technology. Rather than simply importing Western educational technology practices, the initiative demonstrated how AI tools can be designed to reflect and honor local cultural values and traditions. The connection to guru-shishya parampara provided a familiar conceptual framework that made the innovative practice feel both contemporary and rooted in tradition.

Students recognized the parallels between teaching the chatbot and the responsibilities of traditional teachers in Indian educational philosophy. This recognition fostered a sense of pride and seriousness about the teaching role, elevating the activity beyond a mere technological novelty to a culturally meaningful pedagogical experience.

Power of surprise learning.

The deliberate decision to implement the activity without prior announcement proved pedagogically valuable. Students could not prepare specific content or rehearse explanations, forcing them to rely on genuine understanding rather than memorized information. This approach revealed authentic knowledge levels more accurately than traditional assessments where students can prepare extensively.

The surprise element also prevented anxiety that might have built up with advance notice. By framing the activity as exploratory and emphasizing that mistakes were learning opportunities, the instructor created a psychologically safe environment despite the unexpected nature of the task.

Student feedback indicated that while initially surprised, participants quickly embraced the challenge and found the spontaneity refreshing compared to typical planned assignments. The element of surprise added an element of play and discovery that enhanced enjoyment and engagement.

Evidence of teaching effectiveness.

The instructor's post-activity assessment of each student's chatbot provided objective evidence of teaching effectiveness. Chatbots that received clear, comprehensive, well-structured teaching demonstrated sophisticated understanding when questioned, accurately explaining concepts, providing examples, and even making connections between related topics.

Conversely, chatbots that received superficial or fragmented teaching exhibited corresponding knowledge gaps, unable to answer questions about concepts that were poorly explained or omitted entirely. This direct correlation between teaching quality and chatbot knowledge provided immediate, tangible feedback that students found compelling and credible.

Importantly, this assessment method eliminated the subjective elements often present in traditional evaluation. Students could directly observe the consequences of their teaching effectiveness, making the feedback mechanism both transparent and incontrovertible. Where the chatbot struggled, students immediately recognized the need to improve their own understanding and communication, creating intrinsic motivation for further learning.

Practical Implications and Scalability

Cross-disciplinary applications.

While implemented in a Digital Marketing course, the "Teach the AI" model demonstrates broad applicability across disciplines. Any subject area where understanding requires explanation, application, and articulation can benefit from this approach. Science courses could have students teach concepts like photosynthesis or chemical bonding; humanities courses could involve teaching historical events or literary analysis; professional programs could include teaching business strategies or legal concepts.

The flexibility of the model allows adaptation to diverse learning objectives, course levels, and institutional contexts. Instructors can customize chatbot personas, questioning styles, and knowledge domains to align with specific curricular goals.

Technology platform considerations.

The Landbot.io platform used in this implementation offers accessibility for instructors without programming expertise, featuring intuitive drag-and-drop interfaces for chatbot creation. The free

tier's 100-conversation limit accommodates classes up to approximately 40 students if each uses 2-3 conversations. Premium subscriptions remove these limitations, enabling implementation in larger courses or repeated use throughout a semester.

Alternative platforms offer different features and pricing structures. Open-source large language model platforms are also emerging as viable alternatives, allowing greater customization and integration with institutional learning management systems.

Institutional investment in chatbot platforms could enable widespread adoption across departments, with shared infrastructure reducing individual instructor burden. Technical support units could assist faculty in creating customized chatbots aligned with their specific pedagogical objectives.

Implementation recommendations.

Based on this experience, several practical recommendations emerge for instructors considering similar implementations. First, careful chatbot design is essential; the chatbot must be genuinely curious and responsive rather than merely recording information. Second, providing clear instructions while maintaining the element of surprise requires balancing transparency about expectations with avoiding over-preparation. Third, ensuring technical reliability through advance testing prevents disruptions that could undermine engagement. Fourth, allocating sufficient time for both teaching and assessment phases allows meaningful interaction and feedback.

Instructors should consider integrating this practice with other course activities rather than treating it as isolated intervention. For example, following the initial teaching session, students could engage in peer discussions about what they learned through teaching, or complete written reflections on gaps they identified. Repeated teaching sessions throughout a semester could track learning progression and allow students to refine their teaching approaches.

Assessment and grading considerations.

While this implementation focused on formative learning rather than summative assessment, the practice could incorporate formal evaluation if desired. Grading rubrics could assess the comprehensiveness of knowledge taught, clarity of explanations, responsiveness to chatbot questions, and demonstrated understanding through chatbot performance. However, instructors should carefully consider whether adding formal assessment might undermine the psychological safety and intrinsic motivation that characterize the practice in its current form.

Alternative approaches might include self-assessment where students evaluate their own teaching effectiveness based on chatbot responses, or peer assessment where students interact with classmates' chatbots to evaluate teaching quality. These approaches maintain the learning-focused orientation while providing structured reflection opportunities.

Lessons Learned and Future Directions

Student-centric AI design principles.

This initiative reinforces that AI tools in education achieve maximum effectiveness when designed to empower students as active agents rather than passive consumers. By positioning AI as a learner rather than teacher, the power dynamic shifts fundamentally, placing students in authority positions that foster confidence, responsibility, and deep engagement.

Future AI educational tool development should prioritize this principle, exploring diverse roles for AI that support active learning. AI could function as debate partners requiring persuasion, collaborative team members requiring coordination, or critical reviewers requiring defense of ideas. Each role offers different learning affordances while maintaining student agency.

Curiosity-driven pedagogy.

The chatbot's programming to ask questions, express curiosity, and highlight gaps proved essential for driving deep engagement. This design element transformed the interaction from information transfer to genuine dialogue, requiring students to think critically about their explanations and anticipate potential confusion or misunderstanding.

Educational technology should incorporate curiosity mechanisms that prompt elaboration, challenge assumptions, and encourage exploration. These mechanisms replicate the Socratic method in AI form, guiding students toward deeper understanding through strategic questioning rather than direct instruction.

Value of immediate feedback loops.

Testing the chatbot's responses immediately after teaching provided powerful feedback that students found highly motivating. The transparency of this assessment - where chatbot knowledge directly reflected teaching quality - eliminated ambiguity and made learning needs explicit.

Future implementations could enhance this feedback mechanism through automated assessment features that analyze chatbot responses against learning objectives, providing students with detailed feedback on teaching effectiveness. Such systems could identify specific conceptual areas requiring reinforcement while affirming successful explanations.

Integration of tradition and innovation.

The successful blending of traditional Indian pedagogical philosophy with contemporary AI technology demonstrates that educational innovation need not abandon cultural heritage. Rather, technology can serve as a medium for expressing and extending traditional wisdom in new contexts.

This principle has implications for educational technology development globally. Rather than imposing uniform technological solutions across diverse cultural contexts, developers and educators should consider how technology can be adapted to honor local traditions, values, and

educational philosophies. Culturally responsive educational technology may achieve greater acceptance and effectiveness than culturally neutral alternatives.

Research directions.

This exploratory study opens numerous avenues for future research. Quantitative studies with larger samples and control groups could establish statistical evidence of learning gains compared to traditional instruction. Longitudinal research could investigate long-term retention and transfer of knowledge acquired through teaching AI. Comparative studies could examine effectiveness across different disciplines, student populations, and educational levels.

Research may also explore optimal chatbot design features, investigating how different levels of curiosity, questioning strategies, or personality traits affect learning outcomes. Studies examining student characteristics that predict success with this approach could identify for whom this pedagogy is most beneficial and how to adapt it for diverse learers.

Future research can employ systematic data collection and analysis methodologies to rigorously evaluate this pedagogical approach. Multiple qualitative data sources could be gathered, including complete conversation transcripts between students and chatbots, instructor observational field notes documenting engagement patterns and emotional responses, and direct verbal feedback from participants. Conversation transcripts could be analyzed using established methods such as thematic analysis to identify patterns in conceptual explanations, responses to questioning, and teaching strategy refinement. Instructor assessments of chatbot responses could provide objective evidence of teaching effectiveness, allowing researchers to compare student self-reported confidence with actual knowledge transfer quality.

Finally, research examining scalability challenges and solutions would support broader adoption. Studies investigating how to maintain teaching quality and engagement in larger classes, or how to integrate this practice systematically across curricula, would provide practical guidance for institutions considering implementation.

Conclusion

The "Teach the AI - Vidyarthi Vijaya" initiative demonstrates that reversing traditional classroom roles by positioning students as teachers to AI-powered chatbots can generate significant learning benefits. This qualitative study enhanced conceptual mastery, improved communication skills, increased confidence, and sustained engagement extending beyond formal classroom time. The practice successfully addressed common active learning barriers by creating private, non-judgmental spaces where students enjoyed complete autonomy and authority.

By integrating traditional Indian pedagogical values of guru-shishya parampara with contemporary AI technology, the initiative offers a culturally responsive model for educational innovation. The chatbot's design as a curious, respectful learner without external knowledge sources ensured that student teaching quality directly determined learning outcomes, creating transparent feedback loops that motivated continued exploration and improvement.

The practice proves readily scalable across disciplines, class sizes, and institutional contexts, requiring only accessible chatbot creation platforms and thoughtful instructional design.

This initiative contributes to growing evidence that AI in education need not replicate traditional teacher-student power dynamics. By creatively reimagining AI's role as student rather than instructor, educators can leverage technology to foster active learning, develop metacognitive awareness, and cultivate the communication skills essential for professional success. The overwhelmingly positive student response, with all participants reporting enjoyment and continued subject exploration, suggests that this approach meets important psychological needs for autonomy, competence, and meaningful engagement.

As educational institutions worldwide grapple with effectively integrating AI technologies, the "Teach the AI" model offers a promising direction that centers student agency, honors cultural traditions, and produces measurable learning outcomes. Future research and broader implementation will further refine this approach and establish its place in the evolving landscape of AI-enhanced education.

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Author Bio

Mr. Jai Ganesh M N navigates the fascinating intersection where management philosophy meets technological innovation. As an Assistant Professor in The Department of Business Administration, Vidyavardhaka College of Engineering, Mysuru, he brings an unconventional blend of engineering precision and humanistic inquiry to his teaching practice. His academic journey - from computer science to management education—reflects a deep curiosity about how technology reshapes our understanding of work, learning, and human potential.

His research ventures into unexplored territories: the transformative power of role reversal in learning, the ways AI interactions reveal our own cognitive processes, and how ancient pedagogical wisdom finds new expression through digital means. These inquiries drive his work in human resource management, organizational behavior, and educational innovation.

With roots in both industry and academia, he approaches management education as a creative endeavor rather than mere knowledge transmission. His scholarship explores performance systems, digital workplace dynamics, and the ethical dimensions of technological integration in organizational life. He believes that the most profound learning occurs at boundaries - between disciplines, between traditional and emerging practices, between teaching and being taught.

Currently, he continues experimenting with pedagogical approaches that challenge conventional classroom dynamics, seeking ways to make learning more engaging, meaningful, and transformative for the next generation of business leaders.

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Annexure:

Link to the Chatbot:
This Chatbot is created on a free platform called Landbot.io, having limited number of conversation threads, but feasible for a class of 40 students.

Link: https://landbot.online/v3/H-3111154-EAV31G3GXDE8U5WO/index.html

Supporting Evidence:

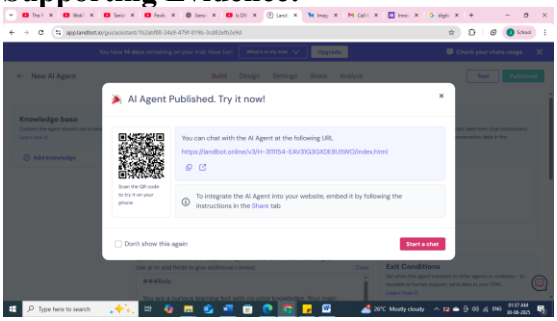

Figure 1: The first step – Designing and Publishing the Customised Chatbot.

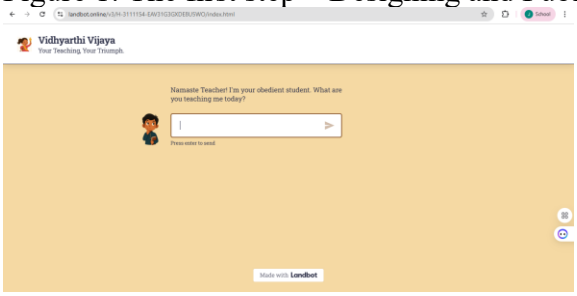

Figure 2: The Chatbot – Designed for comfortable view.

Figure 3: Conversational Samples

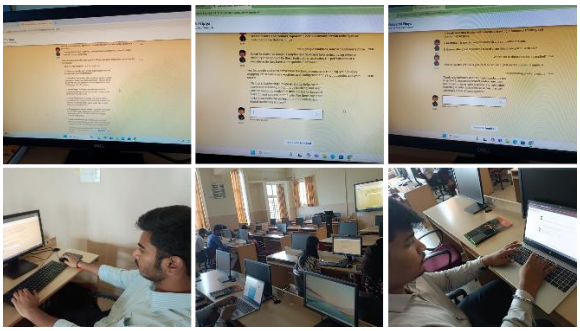

Figure 4: Students – Teaching their own Student!

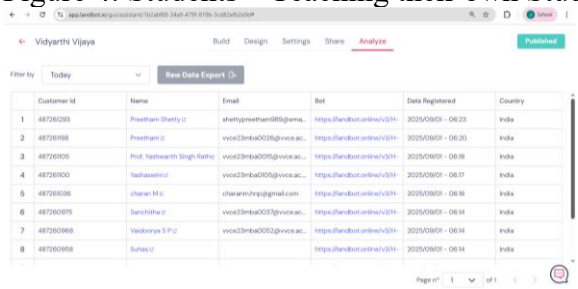

Figure 5: Monitoring each student's conversation