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# Satellite-based Supplementary English Programme for Students in Scheduled Areas of Gujarat

## **Abstract**

WELCOME English is a satellite based programme to supplement the regular English curriculum in about 230 schools. It seeks to address the widely found cumulative backlog of students' English achievement at entry to standard VIII and the low levels of teacher capacity in the scheduled areas – both of which seriously reduce the value and effectiveness of the state textbook based teaching-learning. Implemented by Unnati, an NGO, it is supported by the Tribal Development Department, Gujarat.

The programme enables students to Watch, Explore, Learn, COmmunicate and Enjoy the experience of learning English. It aims to reduce their fear and inhibition and develop confidence in using the language. 50 DVDs and 3 workbooks for standard VIII and 30 DVDs and 2 workbooks for standard IX contain high quality studio lessons followed by a live phone-in interaction with students and a worksheet linked to each lesson for reinforcement-cum-extension. Teachers are provided orientation and training on using the components of the package effectively.

The focus has been on contextualizing the package, overcoming the limitations of using satellite communication and enhancing viewership and engagement of students and teachers. The paper shares the learning that has emerged over 3 years of implementation.

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## **Context and Rationale**

WELCOME English SATCOM (satellite communication) programme seeks to supplement the regular English curriculum in about 230 schools run and managed by the Tribal Development Department, Government of Gujarat. This programme is being implemented by UNNATI Organisation for Development Education, an NGO that works amongst other themes, on social inclusion of the marginalised sections of society.

The Tribal Development Department, Gujarat conducted a study that revealed that the academic gap between students in tribal and non-tribal areas has been found to increase by the time they reach the secondary level despite insignificant differences in their intelligence levels. A

significant factor that contributes to this situation is the quality of teaching inputs that children in majority of the scheduled areas receive. In the long run such limited levels of achievement, especially in English, due largely to inadequate exposure and support, curtail the students' livelihood opportunities.

Low availability of trained and motivated teachers, especially for teaching English, impacts the quality of education and language related inputs to students. The extent and nature of in-service training support that teachers receive has been reported to be inadequate. Teachers, in tribal schools, lack clarity on teaching methodology and can benefit from inputs on participatory teaching methods along with attitudinal training (Dasra 2009: 21-24). Teachers tend to attribute students' limited language achievement to the lack of support from the home rather than question the efficacy of the curriculum implementation. The diversity in the schools managed by the Tribal Department manifests in several aspects - the student selection processes, teacher quality, financial resources, infrastructure facilities, inputs for human resource development, engagement and support provided by the management - that together impact the learning of the students, including the potential for students' language enhancement.

The students in the tribal areas do not have exposure and support for English learning in their environments. The SATCOM Programme for English Language explores ways of utilising the potential of SATCOM based instruction to provide quality exposure to students to English language within their current learning environment and enhance the quality of the English curriculum, importantly by providing teachers with a practical model of an enriched pedagogy. (Sacha et. al. 2011: 4)

The programme reaches out to 230 participating schools and over 8500 students across 15 districts of Gujarat. It would have been difficult to achieve this coverage geographically and numerically through face to face language teaching inputs by a small group of specialised teachers. As the number of teachers with a background and expertise in teaching English as a second language is extremely limited in the areas covered, the option of training master trainers and percolating the training also did not appear viable. The availability and effective functioning of the SATCOM network in Gujarat made the use of this medium for connecting to such a wide and spread out audience feasible.

## **Programme Design**

The programme was conceived as a synchronous model of technology based learning (TBL). Instructors and learners meet at a specific time in a physical or virtual classroom. It was designed to be used in harmony with, rather than as a replacement for the traditional face-to-face instruction. For optimal use of the potential of TBL, it should build in spaces and scope for human interaction (either face-to-face or electronically), and “it should provide opportunities for the active engagement of learners, provide content that is relevant and linked with what learners already know, and offer opportunities for feedback and support.” (Koller 2006: v) These were the key principles that guided the design of the content as well as implementation of the programme.

With few precedents in the area of satellite based language teaching, the initiative evolved based on experience and feedback from language experts and participating teachers. These pointed to the need to develop a learning package that would address the needs of both the students as well as teachers and actively engage with the teachers in the schools since the programme was visualized as a supportive mechanism rather than a standalone.

The programme design focuses on creating a community of learners, where students practice the listening, speaking, reading and writing skills in their own school environment as well as utilize a phone-in platform for connecting to the other schools and learners. The latter was guided by the premise that demonstration of a skill by peers as doable encourages children to try it. (Prasad work in progress: Section 1)

### **Key Components of the programme**

The English teachers of the participating schools are oriented on the specific aspects of WELCOME English in action prior to the relay of the programme. Participating schools are equipped with the necessary hardware (a TV and a set top box) for receiving the programme. The pre-recorded classes, usually of 35-40 minutes duration, are relayed thrice a week for an hour after school timings from the Bhaskaracharya Institute for Space Applications and Geo-informatics (BISAG) SATCOM studio. These are followed by a phone-in interaction where students and teachers call on a toll free number to speak to the studio teacher. A two way audio and one way video facility enable students to see the studio teacher while all schools tuned in can hear the interaction between the caller and the teacher. This space is used to convey messages, model good practices for teachers, share performances by students, with the aim of

enhancing student and teacher participation. The English teacher is expected to be present during the relay of the programme and play a facilitative role pre, during and post class relay. This requires ensuring that there are no technical glitches, students attend, conducive viewing conditions are created and students are supported to comprehend the class components, attempt the worksheets and receive opportunities to practice the language. Members of the curriculum development and programme team visit selected schools on relay and non-relay days to understand the issues in the implementation and provide support to teachers in performing their facilitative role effectively. The impact of the programme is gauged through multiple modes.

### **Learning Package**

WELCOME English learning package for standard VIII contains 50 DVDs of the pre-recorded classes and 3 workbooks. The standard IX package has 30 DVDs of the pre-recorded classes and 2 workbooks. The packages have three major components: high quality studio lessons followed by a live phone-in interaction with students, a worksheet linked to each lesson for reinforcement-cum-extension and involvement of the English teachers in facilitating lessons as well as guiding and monitoring workbook activity.

The learning package for standard VIII was developed in two parts. The first part - the Bridge course - focuses on helping students' revise some of the language functions covered in standards V-VII while the Second (text-linked) focuses on language and grammar focus covered in the standard VIII textbooks. The package for standard IX is similarly linked to the learning focus and levels prescribed in the curriculum. Methods used demonstrate pedagogical nuances and classroom practices that can enhance language development among students.

Students are provided exposure through interesting contexts, interaction through grammar and vocabulary activities and consolidation through fun activities. It relies on language necessary for initial interaction.

### **Challenges, Learning and Good practices**

Implementing the programme threw up challenges and resulted in learning and adoption of good practices recounted below:

- a. Balance between quality and timely production: The programme was visualized in 3 broad stages: course design, course development and course delivery. It was important to ensure

that the learning materials developed are engaging, contextual, easy to understand, attractive, helpful to students in understanding abstract concepts in the curriculum; the workbooks are in consonance with the audio-visual materials of the package for reinforcement of students' reading and writing skills; production happens in time and the programme is delivered efficiently and effectively. It also entailed collating feedback from several fronts and making revisions to the packages. All the 3 stages of each package (for standard VIII and IX) had to be completed in a year's time. The team struck a balance by planning well in advance, staying constantly connected, taking corrective action on time and fixing and meeting deadlines.

- b. Convergence of multiple tasks, skills, and roles: The programme entailed performing a wide range of tasks and roles and giving the right job to the right person. The tasks included reviewing state prescribed textbooks, developing a broad structure for the package, selecting the activities for a class, choosing the pedagogy, visualization, scripting, recording, editing, converting activities into a reading and writing format for the workbook, developing illustrations, proofing, printing the workbooks and much more. The team was small and included professionals with a background of teaching ESL, developing English curricula, teacher training, monitoring and evaluation, design, film making and development education. Their experience ranged from 2-30years; however they did not necessarily have the expertise for the multiple roles that they were required to perform. The team members were at multiple locations. It was important to discuss, bring in varied perspectives, give feedback to each other and stay connected. Contact was maintained using face to face meetings, Google applications, hangouts, group mailing systems; roles were allocated and distributed based on identified capacities; and through ongoing capacity development inputs, the team was enabled to assume multi-roles and adopt multi-orientations.
- c. Building collective ownership through stakeholder engagement and support: Active involvement of all stakeholders in programme implementation is critical to building collective ownership. This requires articulation of their roles, providing consistent support and above all reposing and communicating trust in their abilities. Dialogues with all stakeholders helped them to articulate their envisaged role that was enlarged based on experience. Support to teachers ranged from helping them acquire the technical skills for programme operation to developing strategies for garnering management support. Capacity development inputs were directed to appreciating the benefits of interactive pedagogy in language learning and

the rationale for use of diverse formats in the learning package; providing space to experience the joy of being an active learner to contributing ideas to course design. Teachers perceived that students in tribal schools have limited abilities to learn and require repeated inputs even for basic concepts. Some even had apprehensions about their abilities to learn from the medium used in this programme. Video clippings of students' capacities to engage and learn from the programme were shared through different forums. Learning materials to enhance their pedagogical knowledge and skills were provided. Face to face interactions through orientations, review meetings and school visits, telephonic and postal communication and satellite-based interactions were deployed. The Tribal Development Department provided support for logistics and liaison support for events, troubleshooting at the school level, dissemination of the package and other materials, and through participation in meetings and motivating the schools to implement the programme. The technical team at the BISAG studio was engaged in streamlining the phone-in interaction and recording the calls received.

- d. Creating monitoring systems to enhance viewership: The presence of viewers and working infrastructure are two pre-conditions in any satellite-based programme. Strategies were evolved to track these and make amends. Monitoring only by external agencies/actors is often fraught with a fault finding approach/tendency. Involving the key actors in a programme and adopting an approach of monitoring for support can lead to a greater level of participation and ownership of responsibility. Teachers were engaged in developing self-monitoring indicators and tracking their own progress. Viewership was thus tracked through periodic reporting by schools, phone calls to schools by rotation and visits made by SATCOM Fellows appointed to provide support to schools. Reasons for low viewership (functions in school, teachers' engagement with administrative duties, technical failures, no local technical support and lack of support from management) were addressed. The programme relay schedule was based on the academic calendar. Student teams were formed to take charge in absence of a teacher; local technical support was sourced and funds created, the school management was approached for support and the programme relay team at BISAG and the administrative and monitoring teams in the department were engaged. Three similarly structured tests of ability with a built-in gradient of task complexity across them were administered to students and scored by the teachers. Variation in the score levels between sections within each Special Worksheet matches the expected

patterns built in the design. This variability of scores is a vindication of the trust reposed in the teachers.

- e. **Complementarity for sustainability:** The key responsibility of providing educational inputs to students lies with the teachers. Programmes of non-government agencies aimed at education should aim at complementing and strengthening the existing systems and not replace them. This requires use of supportive strategies, handholding and engaging with the teachers to build their stake in the alternate programmes with the ultimate aim of mainstreaming them. The programme focused on involving teachers at all stages – right from programme design to monitoring. The DVDs of the learning package was provided for repeated use by schools.
- f. **Staying connected:** With the diverse range of actor and skill requirements, it was important to keep in touch, receive and give immediate feedback, share ideas, resources and skills. A number of virtual spaces and platforms were used to interact and share documents, ideas, feedback.

### **Indicators of student learning and teacher engagement**

A mix of qualitative and quantitative methods were used to gauge student learning and teacher engagement: phone-in participation and feedback of studio teacher, school visits and interactions, studio activities repeated in class or outside the classroom, self-monitoring and feedback from the English teachers and use of special worksheets/tests.

Trends in viewership have increased progressively over the years. More than 65% schools had viewed 75% classes and more. Students engagement has taken the form of formation of teams to take care of administrative arrangements for ensuring viewership, putting up performances in English and engaging with the language in daily interaction. Workbooks have been viewed and used as resource and this potential needs further exploration. Teachers have assumed greater responsibilities and have begun using the interactive methods with their students.

The number of schools and new callers has increased during phone-in time. There is a gradual increase in duration and challenge level of interaction. Students' level of comfort appears to have increased and this reflects in their listening and speaking ability.



A series of graded tests administered in the third year of the programme to capture progress in learning have indicated positive trends. Students have performed better on vocabulary and comprehension of short passages as compared to grammar and comprehension of instructions.

An external evaluation of the programme indicated that the programme “has shown its expected effect as obtained difference in score of experimental schools was substantially more than that of control schools.....” (TALEEM 2011: 25).

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