

Program Profile

Program	Program name	Introducing Virtual Reality through Task-Based English Language Teaching at Bangladeshi Private Universities: Prospects and Challenges
	Category	A1, B3

Summary of Program

Program Name	Introducing Virtual Reality through Task-Based English Language Teaching at Bangladeshi Private Universities: Prospects and Challenges
Category	A1, B3
Abstract of Program	This research project explores the integration of Virtual Reality (VR) in Task-Based Language Teaching (TBLT) among students at private universities in Bangladesh. Through a mixed-method approach, the study investigates how immersive VR technology can enhance language learning by providing realistic, interactive environments that align with task-based pedagogical frameworks. By immersing learners in practical, real-world scenarios, VR has the potential to increase student motivation, attention, and retention of English language skills. The project assesses both the effectiveness and the challenges of using VR in language classrooms, offering practical solutions and strategies for its sustainable adoption in Bangladeshi higher education.

Details of Program

Planning

Objectives	Long-term Goals	- To explore the effectiveness of VR-enhanced TBLT in English language acquisition. - To analyze students' engagement, motivation, and language development using VR tools. - To identify challenges in the adoption of VR in classroom-based language instruction. - To offer practical solutions for effective VR-TBLT implementation in the Bangladeshi context.
	Short-term Targets	Literature Review – Compile and analyze existing studies on VR in language learning and TBLT. Tool Selection – Identify and test suitable VR platforms/apps for English language tasks. Pilot Study – Conduct a small-scale trial with a limited group of students to refine research instruments. Data Collection Instruments – Develop questionnaires, interview guides, and task designs aligned with VR activities. Faculty & Student Orientation – Provide brief training sessions to familiarize participants with VR tools. Baseline Data Collection – Gather initial data on student motivation, engagement, and language skills before VR intervention.

		Initial Implementation – Integrate VR tasks in a few selected classes to test feasibility. Preliminary Analysis – Evaluate pilot data to identify early trends and refine methodology.
	Rationale	English language teaching in Bangladesh, particularly at private universities, often relies on traditional classroom practices that may not fully engage learners or connect them with real-world contexts. Task-Based Language Teaching (TBLT) has been recognized as an effective pedagogical approach since it emphasizes authentic communication and problem-solving. However, implementing TBLT in conventional classrooms can be limited by a lack of authentic settings and interactive opportunities. Virtual Reality (VR) offers a transformative solution by immersing learners in realistic, task-oriented environments that simulate real-life communication scenarios. This integration can make language learning more engaging, interactive, and practical, fostering deeper motivation and retention among students. At the same time, the application of VR in Bangladeshi higher education is still in its infancy, with little empirical research available on its effectiveness, challenges, and sustainability. Therefore, this project is significant because it not only examines the pedagogical value of VR-enhanced TBLT in improving English proficiency but also addresses the practical barriers to its adoption. By generating evidence-based insights, the study aims to provide strategies for effective implementation, contributing both to language education research and to the modernization of higher education in Bangladesh.
Subject (Leader)	Initiator(s)	Ullah, M. A.
	Champion(s)	Ullah, M. A.
	Major team member(s)	Ullah, M. A, Sk Obaidullah, Sifat Ullah
Environment	Nature/Society	The effectiveness of VR-enhanced Task-Based Language Teaching (TBLT) in English language acquisition contributes to educational innovation and digital inclusion in Bangladeshi society
	Industry/Market	Expanding the digital education market in Bangladesh
	Citizen/Government	(Discuss how citizens and government support or impose on the program.)
Resources	Human resources	1 Research assistant and a team of 3 students will be involved in the Project work.
	Financial resources	1,50,000–200,000/=tk

	Technological resources	☐ VR headsets (e.g., Meta Quest, Pico); ☐ Laptops/PCs compatible with VR systems; ☐ VR-based English language learning applications or custom-built modules; ☐ Stable internet connection and smart classrooms; ☐ Access to statistical software (e.g., SPSS) for data analysis;
Mechanism	Strategy (Weight/Sequence)	(Outline the program's strategic directions, prioritizing the subject, environment, and resources by importance (weight) and order (sequence).)
	Organization	(Evaluate if the university's organizational structure aligns with the program's strategies.)
	Culture	(Assess whether the university's culture supports or hinders the program's execution.)
Doing		
Launch date		(Provide the launch date of the program.)
Responsible organization		World University of Bangladesh
Program content and process		The literature review and theoretical framework have been completed. A plan for pilot testing with limited VR scenarios has been initiated. Collaborations with private universities are currently under discussion and will be finalized soon for full-scale implementation.
Key highlights of the content/process		- Limited access to high-quality VR devices. - Lack of VR content aligned with local language learning needs. Instructor training on using VR tools effectively.
Differences from traditional approaches		- Procuring cost-effective VR headsets and software. - Collaborating with local developers for customized VR learning modules. Conducting workshops and training programs for language instructors.
Progress as of today		The literature review and theoretical framework have been completed. A plan for pilot testing with limited VR scenarios has been initiated. Collaborations with private universities are currently under discussion and will be finalized soon for full-scale implementation.
Problems in implementation		- Limited access to high-quality VR devices. - Lack of VR content aligned with local language learning needs. Instructor training on using VR tools effectively.
Approaches to solve the problems		- Procuring cost-effective VR headsets and software. - Collaborating with local developers for customized VR learning modules. Conducting workshops and training programs for language instructors.
Completion date, if completed		January 30,2026
Seeing		

Impacts on students	Increased engagement and motivation in learning English. Better performance in real-life communication tasks.
Impacts on professors	- Enhancement of teaching methods with immersive technologies. - Increased research opportunities in tech-based pedagogy. Overall, a new dimension will be introduced in the field of English language teaching.
Impacts on university administration	The integration of VR-enhanced TBLT will encourage university administrations to invest in modern learning technologies, upgrade classroom infrastructure, and provide faculty training. It can strengthen institutional reputation by positioning the university as innovative and competitive in higher education. Additionally, administrators may develop new policies, partnerships, and evaluation systems to ensure sustainable adoption of VR in language teaching.
Responses from industry/market	Interest in industry-specific language VR training modules
Responses from citizen/government	Potential support under the Digital Bangladesh education initiative
Measurable output (revenues)	Quantitative data on student performance before and after using VR. Qualitative feedback from students and teachers.
Measurable input (expenses)	The estimated budget for implementing VR-enhanced TBLT is as follows: VR headsets and devices for students are projected at BDT 60,000 per unit, with a set of 5 units totaling BDT 300,000. Software licenses for VR language applications are estimated at BDT 12,000 per license for 10 licenses, totaling BDT 120,000. Computer and network upgrades, including high-performance PCs and improved Wi-Fi, are expected to cost around BDT 200,000. Faculty training workshops are budgeted at BDT 50,000, while maintenance and technical support for one year may require BDT 40,000. Additional research-related expenses such as surveys, data collection, and reporting are estimated at BDT 30,000. Overall, the total projected cost for the project is approximately BDT 740,000.
Cost-benefit analysis for effectiveness	Though initial investment is high, long-term benefits include scalable teaching modules, reduced classroom load, and more effective learning outcomes.
Future Planning	
Where does the project go from here?	This project aims to expand VR-TBLT implementation to more universities, introduce subject-specific language tasks (e.g., tourism, healthcare), and influence national policy in digital language learning.
Addendum	
Exhibits, pictures, diagrams, etc.	Conferences, Social Media
Reports, mimeos, monographs, books, etc.	University Press; Academic Journal; Newspaper etc.
Others which may help explain the program (including website links)	(Include any materials that may help validate the program; links to the program's website will be especially useful.)