ANU 6.0

Transforming Rural English Learning With AI

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INTRODUCTION

English is recognized as a global language of communication, education, and career growth. In India, and particularly in Karnataka, English proficiency plays a critical role in enabling students to pursue higher education, succeed in competitive examinations, and access job opportunities. However, despite its importance, rural children often lack access to quality English learning resources.

In rural Karnataka, many children are first-generation learners. Their exposure to English is limited to school textbooks, and they rarely interact in English outside classrooms. Unlike urban counterparts, they don't have private tuitions or digital exposure in English. This results in a wide language gap between rural and urban students, which further widens as they move to higher education levels.

Our project, ANU 6.0, proposes an AI-powered humanoid robot to address this challenge by providing personalized, distraction-free English learning for children aged 6–16 years.

PROBLEM STATEMENT:

- Challenges faced by rural students:
 - Lack of English-speaking environment.
 - No personalized or trained English teachers.
 - Reliance on mobile phones for learning, which often leads to distraction.
 - Students fall behind in reading comprehension, vocabulary, and pronunciation.
- o Impact: Students struggle in higher education, competitive exams, and global opportunities due to poor English foundation.

LITERATURE SURVEY:

Survey Evidence:

ASER 2022 (National): Only 24.5% of Class V students could read simple English sentences, and 46.7% of Class VIII students could do so.

ASER 2023 (Ages 14–18): 42% of rural students could not read basic English sentences. Among those who could, 26.5% failed to understand the meaning.

ASER Karnataka 2022: In Karnataka, around 27% of Class V students could read simple English, while only 48% of Class VIII students could do so (close to national average).

These statistics reveal that nearly half of rural children in Karnataka and India struggle with basic English literacy, highlighting the urgent need for intervention.

National Findings (ASER 2022 & 2023)

- Class V: 24.5% could read simple English sentences (declined slightly from 2016)
- Class VIII: 46.7% could read simple sentences
- Ages 14–18: 42% cannot read basic English sentences, and even among readers, 1 in 4 cannot understand meaning

Karnataka-Specific Observations:

- o In Northern Karnataka districts (e.g., Bagalkot, Kalaburagi, Raichur), English learning levels are below state average due to teacher shortages.
- o In Southern Karnataka (e.g., Mysuru, Kodagu, Hassan, Mandya), exposure to English is slightly better but still urban students outperform rural peers.

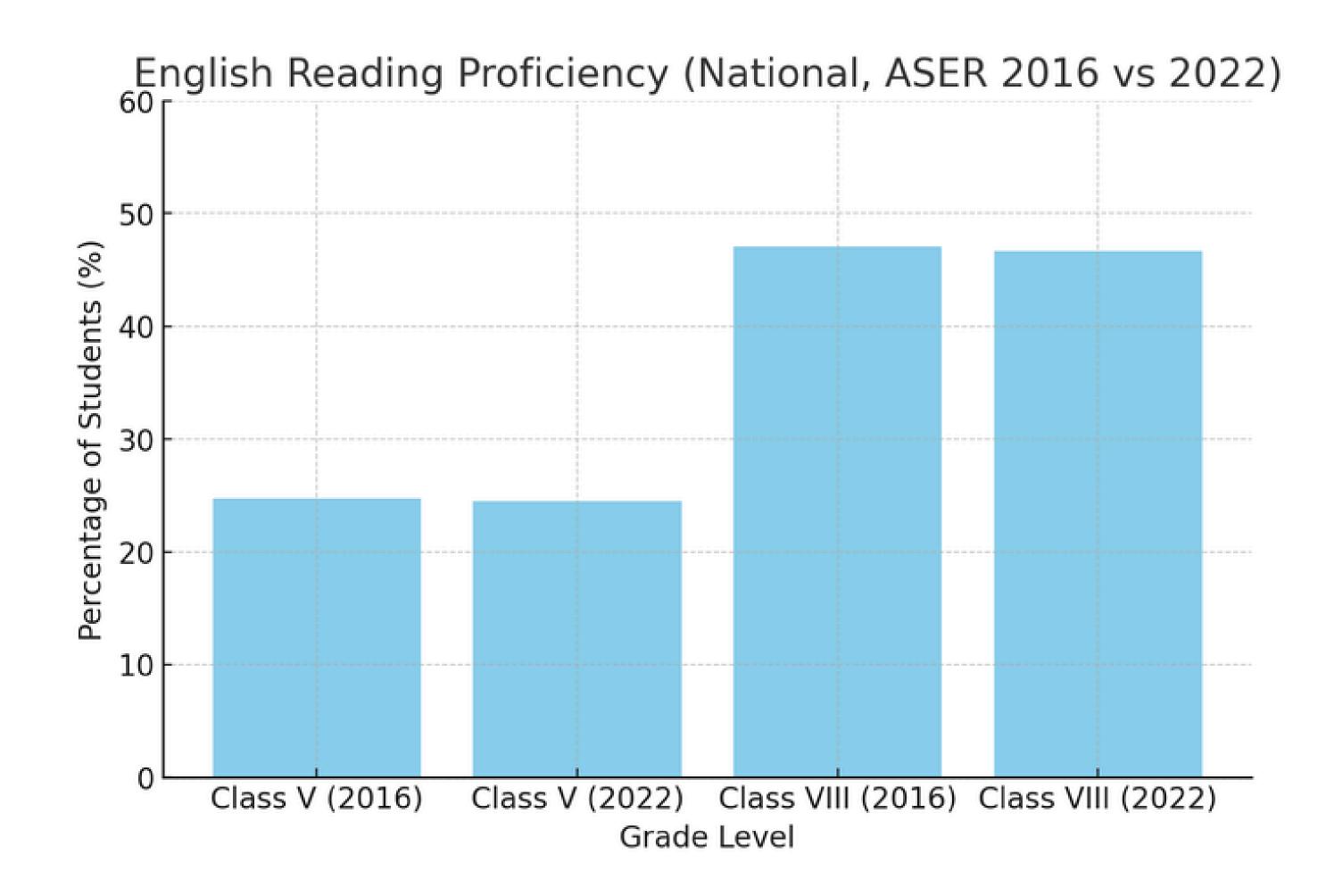


Figure 1: National English Reading Proficiency (Chart 1)

Shows a slight decline in English reading skills among Class V and VIII students across India between 2016 and 2022, based on ASER survey data.

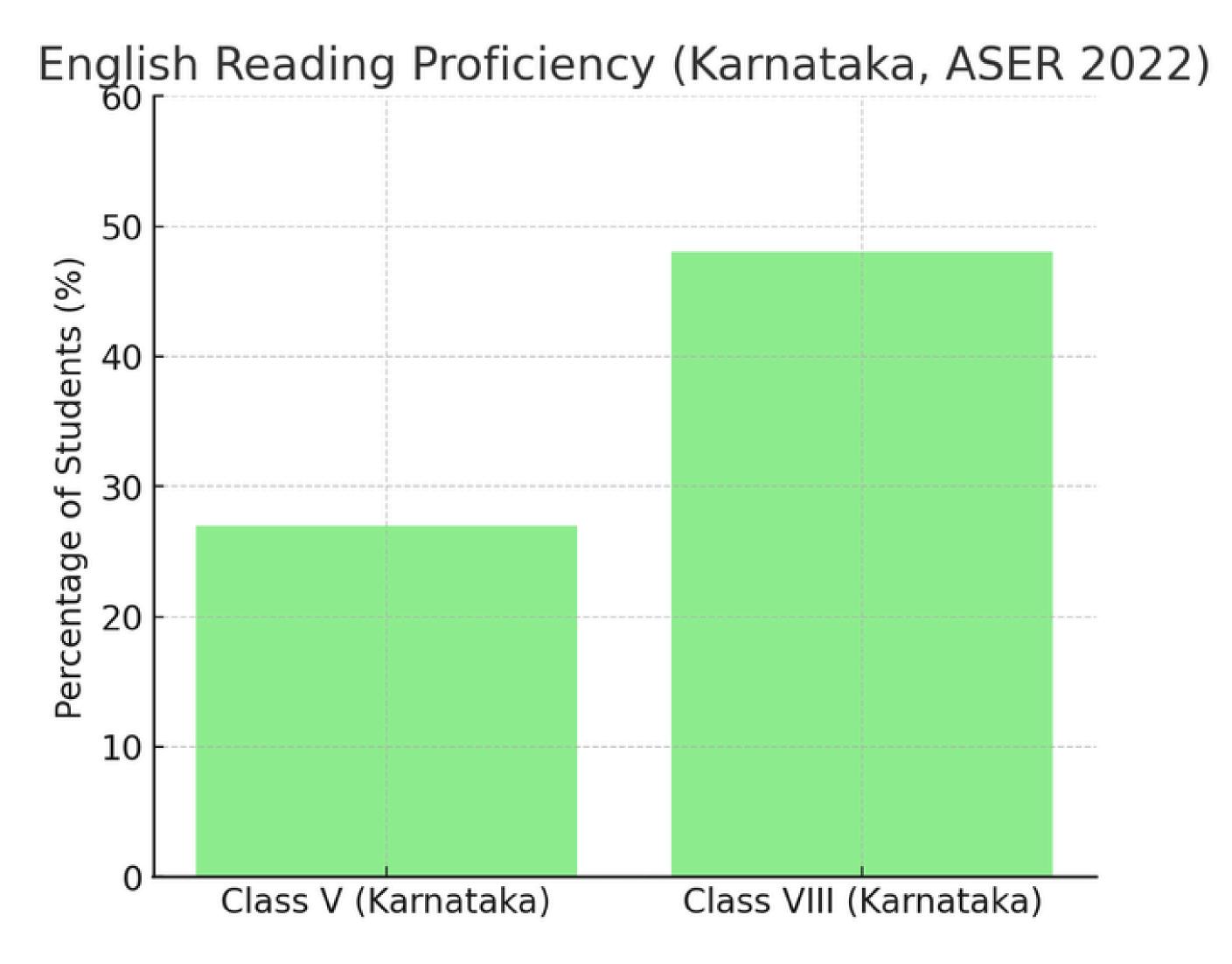


Figure 2: Karnataka English Proficiency (Chart 2):

Highlights that only 27% of Class V and 48% of Class VIII students in Karnataka could read basic English sentences (ASER 2022), indicating significant learning gaps.

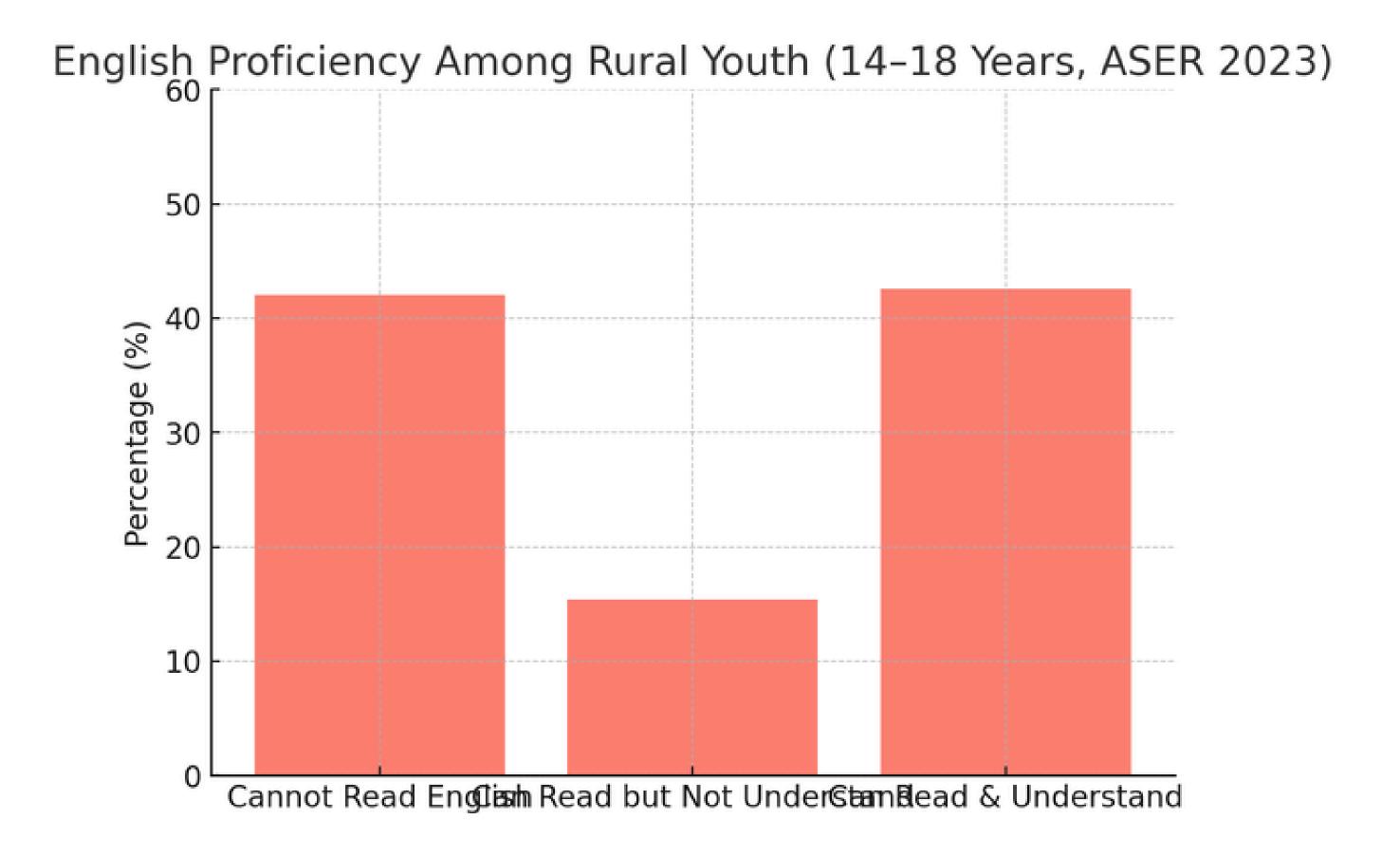


Figure 3: Rural Youth (14–18 Years) Proficiency (Chart 3):

Displays that 42% of rural youth in India cannot read basic English, and among those who can, about 26.5% still don't understand the meaning suggesting limited comprehension skills.

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