

Quizabled: Transforming Perceptions, Aspirations, and Pedagogy for Students with Disabilities

A Study of Quiz Competitions for Students with Disabilities



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Table of contents

Foreword.....	I
Executive Summary.....	II
1. Introduction.....	1
1.1 Quizabled Overview	1
1.1.1 Objectives and rationale	2
1.1.2 Structure and accessibility	2
1.1.3 Growth, expansion, and resilience.....	2
1.1.4 Partnerships and collaborations	3
1.1.5 Impact and recognition	4
1.1.6 Introduction of student projects	4
1.1.7 Setting up a dedicated Quizabled foundation	5
1.1.8 Future plans	5
1.1.9 Alignment with national and international policy objectives	5
2. Study Objectives.....	6
3. Literature Review	7
3.1 Quizzing for learning and performance gains.....	7
3.2 Social and collaborative potential of quizzes	8
3.3 Student generated quizzes.....	8
3.4 Technology-enhanced quizzing	9
3.5 Quizzing for disabled and foreign language learners	9
4. Methods	11
4.1 Study design.....	11
4.2 Sample and participants.....	11
4.2.1 Selection of teachers for interviews.....	12
4.2.2 Teacher survey sample	12
4.3 Design of data collection tools	13
4.3.1 Semi-structured interviews	13
4.3.2 Teacher survey.....	13
4.4 Quizabled event observation.....	14
4.5 Data collection procedures	14
4.6 Data analysis.....	14
4.7 Ethical considerations.....	14
5. Findings	15

5.1 Designing Accessible Quizzes.....	15
5.1.1 Choosing quiz content/topics.....	15
5.1.2 Question framing and quiz format.....	17
5.1.3 Analysis of quiz questions.....	18
5.2 Accessible Quiz Implementation.....	20
5.2.1 Outreach and mobilisation of students.....	21
5.2.1 Student registration processes.....	23
5.2.3 Student preparation processes.....	23
5.2.4 Screening and selection of students for finals.....	25
5.2.5 Organisation of Quizabled finals.....	27
5.3 Challenges and Opportunities.....	31
5.4. Outcomes of Quizabled.....	34
5.4.1 Student related outcomes.....	34
5.4.2 Teacher related outcomes.....	36
6. Discussion.....	39
6.1 Quizabled as an accessibility-first model of intellectual engagement.....	39
6.2 From competition to pedagogy: how Quizabled shapes classroom practices.....	40
6.3 Support systems and community networks.....	40
6.4 Technology and digital skills.....	41
6.5 Registration, screening, and selection.....	41
6.6 Outcomes and transfer: what changes, for whom, and why?.....	42
6.6.1 Student outcomes.....	42
6.6.2 Teacher outcomes.....	42
6.7 Challenges and opportunities: what the findings imply for strengthening Quizabled.....	42
7. Conclusion.....	44
8. References.....	46
Appendices.....	48
Appendix 1 - Interview Protocols for the Quizabled Study.....	48
Appendix 2- Consent Form.....	53

Foreword

Affirming Capabilities

At LTIMindtree, inclusion is not an initiative - it is a belief deeply woven into who we are. We are an equal opportunities employer, guided by a philosophy we proudly call **DiversAbility**, which recognizes the unique strengths that every individual brings. For us, inclusion goes far beyond policies or compliance frameworks; it reflects our commitment to building environments where every person can learn, grow, and thrive with dignity.

This belief also shapes our engagement with communities. Over the years, we have fostered a culture that celebrates the voices, talents, and journeys of persons with disabilities through sign language awareness workshops, interactive learning sessions, and platforms such as our “**Breaking Barriers: Stories That Inspire**” series, which amplifies lived experiences and personal triumphs. These efforts reflect our conviction that meaningful inclusion is achieved when we listen, learn, and create spaces that empower every individual.

It is this same conviction that led us to grow and strengthen **Quizabled**, one of our CSR initiatives focused on children and youth with disabilities. Since 2016, LTIMindtree Foundation has championed this programme with the support of our incredible partner *Quizabled* (initiated by Seva-in-Action) working together to build an accessible and enabling platform that celebrates the knowledge, confidence, and capabilities of young participants.

Over the years, Quizabled has evolved into a pan-India movement, reaching more than 12,000 students across 15 states. By adopting an accessibility-first approach to quizzing, the programme demonstrates how thoughtfully designed environments can allow children with intellectual disabilities, cerebral palsy, autism, visual and hearing impairments to participate on equitable terms and showcase their talents with pride.

This impact study, conducted by the *National Institute of Advanced Studies (NIAS), Bengaluru*, presents an independent assessment of the programme’s educational value. The findings reaffirm our belief that when accessibility is embedded into content, language, pacing, and facilitation, learning becomes truly inclusive. Quizabled has not only transformed the competitive quiz format into a meaningful learning experience but has also emerged as a pedagogical resource for teachers, encouraging inquiry, curiosity, and collaborative learning within classrooms.

The programme’s reach and outcomes have been strengthened through our ecosystem-based approach, where LTIMindtree Foundation’s vision is supported by educators, volunteers, families, grassroots organisations and technology platforms that help expand participation through online prelims and hybrid models.

Today, Quizabled stands as a mature, scalable model for accessible knowledge development - one that shifts focus from disabilities to capabilities, transforming perceptions, aspirations, and educational practices.

At LTIMindtree, we are proud to lead and grow this initiative with our partners, and we remain committed to building inclusive pathways that celebrate ability, amplify confidence, and empower every learner to rise to their fullest potential.

Archana Sahay

*Global Head – ESG & Sustainability
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Executive Summary

This report presents the findings of a comprehensive study of Quizabled, a decade-long, quiz-based educational initiative designed exclusively for students with disabilities in India. Conducted by the Education Programme at the National Institute of Advanced Studies (NIAS), Bengaluru, the study examines Quizabled's design, implementation, outcomes, and broader educational significance, with a particular focus on accessibility and pedagogy.

Quizabled was launched in 2016 by Seva-in-Action in partnership with the LTIMindtree Foundation to address a critical gap in opportunities for students with disabilities, particularly, the lack of platforms for intellectual engagement like Quiz competitions. Over the past ten years, the programme has expanded from a single-city initiative to a multi-state effort spanning 15 Indian states and engaging over 12,000 students across disability categories including intellectual disability, hearing impairment, visual impairment, cerebral palsy, and autism spectrum disorder. Through preliminaries, state finals, and national finals - supported by digital platforms since the COVID-19 pandemic, Quizabled has demonstrated both scale and resilience.

The study adopted a mixed-methods, multi-stakeholder case study design, drawing on semi-structured interviews with organisers, quiz hosts, NGO partners, teachers, parents, and funders; an online survey of 94 teachers across multiple states; document review; and direct observation of a state-level Quizabled finals event. This approach enabled triangulation of perspectives and a nuanced understanding of how Quizabled operates in diverse contexts and its varied impact.

Key Findings

Accessibility-first quiz design:

Quizabled demonstrates that quizzing, often perceived as speed-oriented and exclusionary, can be redesigned as an accessible intellectual activity. Accessibility is embedded at multiple levels: content selection, question framing, response formats, pacing, facilitation, and emotional support. Quiz formats are differentiated by disability type, using multiple-choice questions, simplified language, visual, auditory, and tactile aids, bilingual delivery, and flexible response times. These adaptations enable students to participate confidently and demonstrate knowledge on equitable terms.

Pedagogical value beyond competition:

The findings show that Quizabled functions not merely as a competition but as a pedagogical catalyst. Teachers integrate quizzing into daily classroom routines through general knowledge periods, subject-based quizzes, news discussions, and formative assessments. Students develop learning behaviours such as observation of everyday information, self-directed study, and regular engagement with current affairs. Quizabled thus strengthens classroom learning cultures.

Support systems and partnerships:

Quizabled's scalability relies on partnerships with long-standing disability-focused NGOs, locally rooted quiz hosts, sign-language interpreters, and volunteers. These partnerships enable effective outreach, mobilisation, venue selection, and the organisation of accessible events across diverse linguistic and regional contexts. Informal networks such as teacher connections across states and parent groups extend support beyond the events themselves, although uneven home-based support remains a challenge for some students.

Technology and digital skills:

The shift to online prelims and the development of a multilingual web portal expanded participation and sustained the programme during the pandemic. Teachers and students increasingly use digital tools, mock quizzes provided by Quizabled, online forms, videos, and online searches for preparation, contributing to digital literacy. At the same time, online screening has raised concerns about fairness, highlighting the need for adaptive quizzing, online proctoring tools, and learning analytics.

Outcomes for students and teachers:

For students, Quizabled contributed to expanded knowledge and interests, increased confidence and motivation, greater exposure to other schools and disability groups, and newer career aspirations. For teachers, participation serves as embedded professional development, exposing them to accessible quizzing strategies and encouraging reflective teaching practices. These outcomes extend the programme's impact well beyond individual quiz events.

Challenges and future directions:

Stakeholders identified challenges related to the high design effort required, varied teacher expectations regarding quiz content and accessibility, concerns about fairness in the preliminary rounds, limited availability of accessible venues, and travel burdens for rural families. Importantly, these challenges point to opportunities: co-creation of question banks with teachers; use of adaptive quizzes for preliminary rounds, data-informed student categorisation by disability type, severity, and age; promoting school or district-level events; expanded response modes for answering quiz questions; and stronger engagement with government systems to secure accessible venues and institutional support.

Overall, the study finds that Quizabled is a distinctive and mature model of an accessible knowledge-development platform for students with disabilities. By translating the principles of the Rights of Persons with Disabilities Act, the National Education Policy 2020, the UN Convention on the Rights of Persons with Disabilities, and the Sustainable Development Goals into concrete practices, Quizabled challenges deficit-based assumptions about students with disabilities. As the programme enters a new phase through the establishment of the Quizabled Foundation and the expansion of Innovative Learning Activities and Projects (ILAP), its future impact will depend on deepening teacher capacity to design quizzes and project-based learning activities, developing evidence-informed student categories by disability type, severity, and age, and sustaining long-term partnerships to effectively harness the learning gained through years of implementation experience. Quizabled thus offers many important lessons for adapting a range of activities for students with disabilities in India and beyond.

1. Introduction

This report presents the findings of a study on the Quizabled programme, undertaken by the research team of the Education Programme at the School of Social Sciences, National Institute of Advanced Studies (NIAS)¹, Bengaluru, India, along with Seva in Action, a Bengaluru-based non-profit organisation. Quizabled² is a decade-old, quiz-based educational initiative exclusively designed for students with different disability types. It was conceived and is led by the Seva-in-Action³.

The Education Programme at NIAS is a long-standing initiative with over two and a half decades of engagement in education research. NIAS is a 37-year-old institution dedicated to advancing multidisciplinary research across the natural sciences, social sciences, and humanities. Anchored in the programme's core focus of "Reaching the Unreached," the Education Programme draws attention to critical yet underexplored issues in education. Its work spans multiple areas of education and involves sustained engagement with stakeholders such as students, teachers, institutions, policymakers, and civil society organisations. Through identifying trends, reviewing policies and schemes, drafting analytical reports, and fostering collaborations, the programme contributes to developing meaningful and equitable visions of education.

It is within this broader institutional context that the present study examines Quizabled's design, implementation, outcomes, and broader educational significance. The report analyses how the quiz competitions are designed and conducted in accessible ways, and examines the programme's evolution, reach, and influence over nearly a decade. The subsequent sections draw on a review of Quizabled documents and on systematic data collection and analysis, including interviews and surveys with students, teachers, quiz hosts, Quizabled team members, their partner organisations, and representatives of the funding organisation.

1.1 Quizabled Overview

Ensuring equitable access and participation for all students, irrespective of ability, is a foundational principle of education. Yet co-curricular opportunities for students with disabilities are often limited to arts and sports events, leaving few avenues for intellectual engagement.

To address this gap, Seva-in-Action (SiA), a NGO working in the field of disability rights since 1985, launched Quizabled in 2016 in partnership with L&T Infotech (now the LTIMindtree Foundation⁴). Conceived as India's first quiz competition for students with disabilities, the quiz was designed and developed with support from 4 Edge Quizzing Solutions⁵, a Bengaluru-based firm experienced in hosting quizzing events (Seva-in-Action, 2021).

The inaugural edition, held in Bengaluru, engaged 110 students from 18 special schools - including 10 government schools - representing intellectual disability, autism spectrum disorder, cerebral palsy, visual impairment, and hearing impairment (Seva-in-Action, 2017). In doing so, Quizabled is said to have taken a significant step toward challenging prevailing stereotypes and highlighting the potential of students with disabilities to participate meaningfully in knowledge-based competitions (Seva-in-Action, 2021).

¹ National Institute of Advanced Studies (NIAS): <https://www.nias.res.in>

² Quizabled Foundation: <https://www.quizabled.org>

³ Seva-in-Action: <https://www.sevainaction.org>

⁴ LTIMindtree Foundation: <https://www.ltimindtree.com/social-responsibility>

⁵ 4 Edge Quizzing Solutions: <https://www.facebook.com/4edgeqs>

1.1.1 Objectives and rationale

Building on the success of the inaugural edition, Quizabled was conceived as a knowledge development platform for students with disabilities, with the following objectives:

1. Provide an accessible platform for students with disabilities to showcase their intellectual abilities.
2. Instil self-esteem, confidence, and team spirit among participants.
3. Challenge societal prejudices and low expectations for children and youth with disabilities.
4. Promote quizzing as a pedagogical tool that fosters knowledge, critical thinking, and the application of learning.
5. Facilitate networking among parents, teachers, and volunteers to strengthen support structures for the education of children and youth with disabilities.

1.1.2 Structure and accessibility

At the core of Quizabled is a three-stage structure: preliminary rounds, state finals, and national finals. Preliminaries are conducted online since 2021, while state and national finals are held at accessible venues with professional quiz hosts.

Quizabled currently targets participants in five disability categories:

- Intellectual Disability - Junior (ID Jr): 13 - 18 years
- Intellectual Disability - Senior (ID Sr): 19 - 25 years
- Cerebral Palsy (CP): 13 - 21 years
- Autism Spectrum Disorder (ASD): 13 - 21 years
- Visual Impairment (VI): 13 - 21 years
- Hearing Impairment (HI): 13 - 16 years

Quiz content and format are customised for each group through the use of audio-visual aids, sign-language interpreters, pictures, tactile materials, and option cards (Seva-in-Action, 2021). Questions are developed in consultation with teachers and therapists and are often presented bilingually (English and a regional language). They span diverse topics, including current affairs, history, science, sports, local traditions, festivals, monuments, and famous personalities, and may include identification tasks such as birdcalls, animal sounds, voices of renowned figures, and musical instruments. Quizabled is supported by a dedicated web portal that provides participant registration forms, mock-quiz practice sessions, and prelims with multilingual access (Seva-in-Action, 2021; 2022)

1.1.3 Growth, expansion, and resilience

Quizabled has expanded substantially over the past decade as shown in Figure 1.1 and 1.2 below. By 2024 it was active in 15 Indian states - Karnataka, Tamil Nadu, Kerala, Andhra Pradesh, Telangana, Maharashtra, Gujarat, Odisha, West Bengal, Delhi, Himachal Pradesh, Uttar Pradesh, Madhya Pradesh, Assam, and Meghalaya (Success Story of Quizabled, 2023; *Quizabled Newsletter*, 2024 - 25).

Figure 1.1: Growth in student participation and geographical reach over the years

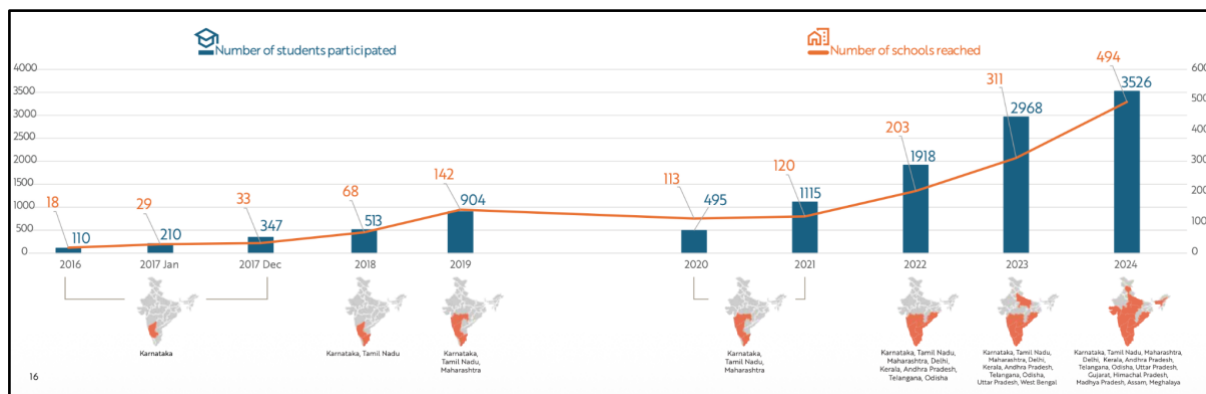


Image source: Nurturing Potential (Seva in Action, 2025)

Over this period, more than 6,700 students with intellectual disabilities, 2,000 students with hearing impairments, 1,800 students with cerebral palsy and autism, and 1,300 students with visual impairments have participated.

Figure 1.2: Cumulative student participation by disability up to the 10th edition (Quizabled, 2024)

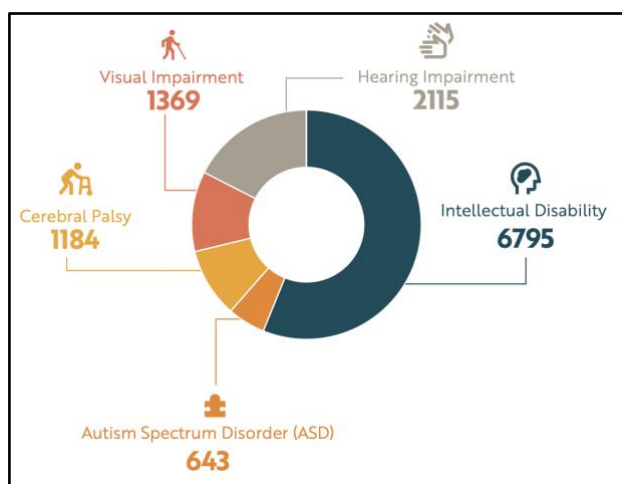


Image source: Nurturing Potential (Seva in Action, 2025)

In total, the initiative has engaged over 12,000 participants from more than 1,500 schools, supported by over 14 NGO partners nationwide.

More importantly, Quizabled continued to host quizzing events during the COVID-19 pandemic lockdowns for two years through online platforms. The Quizabled web portal enabled participants to register easily, practise with mock quiz questions, opt for regional languages, adjust font size, attend live quizzes on the day of the event, and download e-certificates.

1.1.4 Partnerships and collaborations

This expansion was made possible through partnerships with NGOs nationwide, including SPASTN (Tamil Nadu), Sujaya Foundation (Maharashtra), Special Olympics Bharat (Madhya Pradesh and Gujarat), Chetna Sansthan (Himachal Pradesh), Ashadeep (Assam), the Meghalaya Parents Association for the Disabled (MEPAD), and others.

The roles of the NGO partners included:

1. Identifying and reaching out to schools in their regions to mobilise participants for Quizabled.
2. Arranging orientation sessions for teachers and caregivers on the quiz format, student preparation, and registration.
3. Recruiting or arranging local quiz hosts, volunteers, and sign-language interpreters.
4. Ensuring that quiz questions are relevant and customised to the local context.
5. Identifying and booking accessible venues.
6. Identifying vendors to provide transportation, audio-visual equipment, awards, and stationery.
7. Managing the organisation of local- and state-level Quizabled events.

The Quizabled team at Seva-in-Action guided NGO partners through every stage of implementation, drawing on prior experience and providing detailed checklists to ensure tasks were completed efficiently.

1.1.5 Impact and recognition

Several studies and reports document Quizabled's impact and recognition:

- An impact study by the Tata Institute of Social Sciences confirmed Quizabled's role in changing perceptions of disability, enhancing learning, and contributing to SDG 4 (Quality Education) and SDG 10 (Reduced Inequalities) (CETE, 2022).
- Schools introduced practices such as daily general knowledge sessions, while students demonstrated increased enthusiasm for current affairs. Teachers and parents were made aware of children's capabilities (CETE, 2022).
- Quizabled fostered networks of teachers and parents, thereby creating a supportive environment for education of children and youth with disabilities (Celebrating Diversity, 2021).
- Quizabled also influenced systemic change - for example, a three-time Quizabled winner successfully argued in court for admission into the higher secondary science stream, citing his achievements in the quiz. The case resulted in a Tamil Nadu Government Order permitting students with disabilities to choose academic streams based on merit, marking a milestone in educational inclusion (Success Story of Quizabled, 2023).
- Quizabled received media recognition, including a feature on Doordarshan Chandana, showcasing to a wider audience how quiz competitions can be made accessible to children and young people with disabilities. (Quizabled Newsletter, 2024 - 25).

1.1.6 Introduction of student projects

In addition to quiz competitions, Quizabled introduced Innovative Learning Activities and Projects (ILAP) in 2024. ILAP is a competition of students' projects, designed exclusively for students with disabilities, to encourage the real-world application of knowledge and innovation. It aims to supplement quizzing competitions, which largely emphasise broad knowledge acquisition and recall.

ILAP was piloted in five southern states of India with students from two disability categories - intellectual disability and hearing impairment. Student teams submitted projects on a wide range of topics, including renewable energy, environmental conservation, storytelling, and the arts. Through these activities, ILAP is said to have helped foster problem-solving, creativity, and 21st-century skills among students (ILAP Report, 2025).

1.1.7 Setting up a dedicated Quizabled foundation

In 2024, for better operational efficiency, Quizabled was registered as an independent entity - the Quizabled Foundation - for new legal status and managerial structure. Previously, Quizabled was implemented by Seva-in-Action, registered as a society and funded by the LTIMindtree Foundation. Co-founded by Seva-in-Action and the LTIMindtree Foundation, the Quizabled Foundation aims to accomplish scale, provide continuity, and strengthen advocacy for better educational opportunities for children and young people with disabilities, while deepening partnerships with NGOs, schools, and government systems across India (Quizabled Newsletter, 2024 - 25).

1.1.8 Future plans

Looking ahead, the Quizabled Foundation plans to expand into underserved rural, tribal, and aspirational districts, ensuring wider participation of students with limited opportunities (Quizabled Newsletter, 2024). A central focus will be building teacher capacity to integrate quizzes more effectively into classroom instruction and assessment across diverse disability groups (Seva-in-Action, 2025). The Foundation also seeks to enhance participants' performance in schoolwork, competitive examinations, and future studies, while supporting their career aspirations. Alongside this, it will work with parents, teachers, volunteers, and schools to ensure effective preparation and participation. Quizabled further intends to nurture participants' e-learning and digital literacy skills developed through quiz engagement.

Another priority is the expansion of Innovative Learning Activities and Projects (ILAP), which promote 21st-century skills such as creativity, collaboration, critical thinking, and communication. Piloted across five states in 2024 - 25, ILAP will be scaled nationally and offered in both STEM and arts-based categories (ILAP Report, 2024 - 25; Quizabled Newsletter, 2024 - 25).

To sustain and deepen its impact, Quizabled aims to strengthen collaboration with government departments for mobilization, venue support, and policy advocacy. It also plans to document its outcomes through monographs, academic publications, and media engagement. Together, these efforts aim to contribute to the national discourse on disability rights and accessible educational opportunities. (Seva-in-Action, 2025).

1.1.9 Alignment with national and international policy objectives

Quizabled's model of intellectual engagement for students with disabilities aligns closely with key national and international policy frameworks, translating their principles into tangible action (Seva-in-Action, 2023).

At the national level, the initiative operationalizes the Rights of Persons with Disabilities (RPwD) Act, 2016, which guarantees equal opportunity and reasonable accommodation for persons with disabilities across education, cultural life, and recreation. It also embodies the principles of the National Education Policy (NEP) 2020, emphasizing equitable and accessible learning opportunities. By making intellectual engagement accessible through quizzing and project-based learning, Quizabled addresses the NEP's call for holistic development - ensuring that students participate meaningfully in all curricular activities, rather than merely enrolling.

Internationally, Quizabled advances the objectives of the United Nations Convention on the Rights of Persons with Disabilities (UNCRPD, 2006), particularly Article 24 (Right to Education) and Article 30 (Participation in Cultural Life, Recreation, Leisure, and Sport). Quizabled creates opportunities for intellectual recreation and recognition that are often denied to students with disabilities.

Quizabled also contributes concretely to United Nations Sustainable Development Goals 2015 (SDGs):

- SDG 4 (Quality Education): Contributes to the target of eliminating disparities and ensuring equitable access to effective learning opportunities for persons with disabilities.
- SDG 10 (Reduced Inequalities): Supports the target of promoting social inclusion of persons with disabilities by challenging stereotypes and low expectations about their capabilities.

2. Study Objectives

With the above background on Quizabled, the following objectives were set for the current study:

2.1 Accessibility and Inclusion

- Document quiz hosts' practices in designing accessible quiz content and formats for different disability profiles.
- Review participant selection and screening processes for Quizabled events.

2.2. Pedagogical Value and Classroom Integration

- Investigate quizzing as a pedagogical tool for students with disabilities, focusing on motivation, cognition, and socio-emotional growth.
- Explore how teachers integrate quizzes into classroom instruction and assessment across diverse disability groups.

2.3 Support Systems and Community Networks

- Identify the support required by participants, parents, teachers, volunteers, and schools for effective preparation and participation.
- Analyze how informal networks of parents, teachers, and volunteers emerge and function as long-term support structures.

2.4 Technology and Digital Skills

- Examine the development of participants' e-learning and digital literacy skills gained through quiz preparation and participation.

2.5 Impact, Learning, and Transfer

- Assess Quizabled's decade-long impact vis-a-vis its own objectives, and on participants, teachers, schools, and parents with particular reference to its contribution to SDG 4 (Quality Education).
- Examine how learning from Quizabled transfers to regular schoolwork, competitive examinations, further studies, and career aspirations.

3. Literature Review

To address the objectives of this study, we reviewed literature on quizzing in education from the ERIC, ScienceDirect, and Google Scholar databases, with particular attention to studies relevant to Quizabled's design, implementation, and future directions. While quizzing has been widely examined across disciplines and educational levels, research explicitly focusing on quiz-based approaches for students with disabilities remains limited. In response, this review adopts a broader perspective, drawing on general education literature to identify pedagogical principles and design features that could be helpful for students with disabilities.

The review conceptualises quizzing as a pedagogical practice encompassing learning reinforcement, motivation, collaboration, learner agency, technology use, and accessibility. In light of Quizabled's recent introduction of a student project competition aimed at promoting real-world application beyond memorisation and recall, the review also examines how quiz-based and project-based formats can complement one another. Specifically, it explores how quizzes can support skills such as question framing, information-seeking, critical thinking, and teamwork, and how quizzing elements can be embedded within broader project-based learning designs.

Based on these considerations, the literature is synthesised under five interrelated themes that move from evidence on learning outcomes to broader questions of participation, agency, technology, and accessibility: (1) quizzing for learning and performance gains; (2) collaborative and social dimensions of quizzing; (3) student-generated quizzes; (4) technology-enhanced quizzing; and (5) quizzing for disabled and diverse learners.

3.1 Quizzing for learning and performance gains

Multiple research studies report that quizzes can support learning and improve academic performance across disciplines. Many reports also illustrate how quizzing can be integrated into subject learning and, in some cases, into project-based learning designs. In science classrooms, Calhoun (2005), reported embedding quizzing within a game-based activity centred on printed circuits to teach electronic components to middle school students. In language classrooms, Becker-Cantarino (1977) reported using quizzes with blank maps to highlight aspects of geography, history, and culture. In higher education mathematics, Peralta and Aguilar (2024) studied 78 undergraduates in Mexico who participated in a 90-minute, teacher-facilitated linear algebra quiz game (70 questions, immediate feedback). Most students perceived the activity as engaging and useful for reviewing concepts, identifying gaps, and learning from peers.

Empirical research further establishes the effectiveness of frequent, low-stakes quizzes. McDaniel et al. (2011) conducted classroom-based experiments with eighth-grade science students in a U.S. public middle school using within-student designs that compared learning from quizzed content (clickers with feedback) against comparable non-quizzed content. They also varied quiz timing (pre-lesson, post-lesson, and review) and repetition, and assessed outcomes using regular unit exams as well as delayed end-of-semester and end-of-year tests. Across experiments with samples ranging from 54 to 92 students, students reliably performed better on quizzed content; review quizzes produced the largest gains, and benefits persisted for months.

Evidence from higher education similarly indicates that quizzes can support achievement at scale. In a U.S. undergraduate Anatomy and Physiology course ($n = 238$), Utz and Bernacki (2018) analysed voluntary web-based quiz use through learning management system analytics alongside a prior-knowledge pretest, and compared exam outcomes across quiz-use groups using mixed-design ANOVA.

Students who used quizzes repeatedly were found to outperform occasional users and non-users, with the strongest gains among those with lower prior knowledge-suggesting that optional retrieval-practice quizzes can improve performance.

3.2 Social and collaborative potential of quizzes

Beyond individual learning, research highlights the social and collaborative potential of quizzing. When designed as shared problem-solving activities, quizzes can promote dialogue, peer feedback, and collective sense-making. Ewald (2015) examined interactions among 20 learners in an intermediate, university-level Spanish course as they collaborated in small groups to complete a quiz. By analysing the frequency and types of error corrections (self-initiated and other-initiated) and the focus of students' negotiations, the study shows that collaborative quizzing can function as a formative assessment space in which learners identify linguistic problem areas and work together to resolve them.

Similarly, Rezaei (2015)'s quasi-experimental study in an higher education context found that when the quizzes are open-book, and students have a chance to collaborate (discuss in pairs how to answer the quiz questions), they perform significantly higher in their final examinations and their final projects (an indicator of conceptual learning). Together, these studies indicate that quizzing can function as a structured social practice that supports interaction, reflection, and higher-order thinking, with particular relevance for team-based quiz formats.

3.3 Student generated quizzes

Another strand of research emphasises learner agency through student-generated quizzes, positioning students not only as respondents but also as designers of assessment tasks. This line of work highlights how quiz authorship can support learning through analysis, explanation, and reflection.

Kerkman et al. (1994) examined a quiz-based instructional strategy designed to increase learning by requiring students to write a multiple-choice question for each reading assignment and explain why each response option was correct or incorrect. To test the approach, one developmental psychology class authored questions with explanations, while another class did not. Both classes took pop quizzes composed of the 10 best student-generated questions. The experimental class achieved significantly higher quiz scores than the control class, even after grade point averages were statistically controlled. The formal correctness of the questions predicted quiz scores more strongly than their conceptual quality, and the authors suggest that explaining each option may have strengthened students' conceptual networks, contributing to improved performance.

Fukushima (2006) similarly reports strong motivational and learning benefits in a U.S. university course project in which students created an online Japanese grammar quiz for the World Wide Web. Students produced a simple but well-designed website featuring multiple-choice questions with concise explanations. The study suggests that the process of quiz and webpage creation generated high motivation and functioned as a constructive review of second-language grammar rules.

More recent studies reinforce these findings at scale. Riggs et al. (2020) analysed two cohorts of undergraduates in a large introductory molecular biology course in Canada (n = 380 in 2017; n = 355 in 2018, after attrition). Using learning-analytics data from the *Quizzical* platform, students were required to author multiple-choice questions and were encouraged to participate in peer quizzes. After controlling for prior academic achievement, the study found that authoring and quiz participation were associated with improved exam and course performance, suggesting that acting as both quiz designers and respondents supported deeper engagement with course topics.

Importantly, similar benefits have been documented in school contexts. Zhou et al. (2013) describe a Grade 6 classroom activity in which students collaboratively authored quizzes using the Multi-Mouse Quiz Editor (MMQEditor) and then evaluated one another's work using the MMQ system. The authors link this workflow of collaborative quiz creation and mutual evaluation to increased peer interaction and engagement during review.

Collectively, this literature suggests that student-designed quizzes can serve as powerful pedagogical tools across educational levels, shifting learners from passive recipients of assessment to active constructors of knowledge through explanation, reflection, and peer interaction.

3.4 Technology-enhanced quizzing

Advances in educational technology have expanded the scope of quiz-based pedagogy in classroom, blended, and online contexts. Lowe et al. (2014) reported that embedding quizzes within learning management systems in few colleges in the United States was associated with higher undergraduate student participation - particularly when quiz completion was linked to course credit and provided instructors with timely insights into students' understanding. Mouri et al. (2021) (Japan; $n = 12$ international university students learning Japanese) examined an automatically generated vocabulary quiz system based on learners' digital textbook operation logs, using a pre-test/post-test experimental design comparing an experimental group (automatic quizzes) and a control group (teacher-created quizzes). The study found no significant difference in learning gains between the two groups, indicating equivalent effectiveness. Correlation analysis further showed a strong positive association between the number of quizzes attempted and post-test scores, suggesting that more frequent quiz engagement was linked to higher achievement.

Building on developments in automation and personalisation, gamified digital quizzes represent a further evolution. Zainuddin et al. (2020) (Indonesia; $n = 94$ secondary science students) used a mixed-methods intervention study in which students received traditional instruction with paper-based quizzes and gamified formative assessments delivered via three digital quiz platforms (Socrative, Quizizz, and iSpring Learn LMS). Quantitative data came from formative quiz scores and post-questionnaire surveys, and qualitative insights were gathered through personal interviews. The study found that both traditional paper-based quizzes and gamified e-quizzes were effective for assessing student learning performance in science classrooms, and students reported positive engagement with the gamified formats. More recently, large language models such as Gemini, ChatGPT, and others enable rapid generation of customised quizzes, offering flexible practice opportunities; however, systematic research on their pedagogical implications is needed.

3.5 Quizzing for disabled and foreign language learners

A growing body of research demonstrates that quizzing can support learners with diverse needs when embedded within structured and accessible instructional approaches. Jimenez, Lo, and Saunders (2014) (United States; $n = 3$) showed that explicit, highly structured instruction implemented through a single-subject multiple-probe design across three science units (with replication across students) comparing baseline, scripted lessons, scripted lessons plus guided notes led to improved daily science quiz performance among elementary students with moderate to severe intellectual disability and autism. Similarly, Haydon et al. (2010) reported that the structured cooperative learning strategy *Numbered Heads Together* led to higher on-task behaviour and improved daily quiz scores among eight seventh-grade students with disabilities - including learning disabilities, emotional/behavioural disorders, and mild intellectual disability - using an alternating-treatments design that compared typical hand-raising instruction with NHT and an NHT-plus-incentives condition in a language arts classroom in the United

States. At the level of early literacy, Subramaniam et al. (2024) in Malaysia reported improved foundational reading skills among five beginner-level dyslexic learners following gamified Quizizz-based activities, using a qualitative, descriptive approach that combined unstructured teacher interviews with pre-post reading tests.

Moedjito (2018), in a quantitative one-group pretest-posttest study with Indonesian university-level English as foreign language (EFL) learners, found that the structured instructional model - Quiz-Demonstration-Practice-Revision (QDPR) was associated with significant pre-post gains in pronunciation-related outcomes, based on oral reading assessments and a written pronunciation test, analysed using paired-sample t-tests and regression. Across these studies, a consistent insight emerges: quizzes are likely to be more effective when embedded within instructional cycles that combine explanation, guided practice, feedback, and revision, rather than being used as stand-alone assessment tools.

Taken together, the literature positions quizzing as a flexible pedagogical tool that can support learning, improve academic performance, foster collaboration and learner agency, and promote inclusion. Although direct evidence on quizzing with students with disabilities remains limited, findings from general education research consistently point to design principles - such as the value of low-stakes quizzes, collaborative formats, student-generated quizzes, and thoughtful technology integration - that are highly relevant. Across themes, the evidence suggests that quizzes are more effective when meaningfully embedded within broader instructional designs. These insights inform the analysis of Quizabled's design, implementation, and outcomes.

4. Methods

This chapter outlines the research design, sampling strategy, data collection tools, and analytic procedures adopted for the study of the Quizabled programme. The methodological approach was chosen to capture the complexity of a decade-long, multi-state educational initiative involving diverse stakeholders, disability groups, and implementation contexts.

4.1 Study design

The study adopted a **case study methodology**, which is particularly well suited for examining complex educational interventions situated within real-world contexts. As articulated by Yin (2018), case study research enables in-depth, contextualised analysis of programmes where boundaries between the phenomenon and its context are not clearly delineated. Quizabled exemplifies such a case, involving multiple actors (organisers, quiz hosts, NGO partners, teachers, students, parents, and funders), varied implementation settings, and layered processes of design, delivery, and participation.

To address the study objectives, a **mixed-methods, multi-stakeholder case study design** was employed. This design combined qualitative methods, semi-structured interviews and event observation with a quantitative teacher survey. Drawing on multiple sources of evidence made it possible to triangulate perspectives and generate a rich, holistic understanding of how Quizabled is conceptualised, implemented, and experienced, as well as the outcomes attributed to it.

4.2 Sample and participants

Data were collected from six key stakeholder groups (listed in table 4.1 below) closely involved in the Quizabled programme, along with direct observation of one major Quizabled event. The sampling strategy was purposive, aimed at capturing a range of roles, experiences, and perspectives across programme design, implementation, and participation.

Table 4.1: Stakeholder sample

Stakeholder group	Number of interviews
Organiser team (Seva-in-Action / Quizabled team)	4
Quiz hosts	3
NGO partners	3
Funding organisation representatives	2
Teachers + Students (across disability categories)	5
Parents / guardians	3

In addition, one Quizabled event was observed.

The stakeholders provided insights into programme origins and vision, quiz design and facilitation, outreach and mobilisation, student preparation and participation, perceived impacts, and future directions.

4.2.1 Selection of teachers for interviews

Teachers were selected through convenience sampling, guided by the need to ensure diversity rather than statistical representativeness. The selection aimed to cover:

- All major disability categories represented in Quizabled
- Multiple geographic zones (North, South, West, East)
- Different locale types (urban, semi-urban, and rural contexts)

The interviewed teachers were drawn from the following schools:

- **School A, South Zone, Rural** – Teachers of students with Hearing Impairment
- **School B, South Zone, Urban** – Teachers of students with Hearing Impairment
- **School C, West Zone, Urban** – Teachers of students with Cerebral Palsy and ASD
- **School D, North Zone, Urban** – Teachers of students with Intellectual Disability
- **School E, South Zone, Urban** – Teachers of students with Visual Impairment

This selection enabled eliciting and documenting valuable perspectives unique to specific disability types and institutional contexts.

4.2.2 Teacher survey sample

To complement the interview data and broaden coverage, an online survey was administered to teachers whose students had participated in Quizabled. A total of **94 teachers** responded to the survey, representing multiple Indian states and union territories as given in table 2.2 below.

Table 2.2 State-wise distribution of teacher survey respondents

State / UT	Number of teachers
Karnataka	18
Tamil Nadu	20
Himachal Pradesh	15
Maharashtra	12
Odisha	11
Andhra Pradesh	8
Assam	5
Puducherry (UT)	3
Delhi (NCT)	1
West Bengal	1
Total	94

The survey data provided insights into student preparation practices, perceived impacts of Quizabled, and teachers' reflections on classroom integration of learning from Quizabled.

4.3 Design of data collection tools

Multiple tools were developed to align with the study objectives while remaining sensitive to the roles and experiences of different stakeholders.

4.3.1 Semi-structured interviews

Semi-structured interview schedules were prepared separately for each stakeholder group. While the specific questions differed, all interviews were aligned with the overarching objectives of examining accessibility, pedagogy, implementation processes, support systems, outcomes, and future directions.

Table 4.2: Focus areas of interviews by stakeholder group

Stakeholder	Main thematic areas covered
Organiser team (Seva-in-Action / Quizabled)	Personal roles and programme origins; vision and alignment with SDG 4; programme evolution; event logistics; screening and selection; accessibility adaptations; support for schools, teachers, and parents; volunteer and partner management; data, monitoring and evaluation; technology integration; learning and impact; future directions
Quiz hosts	Professional journeys and motivation; quiz design and disability-wise adaptations; use of prelim and screening data; facilitation strategies; learning and transfer; community-building; technology and AI; perceived impact and innovations
NGO partners	Nature and evolution of partnerships; outreach and mobilisation; orientation and support for schools and stakeholders; contributions to design and logistics; facilitation of screening; perceived impacts; emerging networks; improvements and future goals
Teachers and students	Participation history; preparation strategies; teacher support; event experiences (design, interactions, accessibility); learning and identity shifts; classroom transfer; concerns and suggestions
Parents / guardians	Child's participation history; preparation and home support; event experiences; peer-parent interactions; perceived learning and behavioural changes; experiences of winning or losing; challenges and suggestions
Funding organisation	Motivation and CSR alignment; positioning within the funding portfolio; comparisons with other initiatives; drivers of long-term commitment; expected outcomes and metrics; guidance on fund allocation; non-financial support; future outlook and challenges

Interviews were conducted in a conversational manner to allow participants to elaborate on issues they considered significant, while ensuring coverage of key themes.

4.3.2 Teacher survey

The teacher survey included a mix of closed-ended and open-ended questions. It focused on student preparation practices, use of quizzes in classrooms, accessibility supports, perceived student and teacher outcomes, and suggestions for improving Quizabled. The survey enabled aggregation of responses across states and disability categories, complementing the depth of interview data.

4.4 Quizabled event observation

To gain first-hand insight into programme implementation, the researcher conducted a non-participant observation of the 11th edition of the Quizabled Tamil Nadu State Finals, held on 10 October 2025 at the Spastics Society of Tamil Nadu.

The observation focused on:

- Venue accessibility and physical arrangements
- Organisation of semi-finals and finals
- Roles played by quiz hosts, volunteers, and sign language interpreters
- Disability-specific accommodations during quiz facilitation
- Student participation, engagement, and interaction
- Audience engagement and inclusion-related activities

Field notes were recorded during and immediately after the event and later integrated with interview and survey data to support triangulation.

4.5 Data collection procedures

Data collection occurred in multiple phases. Interviews were conducted with organisers, quiz hosts, NGO partners, teachers, parents, and the funding organisation representative, either in person or online, depending on location and availability. Interviews were audio-recorded with consent and transcribed verbatim. The teacher survey was administered online to enable participation across states. Programme documents, reports, newsletters, and sample quiz questions were also reviewed to contextualise and corroborate stakeholder accounts.

4.6 Data analysis

Qualitative data from interviews, observation notes, and documents were analysed thematically. An initial coding framework was developed based on the study objectives and refined inductively as analysis progressed. Codes were grouped into higher-order themes related to accessible quiz design, implementation processes, challenges and opportunities, and outcomes for students and teachers. Quantitative survey data were analysed descriptively to identify patterns in preparation practices, perceived impacts, and areas for improvement. Findings from different data sources were triangulated to strengthen validity and to identify points of convergence and divergence across stakeholder perspectives.

4.7 Ethical considerations

Participation in the study was voluntary. All participants were informed about the purpose of the study and how the data would be used. Identifying information was anonymised. Particular care was taken when reporting data related to students with disabilities to ensure respectful representation and avoid deficit-oriented framing.

5. Findings

An overarching theme running through the Quizabled initiative is how it makes and sustains quizzing as an accessible experience for students with different disabilities. Consequently, the findings are organised into four broad areas: (1) accessible quiz design; (2) accessible quiz implementation processes; (3) challenges and opportunities identified by key stakeholders; and (4) the different types of outcomes observed among students and teachers.

5.1 Designing Accessible Quizzes

This section examines how quizzes were conceptualised and prepared for Quizabled. Interviews with quiz hosts indicate that accessibility was addressed at multiple stages of design: selecting appropriate content and topics; framing quiz questions by accounting for students' cognitive, sensory, and communication needs; and deciding on the overall quiz duration and format while anticipating challenges during quiz facilitation. Each of these stages involved differentiation based on students' disability types. In addition, actual Quizabled question sets were examined to understand how decisions around content selection, question framing, and facilitation were operationalised in practice.

5.1.1 Choosing quiz content/topics

Selection based on classroom observations and teacher consultations

Across interviews, quiz hosts described content selection for Quizabled as a careful process involving considerable research and effort. Quizabled team members and NGO partners reported facilitating this research. In the initial editions, this process began with direct classroom observations and consultations with teachers:

We sat in their classrooms, observed lessons, and spoke to teachers to understand the syllabus - what subjects were covered and what the children watched or discussed daily..... this helped us gauge their interests - cricket, local movies, local food - alongside subjects like mathematics and science. (Quiz Host 1)

A second host described a similar approach, adding the importance of consulting local people to ensure contextual relevance across locations:

In the first few years, we spoke to a lot of teachers and specialists from participating schools. This was our starting point... When I visited other cities, I spoke to local people to see what was relevant there. (Quiz Host 2)

Hosts also described how they continued to revise content through periodic consultations with teachers, who helped them stay attuned to students' shifting interests:

Every few years we ask teachers about students' new interests. A few years back, they said children loved advertisements. More recently, they mentioned an interest in technology. Then I made a round of mobile apps – how they look and their logos on mobile phones. (Quiz Host 2)

Moving towards an organised process for selection

Over time, content selection practices became more structured and organized. One host explained how they maintained a balance between continuity and novelty describing it as the “80 - 20” rule:

We try to replicate about 80% of questions of a similar nature from the previous year, but include 20% that are slightly outside the usual scope; otherwise, it becomes monotonous. (Quiz Host 1)

Complementing this, preliminary rounds are now used strategically to refine topics for the finals. Hosts embed experimental items to understand what students can comfortably attempt:

Once we do the online prelim, we don't start preparing finals questions until we get the prelim results. Out of 15 prelim questions, we include about five experimental ones to test which topics students are comfortable with. This helps us decide final-round topics. (Quiz Host 1)

Balancing syllabus-based and fun-oriented content

Additionally, regarding the balance between curriculum-based topics and an element of fun for children, quiz hosts emphasised different perspectives:

In the first round, which generally has six questions, we include four syllabus-based questions and two that are slightly off-topic. (Quiz Host 1)

Another host emphasised prioritising the fun element, viewing learning as occurring organically:

Personally, I like to make the quiz more entertaining for them. Of course, people learn along the way, but they should also enjoy it - the crowd should be interested. (Quiz Host 2)

Incorporating socially and disability-relevant themes

Alongside these informed choices, the Quizabled team and NGO partners also included socially relevant themes:

Sometimes the Quizabled team and NGO partners suggest topics. For example, once there was a suggestion to include questions on climate change and plastic waste. (Quiz Host 1)

Across editions, hosts also intentionally include topics that are relatable to students with disabilities:

There are wonderful ads on the accessibility of mobile applications for different disabilities. There's also a famous stand-up comedian who has cerebral palsy. Questions on Special Olympics or Paralympics.....I have included questions on these aspects many times. (Quiz Host 2)

Prioritising content familiar across socio-economic backgrounds

Moreover, concerns about shared reference points also shape content selection. One host described deliberately using topics that cut across socio-economic differences:

There are some equalisers even in India. It could be entertainment - films..or cricket... Virat Kohli is one topic that everybody loves, irrespective of their background. So we try and use such content.....and avoid niche topics as far as possible. (Quiz Host 3)

Differentiating content based on disability

Over years of hosting, quiz hosts have also developed an awareness of what topics works for different disability groups:

For intellectual disability, senior or junior, I focus on daily life, occupations, animals, and cartoons.....For cerebral palsy and autism, we use current affairs...sports, and popular culture. Questions on personalities - especially Indian ones - work well. But international topics rarely do....Geography almost never works. (Quiz Host 2)

Knowledge transfer to new quiz hosts

Another host, who joined in later editions, emphasised drawing on the Quizabled team's accumulated expertise when deciding content and difficulty levels:

Thankfully, we come with a set of experts at Quizabled who know these kids, and this is where we use their inputs a lot - what sort of topics are they interested in.... what sort of content works for them, what is too tough for them. (Quiz Host 3)

Reflections on the effort involved

Finally, hosts reflected on the substantial effort involved in creating content and the ongoing challenge of striking the right level of difficulty:

It's way more time-consuming to do content for this quiz (*Quizabled*).... since the needs are very, very special and specific, this takes a lot of homework. (Quiz Host 3)

You want to make it (*content*) slightly challenging, so that it's not too easy. It is a difficult balance, especially with intellectual disability - we've taken a long time to figure it out. (Quiz Host 2)

Overall, content selection for Quizabled is an iterative process that draws on classroom observations, teacher feedback, knowledge of different disability types, preliminary-round results, and ongoing iterations, based on the quiz hosts' reflectivity. This has contributed to an accessible mix of familiar daily-life topics, syllabus-based questions, popular culture, and disability-relevant themes, ensuring that the quiz remains engaging, familiar across socio-economic backgrounds, and appropriately challenging for students with different disability types.

5.1.2 Question framing and quiz format

Selecting appropriate content is one part of accessible quiz design. Framing questions and the overall structuring of the quiz forms the second key element of ensuring accessibility. According to quiz hosts, this involves several decisions: whether questions should include options, how complex answers can be, the structure and length of questions, and the overall duration of the quiz for different disability types.

Including options

For students with intellectual disabilities, multiple - choice questions are said to be essential:

Especially students with intellectual disabilities, they cannot answer questions without options at all. It's very difficult for them to formulate the answer, even if it's something simple like 'cat'..... But if it's A, B, C, D and option C is 'cat,' they can just say 'C.' So that's one of the biggest adaptations, which changes from group to group. (Quiz Host 2)

For others, options can become distracting. For students with cerebral palsy, quiz hosts focus on keeping answers that are easy to articulate:

For students with cerebral palsy, we try to keep answers simple to say, because many have mobility issues that affect their speech. So, if the answer is 'Sachin Tendulkar,' it may be very difficult for them to say 'Tendulkar.' Many of them put in a lot of effort and just say 'Sachin', and that still gets them the points. (Quiz Host 2)

Structuring Questions

For hearing-impaired students, question structure and sentence length become particularly important:

For hearing-impaired students, we have to keep questions very direct. Even with a sign language interpreter, if the question is long or embedded in a sentence, they often don't understand..... So it's mostly things like 'Identify person' or 'What this?' - very simple, straightforward questions. Basically, they are not taught English grammar in the conventional way. They might know 'India

capital Delhi’, but not ‘The capital of India is Delhi.’ So you can’t really ask them complex sentence-based questions. (Quiz Host 1)

Experimentation over the years has also informed what kinds of question formats work or do not work:

I have experimented with maps; instead of giving options, we have tried different things. For example, we have shown a map of Karnataka and asked them to point out the answer.... We also tried putting different blocks on a person’s face and removing them one by one for students to identify who it is.... They found that quite difficult too. I’ve tried many adaptations. (Quiz Host 2)

Deciding quiz duration

The total number of questions and overall quiz duration are also decided with students’ attention spans and comfort in mind, particularly for groups such as autistic students:

It is not easy to keep children, especially some groups such as those on the autism spectrum, in a venue or under the spotlight on stage for long periods. So we keep the questions minimal, crisp, short, easily understandable, and as uncomplicated as possible, ensuring they are really easy to comprehend. We also keep the event itself very crisp, usually under an hour. (Quiz Host 3)

Additionally, quiz hosts highlighted the need to account for challenges during quiz facilitation that are unique to Quizabled, which has implications for both question framing and overall quiz duration:

I emphasise a lot in Quizabled. In a regular quiz I don’t emphasise it so much. When setting a question for Quizabled itself, we try to add clues here and there to push them to answer. (Quiz Host 1)

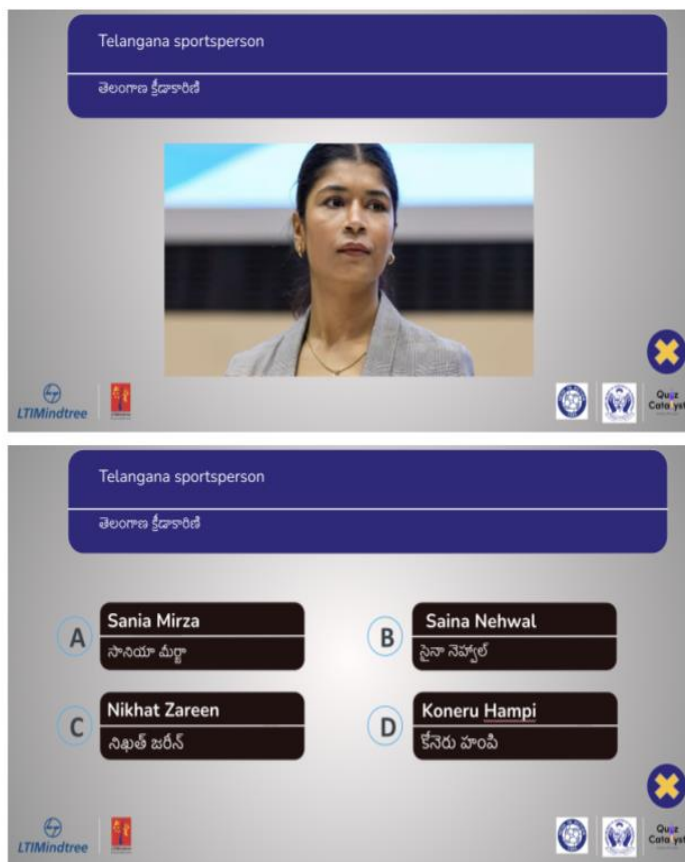
You need a lot of patience and you have to wait for them to answer. In a mainstream quiz, you usually know within 15 seconds. Here, the biggest difference is time: many children need longer to understand the question and gather the courage to answer. My job is to give them enough time, but not too much, so that it’s fair to everyone. I also ask the audience to be patient. (Quiz Host 2)

Above accounts illustrate that decisions around question framing and quiz format in Quizabled are carefully tailored to match the cognitive, communicative, and sensory needs of different disability groups. Over time, quiz hosts have learned to use shorter sentences, simpler answer formats, hints, and flexible response times. These strategies have helped sustain participants’ confidence during the quiz and ensure their comfort.

5.1.3 Analysis of quiz questions

To understand how the above decisions around content selection and question framing translated into actual quiz questions, we examined quiz questions from the preliminary, semi-final, and final rounds of the 2024 edition of Quizabled across different disability categories. This review confirmed that the quizzes cover a wide range of topics: history, politics, governance, and society; science, technology, environment, and mathematics; literature, arts, popular culture, sports, and entertainment; professions and civic life; as well as everyday domains such as food, animals, and birds.

Figure 5.1: A quiz question from 2024 Quizabled finals for students with hearing impairment



The questions reflected several design decisions discussed by quiz hosts: a mix of curriculum-based and beyond-curriculum topics; questions on occupations and professions; items with local relevance; and fewer current affairs questions for students with intellectual disabilities, with greater emphasis on current affairs for students with visual impairment, cerebral palsy, and autism spectrum disorder. Questions were often framed bilingually and showed sensitivity to disability-specific needs. For instance, questions for students with hearing impairment relied heavily on visual recognition of personalities, brand logos, and animated films rather than on lengthy sentences, as illustrated in Figure 5.1.

A sample set of quiz questions from 2024 edition of Quizabled, organised by disability type, is provided below in table 5.1 for reference.

Table 5.1: Sample quiz questions

Disability Type	Sample Quiz Questions	Question Category
Students with Intellectual Disability	Madras was the older name of which city in Tamil Nadu?	History
	Which organ in the human body pumps blood?	Science
	Which sport is also called "Ping Pong"?	Sports
	If you're a constable, where would you be working?	Professions
Students with Cerebral Palsy & Autism Spectrum Disorder	January 12 is observed as the National Youth Day. It is the birth anniversary of which Indian?	Indian Leaders
	Which form of energy is produced using photovoltaic cells?	Science
	Who is the Governor of Tamil Nadu?	Current Affairs
	IPS is a qualification exam for which profession in India?	Professions
Students with Hearing Impairment	Identify Disney movie. (Image-based)	Cinema
	Identify logo. (Image-based)	Advertisement
	Profession solving crimes (Options - Police, Doctor, Pilot)	Professions
	Identify scientist. (Image-based)	Famous Personalities
Students with Visual Impairment	India's highest mountain Kanchenjunga is located in which state?	Geography
	Charminar and Golconda Fort are monuments present in which city?	History & Monuments
	Sukhoi, Tejas and Surya Kiran are a part of which Indian organisation?	Current affairs
	Who among these excavates sites and analyses artefacts?	Professions

This analysis of actual quiz items showed that the design principles discussed by quiz hosts are reflected in practice, confirming Quizabled's emphasis on accessibility across disability groups.

5.2 Accessible Quiz Implementation

Beginning as a single city-based event, Quizabled is now organized across multiple Indian states, each with different languages, state education board, and academic calendar. This geographic spread has significantly broadened students' access to and participation in the programme, but it also entails several implementation challenges.

Accessible implementation of Quizabled across these states requires multiple coordinated steps: effective outreach and mobilisation of students; registration, screening, and selection of participants for

the semi-finals and finals; support for students' preparation; and, finally, conducting Quizabled events in accessible venues that most students can conveniently travel to.

Quizabled Foundation since its establishment and Seva in Action before that, accomplishes these steps through thoughtful partnerships with long-standing disability-focused organisations and experienced quiz hosts in different states. This partnership-based approach is central to ensuring that Quizabled events are implemented in an accessible manner.

5.2.1 Outreach and mobilisation of students

Partnership-based outreach model

For outreach and mobilisation of students, interviews with Quizabled team members indicated that the core approach is to identify a key disability-focused NGO partner in each state. This partner then reaches out to schools in different districts to mobilise students to participate. In a few states, the Quizabled team has also worked with two NGO partners. In such cases, one focused on a particular disability and an additional partner was included to reach students with other disability types.

Orientation and ongoing support for NGO partners

Quizabled team members also described offering systematic support to partner organisations. They orient partners to the quiz format and disability-wise student categories. They also help partners identify and connect with schools and institutions in their regions through national-level statutory bodies such as the National Trust, which has a large network of disability-focused organisations and associations. During the initial stages, Quizabled team members also visit partner organisations. This is followed by regular online coordination.

Collaborative target setting

Further, the Quizabled team explained that student targets i.e., the approximate number of students to be registered for participation in each region and outreach plans are developed collaboratively with NGO partners. Based on these targets, NGO partners plan how many districts to cover. Targets are also increased every year, with an emphasis on reaching out to rural areas.

Formalising partnership roles

These expectations are formalised in the Terms of Reference (ToR) for the partnership between Quizabled Foundation and each NGO partner, which specify minimum targets for each disability category and list key responsibilities. In relation to outreach and mobilisation, these responsibilities include:

- Mobilising students with disabilities from special schools, NGOs, and mainstream government and private schools.
- Sensitising schools about the Quizabled format and encouraging them to prepare and train their students.
- Coordinating media and publicity activities.
- Printing and distributing flyers as per the design shared by Quizabled Foundation.
- Collaborating with Quizabled on planning and organising the preliminary rounds and final quiz, and coordinating with quiz masters.

The ToR also outline success indicators, including the number of schools and students participating; the number of rural and tribal districts covered; the number of teachers oriented; and the number of volunteers engaged.

NGO partners’ experiences with outreach

NGO partners interviewed broadly confirmed implementing these responsibilities in practice. Their accounts also show how this partnership model helps overcome challenges associated with mobilising students in multiple states. One NGO partner recalled the challenges they faced, despite having strong connections with many schools in their region. They also described the strategies that eventually enabled them to fulfil their responsibilities effectively:

In the first year, the biggest challenge was convincing schools about the quiz programme itself. We already had a good rapport with special schools.... Some agreed readily, but most took time - we had to keep calling and explaining.... Convincing regular, especially government schools to participate was hard. In the second year, schools that had participated earlier registered their children quickly. By the third Quizabled edition, we were able to bring in more children from regular schools; we had a clearer strategy and had learnt what works.....Since many of our alumni (*special educators*) were now working in regular schools, we reached out to them directly, which was much easier (*than going through the government officials*). (NGO partner B)

Profiles and strengths of NGO partners

Besides, our analysis of all NGO partner profiles showed that these organisations had diverse but disability-focused mandates, including community-based rehabilitation, inclusive education, livelihood training, sports training, and parent associations working for the wellbeing and empowerment of children and adults with disabilities. With two to four decades of experience, they were well positioned to reach out to and mobilise students with disabilities by coordinating closely with schools and families in their regions.

Participant registrations and reach

The outreach efforts are also reflected in participant registrations. Analysis of registrations for the 11th edition of Quizabled held during 2025 - completed in a few states at the time of writing - shows that a considerable proportion of participating students came from rural areas and from households reporting Below Poverty Line (BPL) status. A detailed summary of the available participant registration data is presented below in table 5.2:

Table 5.2: Student registration data for Quizabled 2025 edition

State	Total registered participants for prelims	Participants from rural areas (Count & %)	Participants reporting Below Poverty Line status (Count & %)	Female Participants (Count & %)
Tamil Nadu	560	118 (21%)	415 (74%)	200 (36%)
Maharashtra	518	32 (6.2%)	167 (32%)	152 (29%)
Himachal Pradesh	348	180 (52%)	68 (19.5%)	129 (37%)

Above accounts and registration patterns underscores the strength of Quizabled’s partnership model with long-standing disability-focused organisations in mobilising students for events across multiple states.

Having outlined how students are mobilised through NGO partners, the next section examines how those students are subsequently registered for Quizabled events, which further indicates the accessible formats used to increase participation.

5.2.1 Student registration processes

Student teams of two members each are registered through an online form, available in English and multiple regional languages, on the Quizabled website. Once registered, teams can participate in the preliminary rounds. Registrations are typically completed by teachers in their respective schools, within eligibility parameters set by the Quizabled team, such as grade level, age bands, and limits on the number of teams per school.

Within these parameters, teachers adopt different approaches to registering students. A teacher from a school for hearing-impaired students described prioritising students with strong general awareness and academic performance:

We look for those who are academically stronger, up to date with current affairs, and interested in knowing new things - students who come up with ideas. We know who can do that, and accordingly we select. (Teacher, School B)

In a school serving students with cerebral palsy and autism spectrum disorder (ASD), student selection was described as a collaborative process drawing on a shared understanding of students’ profiles: “Student selection and registration is done collaboratively with two to three teachers.” (Teacher, School C)

A teacher from another school for visually impaired students noted an internal screening stage before registration:

We have a separate GK period (where we prepare students). So, each semester we will be conducting competitions. First, we do it within class and then inter class. So based on that we select students for prelims. (Teacher, School E)

Survey data from 94 teachers across multiple states corroborated these accounts and pointed to two equally common registration practices. Around half of the teachers reported first selecting students based on prior class or school performance and then training them, while the other half trained all students and subsequently selected those deemed most ready to participate. In practice, therefore, two main approaches to student registration were found: “select-register-train” and “train-select-register.”

Above discussion highlights key aspects of the student registration process for the preliminary rounds. The availability of registration forms in multiple languages and the use of within-class and inter-class competitions after training to identify students for prelims participation help to facilitate accessibility and broaden participation. However, limits on the number of registrations per school, combined with teachers’ reliance on prior academic performance as a key selection criterion, indicate scope to further strengthen the accessibility around registration processes.

5.2.3 Student preparation processes

Having outlined how students are mobilised and registered, this section draws on teacher and student interviews, as well as teacher survey responses, to examine how students prepare for Quizabled across the pre- and post-registration stages. Teachers and students described Quizabled preparation as often

embedded in everyday routines in schools, hostels, and at home. However, closer to the events, preparation typically became more intensive through dedicated practice sessions. Quizabled Foundation also supported student preparation by making practice questions available on its website, which were widely used by both students and teachers.

In many schools, Quizabled preparation was integrated into general knowledge (GK) periods, daily news-reading sessions, subject-specific formative assessments, and internal quiz competitions. A teacher from a school serving students with hearing impairment explained how both GK and subject periods were used:

There is a separate period for GK. Quizabled-type questions are practised in that period. Subject-wise, once in 15 days we do syllabus-based quizzes... Specifically for Quizabled, we do daily practice sessions for half an hour with selected participants. (Teacher, School A - Hearing Impairment)

Similarly, in a school for students with visual impairment, teachers drew on GK books, current affairs materials, news sessions, and structured competitions:

We have GK books and current affairs. Based on that we prepare. Every morning we have a news session, where one of the teachers reads and tells the news... We also do internal quizzes in our school. We have a separate GK period, and each semester we conduct competitions - first within-class and then inter-class. (Teacher, School E - Visual Impairment)

Subject-specific quizzes were also used as formative assessment to familiarise students with quiz formats and consolidate learning:

We use subject-specific quizzes. In science we do that. I choose quiz as one formative assessment activity. After 2 - 3 lessons, I club them together and make questions, then we make teams and ask questions. (Teacher, School B - Hearing Impairment)

Additionally, teachers across schools confirmed receiving mock practice questions from Quizabled Foundation, which served as models to develop further practice materials:

Recently (since 2 - 3 years) we got mock questions from Quizabled, so we use them. Using them as reference, we also go for new questions. We share these questions with other teachers too and preparing for Quizabled is a team work. One month before Quizabled, preparation starts. (Teachers, School B - Hearing Impairment)

Besides, teachers also reported using available resources and tools to broaden practice opportunities:

I show them YouTube videos. I share general knowledge, sports-related information. I share the information with the parents too... I train all students who can respond verbally.... We do not have big projectors, but we use computers or laptops. During Quizabled we conduct quizzes to get them to practise. (Teacher, School C - Autism Spectrum Disorder)

I use Google Forms to create question - answer type subject-specific quizzes - twenty to thirty questions and share them with all students. Some students complete it by themselves and others need help to complete. (Teacher, School C - Autism Spectrum Disorder)

Preparation strategies were also adapted to students' specific disability profiles, including the use of non-verbal modes of response:

Depending on students' disability, I adapt questions accordingly. For example, if a student can't speak, I use image-based questions and the student will point to the right answer. (Teacher, School D - Intellectual Disability)

Furthermore, teachers noted that preparation often extended beyond school, with some students receiving support at home or in hostels from parents, siblings, and peers. In situations where such support was limited, students described relying on their own self-preparation strategies:

Parents do not understand sign language and are also not literate. We are from a village. So we do not receive any help. I personally practise by Google searching specific questions and answers. I also read story books and watch videos. (Student, School A - Hearing Impairment)

Survey responses from teachers also broadly support the above qualitative accounts. The most frequently reported preparation approaches are summarised in the table 5.3 below:

Table 5.3: Teachers approach to student preparation for Quizabled

Student preparation approaches for Quizabled	No of Mentions
Conduct mock quizzes / internal quiz competitions / regular practice / repetition / drill / use quizable question banks / sample questions	37
Use flashcards / visual aids / picture-based learning / videos / online resources / create own materials (worksheets, Google Forms)	27
Read newspapers / track current affairs / general knowledge Q&A	24
Teach concepts / revise syllabus / use textbooks	21
Provide accessibility supports (sign language, simplified language, extra time)	7
Small-group practice / peer discussion	6
Use games, playful learning, and role plays	5
Build motivation and confidence / provide positive reinforcement	3
Explain quiz format, rules, and time management	2
Involve parents / encourage home practice	2

Together, these accounts show that student preparation for Quizabled is anchored in existing school routines such as GK periods, news-reading, and subject quizzes. It is further strengthened through targeted practice using mock questions, teacher-developed materials, and digital tools. They also highlight the disability-specific adaptations and the support students receive at home and in hostels. Crucially, students' own efforts through newspaper reading, online searches, storybooks along with peer support - play a significant role, particularly for those with limited home support. These patterns point to the broad influence of Quizabled in making opportunities for structured quiz preparation accessible to students.

5.2.4 Screening and selection of students for finals

A large number of student teams register for Quizabled across different disability categories, but only a limited number (six teams per category) get to participate in the finals. This makes a systematic, multi-stage screening process essential. Preliminary and semi-final rounds typically consist of a set of multiple-choice questions. During the initial editions, prelims were conducted as in-person tests at designated centres in each state; since the COVID-19 pandemic, they have largely shifted to an online format, with students attempting the questions from their own schools or local centres.

From quiz hosts' accounts, two aspects stand out: the relative simplicity of prelims and their role in maximising participation. Prelims are intentionally designed to be easier than the finals and serve as a window into students' knowledge:

Generally, the prelims are intentionally much easier - a sort of baseline assessment. The basic idea is that if students can answer those very simple questions, then they are likely to answer the tougher ones later. We usually put in two to three slightly medium-level questions to separate teams and see who can go to the next stage. (Quiz Host 2)

Prelims are also described as the key platform for maximising participation:

Prelims are exactly what screening is all about, and as far as Quizabled is concerned, that is the main part. The idea is to provide a platform for these children and to maximise that. The finale might only have about six teams in each category, but what has always mattered in Quizabled is how many children turn up and take part. Many of them look forward to the prelims itself... for a lot of children, just participating in the prelims is a big deal. (Quiz Host 3)

To ensure fairness along with accessibility, organisers discourage assistance from students' own teachers and rely instead on volunteers, who are oriented to support comprehension and operate the computer without influencing answers:

Volunteers are very important, especially for prelims. They read out the questions and help with basic navigation. For instance, a student with cerebral palsy may have strong general knowledge but find it difficult to use a mouse or type quickly. (Quiz Host 2)

Once prelims are completed, quiz hosts use parameters such as scores and response times to identify teams that will proceed to the semi-finals and finals. This involves setting cut-off scores and, in some categories, using response time as an additional differentiator:

We have internal parameters to decide - a cut-off score, response times if teams are tied, and so on. Based on that, we screen out the prescribed number of finalists - usually six teams in each category. Then the event is held on a later date so that teachers have ample time to prepare their children. (Quiz Host 3)

These processes are illustrated by the recent Tamil Nadu state finals held in October 2025. A total of 282 teams registered, of which 263 participated in the first online preliminary round. In the Intellectual Disability - Junior category, many teams obtained similar scores, so a second online preliminary round was conducted for 70 teams, from which 17 qualified for the semi-finals. In the Intellectual Disability - Senior category, comparatively fewer teams registered and took the prelims; based on their performance in the first round, 32 teams were taken forward directly to the semi-finals.

For teams in the Hearing Impairment, Cerebral Palsy and Autism Spectrum Disorder categories, finalists were selected directly from the first preliminary round, without an intermediate semi-final stage. Altogether, 24 teams eventually qualified to compete in the state finals. The example below in table 5.4 summarises this progression, showing how the number of teams is gradually narrowed at each stage.

Table 5.4: Progression of Teams Through Screening and Selection Stages (Tamil Nadu, 2025)

Disability Category	No. of Team Registrations	No. of Teams That Took 1st Online Prelims	No. of Teams That Took 2nd Online Prelims	No. of Teams Selected for Semi-Finals	No. of Teams Selected for State Finals
Intellectual Disability - Junior (13 - 18 yrs)	143	137	70	17	6
Intellectual Disability - Senior (18 - 25 yrs)	75	70	0	32	6
Hearing Impairment (7th - 10th Std)	25	25	0	0	6
Cerebral Palsy (13 - 21 yrs) + Autism Spectrum Disorder (13 - 21 yrs)	36	31	0	0	6
Total No. of Teams	282	263	70	49	24

These processes show how Quizabled maximises participation, ensures fairness, and supports accessibility during prelims, while gradually narrowing a large pool of participants to a small number of finalists.

5.2.5 Organisation of Quizabled finals

Lastly, the organisation of Quizabled finals as in-person events involves several deliberate choices to ensure accessibility. Drawing on interviews with quiz hosts, Quizabled team members, and NGO partners, as well as observations from the Tamil Nadu state finals of the 11th edition of Quizabled, this section is organised in two parts. The first focuses on how hosts, interpreters, volunteers, and venues are identified and prepared, based on interview accounts. The second describes how these choices played out in practice during the observed event.

Assembling a local team

Interviewed quiz hosts, Quizabled team members, and NGO partners highlighted that accessible organisation of Quizabled finals begins with assembling an appropriate team and choosing a suitable venue.

Finals are hosted by quiz hosts who are fluent in both English and the relevant regional language, enabling bilingual facilitation and ensuring that students and audiences across disability groups can follow the quiz. One host explained how this requirement shaped their own involvement:

Quizabled team had planned to do an event in Chennai, and they wanted a Tamil person who could host the quiz, because it's a bilingual quiz. That's how I got involved. (Quiz Host 1)

Another host described a similar process of involving local quiz hosts in a different region:

The first time Quizabled was in Mumbai, I was a coordinator. The quiz master was from my team, from our company, who spoke Marathi. (Quiz Host 2)

Alongside hosts, local sign language interpreters and volunteers play a key role in mediating communication and ensuring that questions and instructions are understood correctly:

We arrange local quiz hosts, sign-language interpreters and volunteers, and work with them to make sure questions are customised to the location and language. (NGO Partner B)

Volunteers also provide one-to-one support to students who need help understanding questions, without influencing their answers. One quiz host, who first began as a volunteer, reflected on this role:

My job as a volunteer was to make sure the student assigned to me understood the question correctly, without giving any hints or answers - just helping with comprehension. For example, (*a student*) may ask you to repeat or explain the question. (Quiz Host 3, who first became involved as a volunteer before becoming a quiz host)

Together, these accounts show that the finals rely on a carefully assembled team of locally rooted quiz hosts, sign language interpreters, and volunteers. Their familiarity with local language and culture help make the overall event an accessible experience for students and audience.

Selecting accessible venue

Accessibility is also a key criterion in choosing venues for Quizabled finals. As one NGO partner described venue selection as a deliberate, research-intensive process that considers both physical access and comfort for students and families:

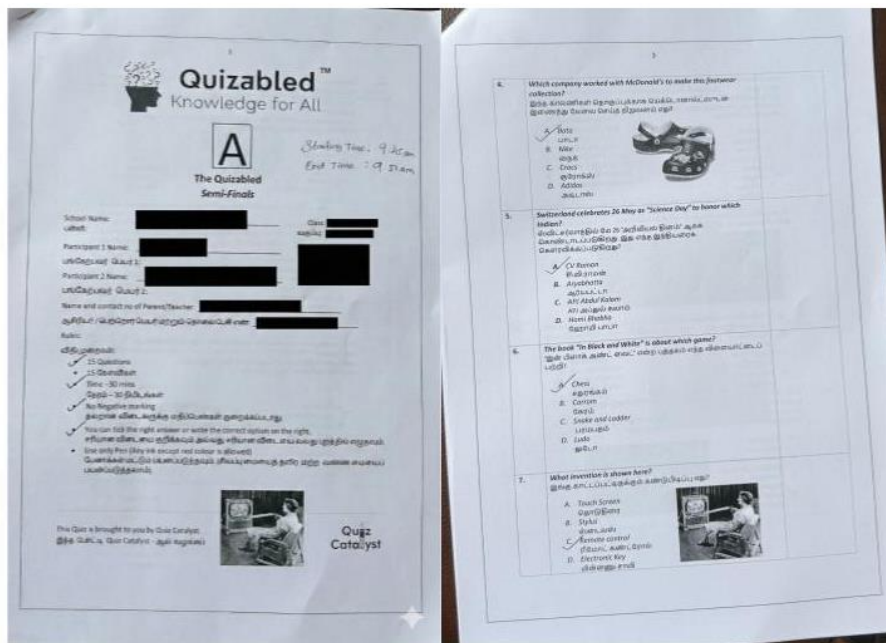
Selecting a venue for Quizabled finals is a matter of research. It has to be on the ground floor. It has to be accessible by wheel chair. We do have big auditoriums, but accessibility is often a problem - for example, toilets may be on different levels or difficult to reach. Also, if students feel fatigue they should be able to go out and come. So there has to be free space outside. Besides, children would be coming in vehicles, in groups, along with parents and others, so there should be ample space for parking. (NGO partner A)

Observations at the state finals

The research team attended the Tamil Nadu state finals of the 11th edition of Quizabled to experience the event first-hand. Our observations broadly confirmed the interview accounts.

The venue, stage area, and toilets were wheelchair accessible, with ramps provided at key points. Semi-finals were conducted in person using a printed questionnaire, with volunteers assigned to each team. These volunteers read out questions where needed, clarified wording, recorded responses and scores, and noted the start and end times for each team.

Figure 5.2: Quizabled semi-finals questionnaire



Disability-specific support was also evident. During semi-final, for example, a participant with cerebral palsy used option cards and a head-mounted pointer to indicate their chosen answers:

Figure 5.3: A participant with cerebral palsy in the semi-final responding to quiz questions using option cards and a head-mounted pointer



In the final quiz competitions, we observed the presence of a sign language interpreter throughout, and a volunteer standing beside each team on stage to provide individual support, consistent with the roles described in interviews.

Between quiz segments for different disability groups, the audience was also engaged with questions on the Rights of Persons with Disabilities Act, 2016 (RPwD Act). A visually impaired postgraduate student aspiring to a banking career was invited as a role model to lead this segment, quizzing the audience on key provisions of the Act:

Figure 5.4: Visually impaired woman quizzing the audience on the RPwD Act



Beyond the quiz itself, organisers also included cultural performances by students with disabilities, such as dance and martial arts demonstrations:

Figure 5.5: Dance performance by a student with disability



Figure 5.6: Martial arts performance by students with disability



These elements together created a lively environment that recognised students' strengths and talents beyond academic knowledge. The combination of disability rights-focused audience quizzes, role models, and cultural performances contributed to an atmosphere of learning and enjoyment for participants, families, teachers, and partners.

Together, these interview accounts and field observations underline that the organisation of Quizabled finals involves much more than staging a quiz event. Careful selection of local quiz hosts and interpreters, targeted deployment of volunteers, deliberate venue choices, and the presence of role models, disability rights content, cultural performances, and assistive technologies all work together to make the finals an accessible and fun experience for students with diverse disabilities.

5.3 Challenges and Opportunities

Across interviews, stakeholders identified challenges and opportunities for strengthening the accessibility of Quizabled's quiz design and implementation. This section organises these insights across five aspects of the programme: quiz design; outreach and mobilisation; registration, screening, and selection; student preparation; and the organisation of Quizabled finals. The table 5.5 below synthesises these themes, outlining key constraints - such as varied teacher expectations, high design effort, limited availability of accessible venues, and concerns about fairness in prelims and proposed improvements, including co-creation of content, better use of digital tools, stronger teacher preparation, and closer engagement with government systems.

Table 5.5: Challenges, opportunities, and suggestions on key aspects of Quizabled

Key Aspect of Quizabled Programme	Challenges and difficulties	Opportunities and suggestions
<p>Quiz design</p>	<p>Varied teacher expectations around quiz content, difficulty, response time, format, and accessibility (e.g., more science or household-context questions; fewer celebrity/imitation items; fixed vs flexible response time; individual vs team participation). (Teachers)</p> <p>High design effort: Quiz hosts reported substantial additional time and research needed to develop age- and disability appropriate content and frame questions accessibly for different disability types. (<i>Quiz hosts</i>)</p>	<p>Co-create and expand the question bank and format by enabling teachers to design and contribute questions. (Teachers)</p> <p>Pilot adaptive quizzes to refine age/disability appropriateness, calibrate difficulty levels, and inform evidence-based grouping of students (including by disability type and severity). (Quiz hosts; NGO partner)</p> <p>Enable multiple response modes (e.g., writing, pointing, assistive device use), aligned to students' disability-related needs. (Teachers)</p> <p>Revisit student categorisation by considering disability type, severity, and age (e.g., separate formats/streams for cerebral palsy and autism due to differing communication needs). (NGO partner; teachers)</p> <p>Strengthen question validity and translation quality to ensure regional-language versions are accurate and consistent. (Teachers)</p> <p>Organise inclusive quizzes that bring together students with and without disabilities (LTIMindtree Foundation team)</p> <p>Students with visual impairments are closer to being integrated into mainstream quiz competitions (Quiz hosts)</p>
<p>Outreach and mobilisation</p>	<p>Hesitancy among new schools/teachers to register students. (NGO partners; Quizabled team)</p> <p>Limited NGO partner staff capacity to mobilise at scale while meeting annually increasing targets. (NGO partners; Quizabled team)</p>	<p>Need to develop persuasive outreach resources for schools, teachers, and parents (e.g., flyers, short videos, student/teacher success stories). (Quizabled team)</p> <p>Better leverage social media and stakeholder networks (students, teachers, parents, schools, and government systems) for outreach and mobilisation. (NGO partners; Quizabled team)</p>

<p>Registration, screening and selection</p>	<p>Ensuring fairness in prelims across many schools (Quizabled team; quiz hosts)</p> <p>Organisation of prelims was reported as chaotic in some contexts. (Teachers)</p> <p>Managing and analysing large-scale prelim performance data to derive meaningful insights. (Quiz hosts)</p>	<p>Explore online proctoring or monitoring tools to support fair and smoother administration of prelims. (Quiz hosts)</p> <p>Pilot adaptive quizzes for screening and selection. (Quiz hosts)</p> <p>Revisit progression thresholds to allow more students to advance to semifinals/finals. (Teachers)</p> <p>Conduct prelims like an exam by sending physical invigilator to schools (Teachers)</p>
<p>Student preparation</p>	<p>Limited number of practice questions aligned to disability type and age. (Teachers)</p> <p>Limited access to teaching aids and assistive/digital resources to support student preparation (Teachers)</p> <p>Limited or no preparation support at home in some contexts (Students; teachers)</p> <p>Limited support from fellow teachers in some schools (Teachers)</p>	<p>Provide more practice questions and templates differentiated by disability type and age. (Teachers)</p> <p>Share specific topics and question formats in advance for students with intellectual disability (Teachers)</p> <p>Provide training and regular feedback to teachers on quiz design, format, and relevant technology (Teachers, Quiz hosts)</p> <p>Organize regular mock quizzes (Teachers)</p>
<p>Quizabled finals organisation</p>	<p>Limited availability of accessible venues in many regions. (NGO partners)</p> <p>Travel to semifinals/finals is demanding, especially for rural families and students with higher support needs. (Teachers; NGO partners)</p> <p>Limited staff and volunteer capacity to manage expanding logistics. (Quizabled team; NGO partners)</p>	<p>Engage government bodies to secure accessible public venues and strengthen institutional support for hosting events. (Quizabled team; NGO partners)</p> <p>Organise taluk/district-level Quizabled events to reduce travel burden and widen participation. (Teachers)</p>

Above insights underline that Quizabled's accessible design and implementation are ongoing, iterative processes. The challenges noted by stakeholders do not merely signal gaps; they also point to how they were converted into opportunities with concrete directions for refining quiz content and formats, deepening partnerships, and expanding support structures so that more students with diverse disabilities can participate on equitable and enjoyable terms.

5.4. Outcomes of Quizabled

Drawing on interviews with students, teachers, quiz hosts, and NGO partners, along with the responses from teacher survey, this section examines how Quizabled has influenced its two primary target groups - students and teachers across learning, participation, and everyday educational practices.

5.4.1 Student related outcomes

Stakeholders described outcomes that were visible during Quizabled events and carried into classrooms, homes, and peer relationships. These accounts point to four interlinked areas of impact: (i) expansion of knowledge, interests, and learning behaviours; (ii) increased confidence and motivation; (iii) exposure to diversity and opportunities for social interaction; and (iv) career aspirations.

Expanding knowledge, interests, and learning behaviours

Teachers reported that participation in Quizabled stimulated students' curiosity and expanded their learning interests. Exposure to a wide range of topics encouraged students to pay closer attention to their everyday surroundings. One teacher described how this shift was visible after the quiz:

Before Quizabled, children did not know any logo. Every year there will be (questions on) logos of companies. So they now keenly observe such symbols. After Quizabled, students have also become interested in monuments and historical places. (Teacher 1, School B)

A second teacher from the same school noted that these interests extended to other domains as well: "different food, fruits, places, and scientists." (Teacher 2, School B)

A teacher from another school observed that Quizabled reinforced classroom learning and helped students recognise gaps in their knowledge:

To some extent quiz questions are related to history and social sciences, so it will help in their regular studies also. (Teacher, School E)

The same teacher explained how participation prompted students to follow up on what they missed:

After participating, they will come and tell us, 'this is what we missed out... What is the answer for this?' Next time while preparing, they inform us, 'this was the pattern.' (Teacher, School E)

Students' accounts indicate that quiz preparation also encouraged self-directed learning behaviours beyond school:

I personally practice by searching online for specific questions and answers. I also read story books and watch videos. (Student, School A)

Mostly (prepare) through online search. I refer to newspapers and news channels. For explanation I watch videos. I do take part in quiz competitions online and offline. I also referred to practice quiz questions from the Quizabled website. (Student, School E)

Family members confirmed these learning behaviours and further added that students engaged in informal learning alongside siblings during routine study activities at home.

When we are studying she will sit beside us and pays attention to what we are studying and learns from it. (Student's sibling, School D)

Increased confidence and motivation

Alongside learning-related outcomes, teachers linked Quizabled to increased student confidence and motivation, particularly because it offered an accessible platform. One teacher emphasised how the accessible format enabled students to participate on more equitable terms:

Our students lack or miss similar opportunities as compared to other students. So, it was good to have such an opportunity for our students... Quizabled was in an accessible format and helped increase student confidence. (Teacher, School A)

The same teacher contrasted this with typical local competitions where students with disabilities were disadvantaged:

In district-level events here our students do not get Quizabled-like opportunities. It is very rare. When they participate in local events, they are not treated like equal competitors. (Teacher, School A)

Teachers also described how student participation generated pride and validation for students and families:

One of the student's mother felt very good... because her son was removed from a regular school due to his disability. And within one year of joining our special school, he got to participate in Quizabled and won. So she was very happy. (Teacher, School C)

In addition, incentives and public recognition were reported to strengthen motivation to prepare and participate:

Students got a mobile as a gift. Gifts are motivating other students also to prepare and participate in Quizabled. (Teacher, School D)

Exposure to diversity and opportunities for social interaction

Quizabled also provided students with opportunities to interact with peers from other schools and across disability groups, broadening their social experiences and fostering a sense of belonging. One teacher noted that participation enabled students to meet peers they would not typically encounter in their regular school settings:

In Quizabled, students get exposure to other schools and students with other disabilities. (Teacher, School B)

A student from another school expressed a similar view, describing these encounters as memorable:

I liked visiting Mysore (as part of Quizabled). Met students with different sign language. So it was memorable. (Student, School A)

Further, an NGO partner noted that in some cases these connections were sustained beyond the event through parents, who formed informal support networks: "Parents have formed WhatsApp groups to support each other." (NGO Partner C)

Encouraging students' career aspirations

Finally, stakeholders reported that Quizabled encouraged students to consider new career possibilities and articulate future goals. One teacher noted: “Regarding career, some say they now want to become quiz host.” (Teacher, School B)

An NGO partner suggested that such influence could also be observed at a wider community level, reinforced by visible success stories:

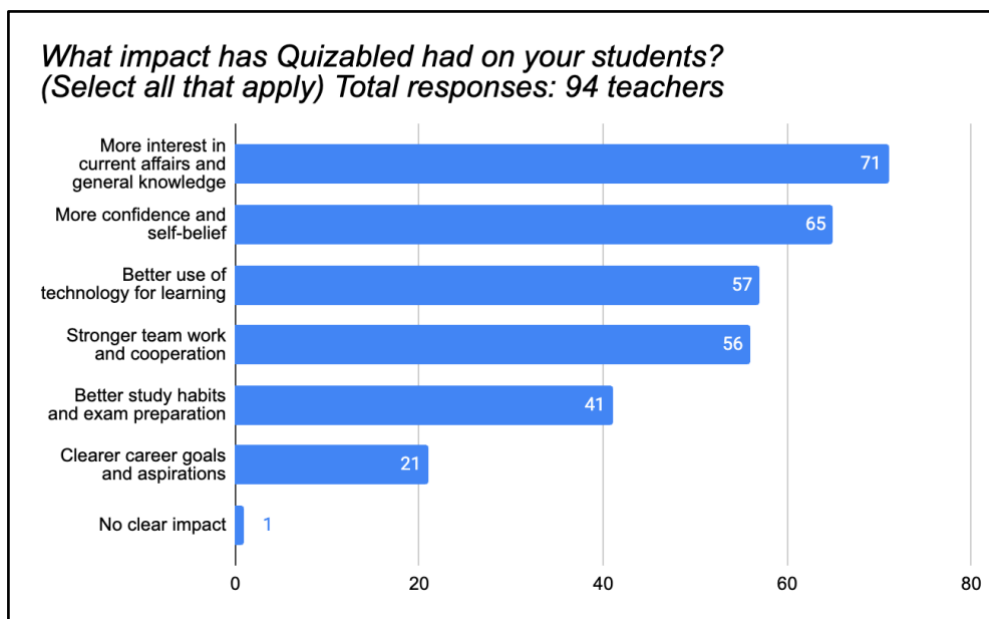
Quizabled has fostered a cultural process toward inclusion, shifting attitudes among students and teachers. Success stories like Bharat's, who won (Quizabled) prizes and is now pursuing engineering, inspire the community. (NGO Partner A)

A quiz host further described Quizabled as creating space for students to explore and express hidden capabilities that might have otherwise remained unnoticed:

Quizabled provides a platform to explore talents that might be hidden... in a way this has given them a very powerful voice. (Quiz Host 3)

Teacher survey responses on Quizabled's impact on students corroborate these interview accounts (see Figure 5.7)

Figure 5.7: Teachers survey responses on Quizabled's impact on their students



Overall, Quizabled makes a meaningful contribution to expanding students' knowledge and interests, learning behaviors, social interactions, and career aspirations. It offers a rare platform where students with disabilities can publicly demonstrate their learning, engage with diverse peers, and receive recognition from teachers, families, and communities. Together, these experiences support students' broader academic, social, and emotional development.

5.4.2 Teacher related outcomes

Quizabled also had a notable impact on teachers, influencing their pedagogical practices, their exposure to accessible teaching strategies, and their professional reflections on accessibility. Teachers described the programme as an opportunity to rethink how they engage students with diverse disabilities, deepen their own knowledge of accessible instructional design, and incorporate quiz-based learning techniques into their everyday classrooms. The following section highlights these shifts, focusing on teachers'

integration of quizzing into routine instruction and their increased exposure to accessible, disability-responsive pedagogical approaches.

Integration of quizzing into teaching practice

A consistent change across multiple schools was the integration of quizzing as a regular pedagogical tool. Teachers reported incorporating quizzes, riddles, and current affairs discussions into their daily classroom routines, using them both as warm-up activities and as part of subject teaching.

Due to Quizabled, now every day I refer to news, pay attention to something new, important and interesting, and share it with my students. We have one class teacher period every day, so I make each student share one news. I also use quizzes as part of regular subject teaching - we take a quick riddle or quiz session just to warm up. I refer to a few apps for current affairs and GK. (Teacher, School E)

Quiz hosts also observed this shift in practice and the way teachers now actively engage students through regular quizzing.

Teachers see new talents and growth in their students. They are training students and sitting with them to learn new things, regularly having these quiz sessions inside school. (Quiz Host 1)

Teachers integrate quizzes into regular teaching. (Quiz Host 2)

Increased exposure to accessible practices and reflection

Participation in Quizabled exposed teachers to new approaches for making learning activities accessible to students with diverse disabilities. Such exposure made them rethink their classroom practices.

We got exposed to how quizzes were adapted to make it accessible to students with other disabilities, i.e., VI and ID, and liked it very much. (Teacher, School A)

Quizabled also provided teachers with opportunities to observe students' performance from other schools and reflect on how to improve their students. Such observations offered new insights to enhance student learning in their own contexts.

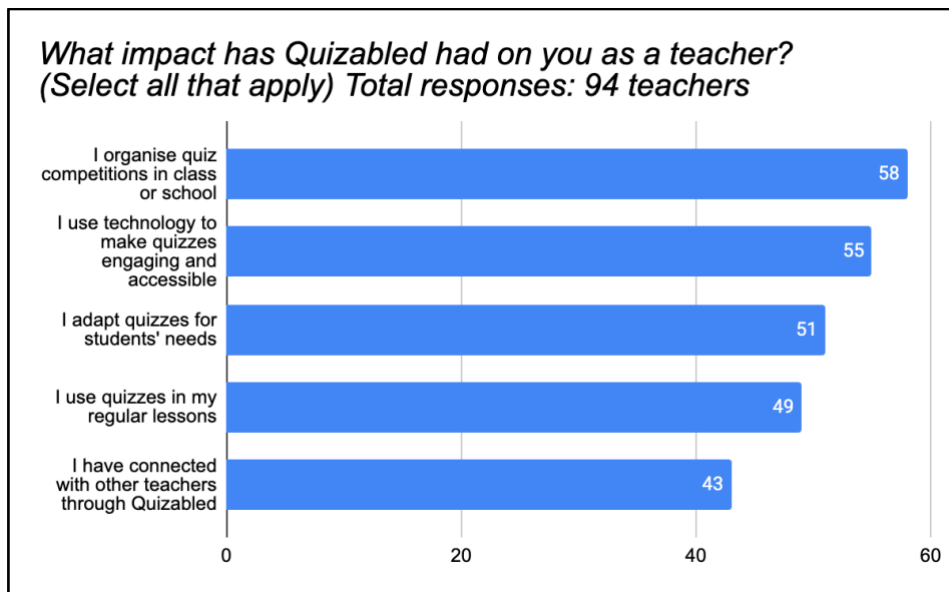
We also get exposure to other schools and their students' performance. We also get ideas on how to improve our students. (Teachers, School B)

In addition, Quizabled enabled teachers from different regions to connect and share practices beyond the event itself:

I met other teachers from all over india and got to share each other's experiences. I am still in touch with a Madhya Pradesh teacher. We share about each other's activities and ideas for class. (Teacher, School C)

Teachers' survey responses on Quizabled's impact further confirmed these accounts.

Figure 5.8: Teacher survey responses on Quizabled’s impact on them



Overall, participation in Quizabled served as a form of embedded professional development for teachers. By observing accessible quiz facilitation, interacting with students from varied disability types, and experimenting with new classroom techniques, teachers reported becoming more reflective and intentional in their teaching. These changes, ranging from regular general knowledge GK discussions to more adaptive, accessible practices suggest that Quizabled’s impact extends beyond individual events, strengthening teachers’ capacity to create richer and more responsive learning environments for their students. In this sense, the programme supported both student and teacher learning, encouraging accessible pedagogical practices within participating schools.

6. Discussion

This chapter brings together the findings in relation to the study objectives and the literature on quizzing as a pedagogical and inclusive practice. Across design and implementation, Quizabled functions not only as a competition but as an ecosystem that makes “intellectual engagement” accessible - through careful differentiation, partnership-based delivery, and repeated opportunities for practice, recognition, and participation. The discussion is organised around five themes aligned to the study objectives: accessibility and inclusion; pedagogical value and classroom integration; support systems and community networks; technology and digital skills; and impact, learning, and transfer.

6.1 Quizabled as an accessibility-first model of intellectual engagement

A central contribution of Quizabled lies in demonstrating that quizzing - often assumed to be language-heavy, speed-oriented, and exclusionary - can be redesigned as an accessible experience for students with diverse disability types. The findings show that accessibility is not treated as an “add-on,” but is built through multiple, layered decisions: what content is selected; how questions are framed; how answers can be expressed; and how time, pacing, and facilitation are adapted.

This aligns with the broader literature that positions quizzes as most effective when embedded within thoughtful instructional designs rather than used as stand-alone assessment tools. Across disability categories, Quizabled mirrors a structured cycle of (i) preparation, (ii) guided participation, and (iii) feedback and recognition - features that education research consistently associates with learning benefits, especially in low-stakes or formative contexts. While the disability-specific quizzing literature remains limited, studies on structured instruction and cooperative learning for diverse learners suggest that scaffolding, clarity, and guided participation are critical. Quizabled operationalises these principles at scale.

Two design insights stand out.

First, differentiation is disability-specific. For students with intellectual disabilities, multiple-choice formats reduce the burden of answer formulation and public speaking, allowing knowledge to be demonstrated comfortably. For students with cerebral palsy, answer articulation is deliberately simplified, acknowledging speech constraints. For hearing-impaired students, the emphasis on short, direct words and visual identification accounts for their difficulty in grasping grammar in written English. For students with visual impairments and those in CP or ASD categories, the inclusion of current affairs and broader knowledge domains shows how Quizabled resists “lowered expectations” by designing challenging content with accessible delivery.

Second, accessibility includes emotional and interactional dimensions. Quiz hosts repeatedly emphasise patience, extended response time, reassurance, and audience sensitisation. These facilitation practices are crucial because performance barriers for many learners are not only cognitive but also social (stage fear, unfamiliarity with public speaking, fear of making mistakes). This echoes the literature on low-stakes quizzing and supportive feedback: when learners perceive the setting as safe, participation expands and learning benefits increase.

Taken together, the findings suggest that Quizabled’s model of accessibility includes (i) content accessibility (relevance, familiarity, non-niche content), (ii) linguistic accessibility (sentence structure, bilingual delivery), (iii) sensory accessibility (visual, audio, tactile aids), (iv) response accessibility (options, pointing, assistive devices), and (v) affective accessibility (time, patience, encouragement). This multi-dimensional approach is a key programme strength.

6.2 From competition to pedagogy: how Quizabled shapes classroom practices

The study set out to examine whether Quizabled has pedagogical value beyond the event. The findings provide strong evidence that it does through changes in teacher practice, student learning routines, and school-level cultures of general knowledge and inquiry.

Teachers describe integrating quizzing into daily routines: GK periods, news-reading, periodic subject quizzes, warm-up riddles, and internal competitions. This supports the literature on frequent, low-stakes quizzing improving learning and performance, particularly when combined with feedback and regular review. Importantly, the Quizabled context suggests an additional mechanism: quizzes become motivational anchors for routine learning in settings where students with disabilities often receive fewer intellectually oriented co-curricular opportunities.

The findings also resonate with research on the collaborative and social dimensions of quizzing. Quizabled is team-based, and preparation often becomes collective - teachers sharing question banks, students practising together, volunteers supporting comprehension, and schools organising internal competitions. Even where the literature draws from higher education or mainstream settings, the underlying principle holds: quizzes can be structured social practices that promote dialogue, shared meaning-making, and sustained engagement.

However, the programme's pedagogical influence is uneven and mediated by school contexts. Some schools have robust GK routines, digital tools, and collaborative staff cultures; others have limited resources, limited peer-teacher support, and students with minimal home support. This variability matters because Quizabled's benefits appear strongest where routine practice is sustained over time, not only in the weeks before an event. This suggests that Quizabled's future plans for building teacher-capacity are central to deepening pedagogical impact.

6.3 Support systems and community networks

Quizabled's scalability across states depends on partnerships and networks that function as a "support system" for inclusion.

Partnerships with NGO organisations operate as intermediaries between Quizabled and schools, particularly in regions where schools may be hesitant, unaware, or difficult to reach through official channels. The findings show how NGO partners mobilise schools, orient teachers, arrange local hosts and interpreters, identify accessible venues, and manage logistics. Given the diversity of languages, education boards, and administrative geographies across states, this partnership model appears to be one of the programme's most effective implementation strategies.

Volunteer support emerges as a second critical system. Volunteers are positioned as accessibility facilitators - supporting computer navigation, reading, repetition, clarification - without influencing answers. The success of online prelims and in-person finals partly hinges on how well volunteers are trained and monitored.

Parent and teacher networks represent a third layer. The findings indicate that in some contexts, parents form WhatsApp groups and sustain relationships beyond the event. Teachers connect across states and share strategies. These networks matter because they extend accessibility beyond a single event and can reduce isolation often experienced by families and educators in disability contexts.

At the same time, the findings highlight gaps in home-based support, especially where parents may not be literate or may not know sign language. In such settings, students rely on self-preparation strategies (online searches, videos, newspapers) and peer support. This suggests that Quizabled's equity goals

require targeted strategies for participants with limited home support - such as more accessible self-study resources, offline materials, and school-based peer mentoring.

6.4 Technology and digital skills

Quizabled's shift to online prelims and the development of a web portal represent a major operational strategy that sustained the programme during the pandemic and expanded participation thereafter. The portal supports multilingual registration, practice questions, mock quizzes, and certification, contributing to both convenience and digital exposure.

The findings suggest two technology-related impacts.

First, technology expands access and practice opportunities. Teachers use mock questions as templates, create Google Forms, and rely on videos and online materials. Students report self-learning through online searches and videos. This aligns with the literature on technology-enhanced quizzing: digital platforms can increase participation, provide practice at scale, and enable varied formats (visual items, rapid feedback, repeated exposure).

Second, technology intensifies the need for fairness and monitoring. Stakeholders note concerns about the administration of prelims across many schools and the risk of inconsistent support. Because online prelims occurs in diverse regions, ensuring fair and supportive conditions is challenging. Moreover, in Quizabled, fairness concerns are intertwined with accessibility: students may legitimately require assistance for navigation or comprehension, but assistance must not mean direct support with answers.

This tension suggests that future improvements should treat “fairness” as a design problem rather than a policing problem through the use of adaptive question banks or randomisation of question items.

6.5 Registration, screening, and selection

The findings reveal a productive but unresolved tension: Quizabled aims to maximise participation while also conducting competitive finals with limited slots. This shapes how schools select and prepare participants.

Two registration approaches “select-register-train” and “train-select-register” were equally common. The first may yield stronger performance but risks restricting access to already high-performing students. The second is more inclusion-oriented but requires more teacher time and resources. This tension is heightened by limits on registrations per school and by teachers' reliance on prior academic performance for selection, particularly in settings where students with disabilities have already experienced exclusion.

Similarly, the screening pipeline (prelims → semi-finals → finals) is designed to be simpler at the entry stage and more challenging later, consistent with quiz hosts' view of prelims as participation-maximising. The Tamil Nadu example shows how multi-stage screening can respond flexibly to score clustering (e.g., a second prelim for ID Junior category), and how categories differ in progression across stages.

From an accessibility perspective, however, the “six teams per category” structure raises questions about how recognition and motivation can be distributed more widely. If prelims are experienced as the most meaningful platform for many students (as hosts suggest), then ensuring the prelims are well-supported, celebrated, and visible becomes as important as the finals. There is also scope to explore more distributed event models (district/taluk-level events), which teachers already propose as a way to reduce travel burdens and widen access.

6.6 Outcomes and transfer: what changes, for whom, and why?

The study documents student and teacher outcomes that align closely with Quizabled's objectives. The discussion here focuses on mechanisms and transfer pathways.

6.6.1 Student outcomes

The reported outcomes cluster in four domains:

1. **Knowledge and interests:** Students become more attentive to everyday information such as logos, places, monuments, and scientists and follow current affairs more closely, thereby broadening their experiences beyond the formal curriculum. This reflects quizzing's role in exposing students to diverse forms of knowledge and motivating sustained interest in learning.
2. **Learning behaviours and agency:** Students adopt self-directed strategies such as online searching, newspaper reading, practice through videos, revisiting questions they missed. This echoes literature on quizzes supporting self-assessment and learning regulation, especially when practice resources are available.
3. **Confidence and motivation:** Accessible formats enable public participation and reduce the experience of being "unequal competitors." Recognition (prizes, stage exposure) fuels motivation for further learning and participation. These effects are particularly significant in disability contexts where low expectations and limited platforms often constrain confidence.
4. **Social interaction and belonging:** Students meet peers across schools and disability groups, sustaining relationships through networks. Exposure to "different sign language," role models, and inclusive environments contributes to identity and belonging.

Importantly, these outcomes appear to be produced by a combination of (i) repeated practice routines, (ii) public recognition, and (iii) accessible event experiences.

6.6.2 Teacher outcomes

Teachers describe Quizabled as embedded professional development: observing accessible facilitation, learning new strategies, connecting with teachers across regions, and integrating quiz-based pedagogy into routine instruction. This is an important finding because teacher learning is a key for sustainability. When teachers internalise quiz-based routines and accessibility strategies, the programme's influence extends beyond the event.

However, teacher outcomes are shaped by resource realities: access to teaching aids, digital tools, and collaborative cultures. The programme's future emphasis on teacher capacity-building is therefore strongly supported by the evidence.

6.7 Challenges and opportunities: what the findings imply for strengthening Quizabled

Stakeholders' "challenges and opportunities" point to an improvement agenda that can be interpreted as the next phase of Quizabled's evolution.

1. **Increasing co-creation with teachers:** While quiz hosts already consult teachers for choosing content and designing questions, harnessing teachers' desire to contribute to question banks and formats could further expand the capacity for disability-specific differentiation, validity checks, translation accuracy, and item piloting.
2. **Strengthening evidence-based calibration of difficulty:** Quiz hosts include experimental items in prelims to assess difficulty and relevance. This can be further strengthened through the

use of adaptive quizzes, item analytics, and feedback to reduce design burden on hosts and enhance fairness.

3. **Revisiting categorisation:** Suggestions to reconsider grouping by disability type/severity/age (e.g., CP and ASD streams) highlight the need for more evidence based grouping within and across disability types.
4. **Reducing travel burdens:** Teachers suggest district/taluk-level events could help reduce travel burden for rural families and students with higher support needs.
5. **Engage government systems strategically:** Stakeholders repeatedly identify accessible public venues and institutional support as constraints. Stronger engagement with government departments to address structural barriers (venues, mobilisation channels), which NGOs and schools alone cannot solve, could be pursued.

Overall, the findings position Quizabled as a distinctive model at the intersection of pedagogy and disability inclusion. It demonstrates how quizzing can be redesigned as an accessible, motivating, and socially meaningful practice, and how a competition format can trigger sustained classroom routines and teacher learning. At the same time, the programme's growth brings to the surface predictable tensions between access and selection, technology-enabled scale and fairness, and ambitious targets and partner capacity. They reflect the complexity of scaling accessibility across diverse disability types and contexts. The evidence suggests that Quizabled's next stage of impact will depend on strengthening teacher capacity, institutional partnerships, and data-informed design to deepen programme accessibility at scale.

7. Conclusion

This study set out to examine the design, implementation, challenges, and outcomes of the Quizabled programme as a decade-long initiative aimed at enabling equitable intellectual engagement for students with disabilities. Drawing on interviews, surveys, document analysis, and direct observation, the findings show that Quizabled has evolved into a distinctive and mature model of accessible quizzing - one that combines pedagogical intent, disability-responsive design, and partnership-based implementation at scale.

At the level of programme design, Quizabled demonstrates that quizzing, often perceived as exclusionary, can be meaningfully adapted for students with diverse disability types. Accessibility is not limited to physical arrangements or assistive tools but is embedded in decisions about content selection, question framing, response formats, pacing, and facilitation. By differentiating these elements across disability groups, Quizabled enables students to demonstrate knowledge and participate with confidence. This multi-layered approach expands prevailing understandings of accessibility to include cognitive, linguistic, sensory, and affective dimensions.

In terms of implementation, the study highlights the central role of partnerships with long-standing disability-focused NGOs, locally rooted quiz hosts, interpreters, and volunteers. These partnerships function as an enabling ecosystem that allows Quizabled to operate across multiple states, languages, and educational contexts. The programme's ability to sustain participation during the COVID-19 pandemic through online prelims and digital platforms further illustrates organisational resilience and adaptability. At the same time, the findings underline that accessibility at scale requires continuous coordination, training, and attention to fairness, particularly in online screening contexts.

With respect to pedagogical value, Quizabled extends well beyond a single event. For students, participation contributes to expanded knowledge, curiosity, self-directed learning behaviours, confidence, social interaction, and emerging career aspirations. For teachers, Quizabled functions as embedded professional development, exposing them to accessible quiz formats, disability-responsive strategies, and the use of quizzing as a regular pedagogical tool. These shifts indicate that Quizabled influences everyday classroom practices and learning cultures, not only competition outcomes.

The study also brings into focus the support systems and networks that underpin participation. Teachers, volunteers, parents, peers, and NGO partners collectively enable preparation, comprehension, and confidence-building. Informal networks such as parent groups and teacher connections across states extend the programme's impact beyond formal events. However, uneven access to home-based support and school-level resources suggests the need for continued attention to equity, particularly for students from rural and socio-economically disadvantaged backgrounds.

Importantly, the analysis of challenges and opportunities shows that the constraints identified by stakeholders such as high design effort, fairness in prelims, limited accessible venues, and varied teacher expectations are not merely obstacles but directions for future strengthening. Suggestions related to co-creation of question banks, adaptive and data-informed quiz design, expanded response modes, district level events, and deeper engagement with government systems point to a clear and actionable improvement agenda.

Overall, the evidence positions Quizabled as a significant contribution to inclusive education practice in India. It operationalises the principles of the Rights of Persons with Disabilities Act, the National Education Policy 2020, and international frameworks such as the UNCRPD and the Sustainable Development Goals by translating commitments into concrete, lived educational experiences. By encouraging intellectual participation, often neglected in disability-focused co-curricular spaces,

Quizabled challenges deficit-based assumptions and affirms the capabilities of children and youth with disabilities.

As Quizabled enters a new phase through the establishment of a dedicated foundation and the expansion of initiatives such as Innovative Learning Activities and Projects (ILAP), the findings of this study suggest that its future impact will depend on deepening teacher capacity, strengthening institutional partnerships, and sustaining evidence-informed design practices. In doing so, Quizabled has the potential not only to scale participation but also to influence broader conversations on accessible pedagogy, assessment, and learner agency within and beyond disability education.

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Appendices

Appendix 1 - Interview Protocols for the Quizabled Study

Members of Organising Team

1. **Personal Role and Programme Origins**
 - a. Describe your current role with respect to Quizabled.
 - b. How did the Quizabled programme first take shape?
 - c. What factors prompted a disability-specific quiz?
 - d. What initial challenges did you face?
2. **Vision and Alignment with SDG 4**
 - a. What overarching goals guide the Quizabled programme?
 - b. How do these goals align with SDG 4's aim of ensuring universal literacy and numeracy?
 - c. Do you track any specific indicators or targets to measure progress toward those goals?
3. **Programme Evolution and Refinement**
 - a. Quizabled is a decade-old programme - what key changes have occurred over the years?
 - i. Changes in quiz structure, rounds, supporting activities, etc.
 - b. What triggered these changes?
 - i. Any data patterns, field observations, or stakeholder suggestions?
 - c. What challenges does the Quizabled team currently face?
4. **Logistics and Event-Management Workflow**
 - a. Give a broad overview of everything that happens before, during, and after a Quizabled event (e.g., outreach to schools, venue selection, stakeholder coordination).
5. **Screening and Participant Selection**
 - a. How was the prelims round designed, and how have you addressed concerns about fairness, transparency, and exclusion?
 - i. Any data you consult (item-level scores, disability profiles)?
 - ii. Policies for first-time versus returning schools?
6. **Accessibility and Adaptations**
 - a. How do you ensure quiz content and delivery are accessible for each disability group?
 - i. Collaboration with quiz hosts, special educators, or technology partners?
 - ii. Accommodation of linguistic diversity?
7. **Support for Schools, Teachers and Parents**
 - a. What preparation resources or training do you provide before the event?
 - i. Sample papers, mock quizzes, orientations?
 - b. What informal networks have emerged, and how do you facilitate them?
 - i. Social-media groups, parent circles, etc.?
8. **Volunteer and Partner Engagement**
 - a. How do you recruit and manage volunteers, sponsors, and partner organisations across multiple states?
 - b. Any challenges unique to certain regions or disability categories?
9. **Data Collection, Monitoring and Evaluation**
 - a. What kinds of data do you routinely collect, and how do they inform decision-making?

- i. Registration trends, longitudinal tracking, participant portfolios?
 - b. Do you consult any learning-analytics or dashboards?
10. **Technology Integration**
- a. Discuss current or planned uses of digital tools (e.g., question generation, online prelims).
11. **Quiz Design, Learning, Transfer and Impact**
- a. What role do you play in quiz design, and what rationale guides your choices?
 - b. What evidence shows that participation influences students' schoolwork, exam preparation, or career aspirations?
 - c. Any anecdotes from alumni or reports from teachers/parents?
12. **Future Directions and Closing**
- a. Where would you like to see Quizabled in the next five years?
 - b. Do you have policy-advocacy plans?
 - c. What advice would you give emerging disability-focused educational programmes?
 - d. Is there anything we haven't covered that is crucial for understanding Quizabled's journey?
-

Quiz Hosts

1. **Professional Journey and Motivation**
 - a. How did you become involved with Quizabled?
 - b. What unique value do quiz competitions offer children and youth with different disabilities—as well as their teachers and parents?
 - i. Cognitive, socio-emotional, or identity-related benefits observed?
2. **Quiz Design: Content and Format**
 - a. Describe your process for researching and framing questions—from initial rounds to finals.
 - i. Sources of inspiration (news, museums, travel, AI tools, etc.)
 - ii. Strategies for balancing breadth (MCQs) with depth (reasoning rounds)
 - b. How do you adapt questions and formats for different disability groups?
 - i. Examples of successful adaptations
 - ii. Instances where an adaptation didn't work and how you managed it
 - iii. Your view on the purpose of QandA segments in quizzes
 - iv. Thoughts on alternative quiz formats and their benefits
3. **Screening and Participant Selection**
 - a. How is the prelims round conducted, and what guides this process?
 - i. Item-analysis dashboards or score patterns reviewed?
 - ii. Adjustments based on observations across disability groups?
 - iii. How do you avoid excluding students who might better represent particular groups?
4. **Facilitation and Interaction Strategies**
 - a. What strategies do you use during the quiz (pacing, tone, wait-time, prompts)?
 - b. How do you accommodate linguistic diversity and local-language quizzing?
 - c. What role does the audience play, and what feedback have you observed?
5. **Learning and Transfer**
 - a. What kinds of learning have you noticed among participants, teachers, and parents?

- b. Have quiz-related skills transferred to other settings? Examples?
 - c. Suggestions for teachers integrating quizzes into regular instruction?
6. **Community-Building and Support Structures**
- a. Describe your liaison with organisers, teachers, and parents.
 - b. Have spontaneous communities or support networks formed around Quizabled?
 - i. Possibilities for nurturing them
 - ii. Challenges in sustaining them
7. **Technology Integration**
- a. Technology tools you use—or wish to use—and their purposes (question generation, screening, facilitation, etc.)
 - i. Potential benefits and limitations
 - ii. Training or capacity-building needs
 - b. Role of these tools in students’ quiz preparation
8. **Impact and Future Directions**
- a. Over the past decade, what changes would you bring to Quizabled and why?
 - i. Observed shifts in students, teachers, parents, or school culture
 - ii. Missed opportunities?
 - b. Innovations you envision for the next few years (resources, partnerships, AI, data analytics, alternative formats)
 - c. How can we ensure children with disabilities are included in general quiz programmes?
 - d. How can future quizhosts be nurtured for Quizabled?
9. **Wrap-Up**
- a. Anything crucial we haven’t discussed regarding Quizabled’s impact or your role?
 - b. Advice to aspiring quiz hosts or organisers?
-

NGO Partners

1. **Partner Profile and Nature of Engagement**
- a. What is your organisation’s current engagement with Quizabled?
 - b. How has this engagement evolved over time?
 - c. What initially motivated you to join the partnership, and how does Quizabled align with your broader goals?
2. **Outreach and Mobilisation**
- a. How do you reach and mobilise participants and volunteers in your region, and which approaches have proven most effective?
 - i. Challenges faced in outreach and how you addressed them
 - b. What orientation or ongoing support do you provide to schools, volunteers, or parents before events?
 - c. Do you collect data on any stakeholder group? If so, what kind and how is it used?
3. **Programme Design, Implementation and Logistics**
- a. Describe your contributions to designing prelim and final quiz events (question adaptation, scheduling, accessibility).
 - b. How did you facilitate the screening rounds? Have fairness or transparency concerns arisen, and how were they handled?

- c. What logistics did you manage (venue, transport, participant safety), and what key hurdles did you encounter?
 4. **Impact of Quizabled**
 - a. From your perspective, what have been the most significant impacts of Quizabled?
 - i. Concrete changes for participants, teachers/schools, parents, volunteers, and your own organisation?
 - b. Have any informal groups or networks emerged around Quizabled in your region? If so, how are you supporting or sustaining them?
 5. **Suggestions and Future Directions**
 - a. What improvements would enhance Quizabled's reach or impact, and what advice would you give NGOs in other regions seeking to partner?
 - b. Looking ahead, how would you like this partnership with Quizabled to evolve?
 - c. Is there anything we haven't asked that is crucial to understanding your contributions or challenges?
-

Student-Teacher Group (Joint Interview)

1. **Participation History**
 - a. All: In which year(s) did you participate, and how many events have you attended?
 - b. Students: Who accompanied you to the prelims, semi-finals, and finals?
 - c. Teacher: Approximately how many students from your school participate each year?
 2. **Preparation, Selection and Event Experience**
 - a. Students: How did you prepare for Quizabled?
 - b. Teacher: What support or guidance did you provide? Any class- or school-level strategies?
 - c. All: Significant experiences from prelims, semi-finals, or finals—
 - i. Quiz design and format, topics, accessibility adaptations, response time, hosts, language
 - ii. Interactions with participants from other schools or regions
 - iii. Meaning of representing class or school
 - d. Students: What did you like about Quizabled?
 - e. All: Any concerns about Quizabled processes? How were these addressed?
 3. **Perceived Learning and Impact**
 - a. All: What did you learn, or how has participation influenced you? Key takeaways?
 - i. **Student probes** (ask selectively): self-perception, important knowledge, study habits, digital skills, peer interactions, effect of winning/not winning
 - ii. **Teacher probes** (ask selectively): classroom ideas, adapting quiz questions, technology use, comparison with other instructional approaches
 4. **Wrap-Up**
 - a. All: Suggestions for improving Quizabled?
-

Parents / Guardians

1. **Participation History**
 - a. Which year(s) did your child take part in Quizabled?
 - b. How many events has your child attended so far?
 - c. Did you or a family member accompany your child?

2. **Preparation, Support and Participation**
 - a. How did your child prepare?
 - b. What support did they receive, and from whom?
 - c. How was their experience in the prelims?
 - d. Memorable experiences from semi-finals or finals?
 - e. Did you interact with parents or teachers from other schools?
 - i. If yes, are you still in touch, and how has it benefited you and your child?
 3. **Perceived Learning and Impact**
 - a. How has participating in Quizabled influenced your child's—
 - i. Social interactions with peers, siblings, teachers, or yourself?
 - ii. Study practices, learning habits, or attitudes?
 - iii. Approach to exam preparation?
 - iv. Use of digital devices (computers, tablets, phones)?
 - b. How did winning or losing affect your child?
 4. **Challenges and Suggestions**
 - a. What challenges did your child encounter during preparation, selection, or participation?
 - b. What support could have helped?
 - c. Which aspects of Quizabled could be improved?
-

Funding Organisation – LTIMindtree Representatives

1. What motivated LTIMindtree to support Quizabled? Which aspects of the programme appeal most to your team?
2. How is Quizabled positioned within LTIMindtree's broader CSR portfolio today?
3. In what ways is Quizabled unique or similar to other initiatives you support?
4. LTIMindtree has backed Quizabled for over a decade. What factors have contributed to this sustained commitment?
5. What outcomes do you expect the Quizabled team to deliver, and how do you assess or measure those outcomes?
6. Does LTIMindtree make specific recommendations on how Quizabled should allocate its funding (e.g., by state, per-child, travel, operational expenses)?
7. What non-financial support does LTIMindtree currently provide, and where could you expand that support?
8. What is your outlook on Quizabled's future and continuity? What challenges do you foresee?

Appendix 2- Consent Form

Participant Consent Form

Study Title: Case Study of Quizabled Initiative for Children and Youth with Disabilities

Purpose of the Study: This study examines how the Quizabled Programme affects children and youth with disabilities, as well as their teachers and parents. We will gather experiences and insights from a range of stakeholders - including participants, parents, teachers, quizmasters, volunteers, organisers, and funders - to arrive at recommendations for maximising the programme's impact.

Your Participation: Depending on your role, you may be asked to take part in one or more of the following in-person or online activities:

- Individual interview
- Focus-group discussion
- Survey questionnaire
- Observation of programme activities

With your permission, sessions will be audio- or video-recorded.

Voluntary Nature: Your participation is entirely voluntary. You may skip any question or withdraw at any time; any data you have already provided will then be deleted.

Risks and Benefits:

- Risks: Minimal - no greater than those encountered in everyday conversation.
- Benefits: Your insights will help improve inclusive-quiz practices. You will receive a summary of key findings.

Confidentiality:

- Your name will be replaced with a code in all study files.
- Data will be stored on encrypted, password-protected devices accessible only to the research team and organizers.
- Anonymised quotations may appear in publications.
- For participants under 18, parental/guardian consent and child assent are required.

Use of Data: Data will be used solely for academic and educational purposes (e.g., journal articles, conference presentations, training materials, newsletter) and will be securely destroyed in accordance with the principal investigator's institutional policies.

For any questions or complaints, you can contact principal investigators:

1. Prof. Mythili Ramchand, NIAS, mythili.ramchand@nias.res.in
2. Prof. Archana Mehendale, NIAS, archana.mehendale@nias.res.in

Consent: By signing below, you confirm that you:

1. Have read and understood the information above.
2. Have had your questions answered.
3. Understand that participation is voluntary and that you may withdraw at any time.
4. Consent to the recording of your participation.
5. Agree to the use of anonymised quotations.

Participant Name	Affiliation	Signature	Date
Researcher	NIAS	Signature	Date