

SENPAI

Transforming Educational Experience Through Robotics



Introduction

InGen Dynamics, a pioneering firm in the AI and Robotics realm, recently undertook a transformative initiative at Mehar Baba Charitable Trust Institution by deploying their advanced educational robot, Senpai, for a three-month trial. This case study highlights the program's achievements, impacts, and insights gained from this unique deployment.

In the rapidly transforming world of healthcare, the integration of technology is a critical aspect, especially in the sphere of telemedicine and elderly care.

Project Overview

The trial commenced with the strategic placement of Senpai unit in classroom in Mehar Baba Charitable Trust Institution, targeting age groups ranging from 5-15 years. Senpai's primary objective was to introduce a holistic, interactive, and highly personalized learning approach, harnessing AI's power, deep learning, and social robotics.

Program Execution & Engagement

Senpai's dynamic engagement strategies swiftly piqued students' interest, with its integrated features such as YouTube for educational videos, Spotify for educational songs and soothing music, and Speech to Text for dynamic, language-focused interactions. Students enjoyed interactive sessions with Senpai, exploring knowledge bases, learning new languages, and engaging in play-based learning activities. The robot's ability to seamlessly navigate between different digital platforms kept students constantly engaged, and they eagerly anticipated their next encounter with Senpai.



Social Robotics & Holistic Learning

A key facet of Senpai is its design based on Disney's 12 principles of animation, which makes it socially engaging and friendly. It was observed that children easily connected with the robot, and it became an integral part of their daily routine. It fostered an environment where learning became an

enjoyable and eagerly anticipated activity. Senpai's emphasis on social and emotional learning resonated strongly with the children, contributing to their holistic development.

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Feedback & Reception

The feedback from students, teachers, and parents was overwhelmingly positive. Students were so engrossed and impressed with the new learning model that they were reluctant to part with Senpai at the end of the pilot. Parents and teachers noted visible improvements in students' engagement, curiosity, and overall performance. Teachers appreciated the robot's role as a teaching assistant, making education more interactive and effective.

Conclusion

The Senpai pilot program at Mehar Baba Charitable Trust Institution substantiated the transformative role of educational robotics in modern classrooms. The experiment underscored that a learner-centric, engaging, and immersive approach effectively nurtures the learners of the 21st century. The reluctance of the students to return Senpai post-trial stands testimony to the product's success, promising a future where robots like Senpai become integral to every learning environment.

By seamlessly integrating technology with traditional teaching methodologies, Senpai revolutionizes education, turning classrooms into dynamic, interactive, and exciting learning spaces. The successful execution of this pilot project at Mehar Baba Charitable Trust Institution reaffirms the potential of robotics in education, opening the door to infinite possibilities in the future of learning.



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