



Applied Project

On

**Bridging the ICT Gap in Rural Education:
A Case Study of Government Senior Basic
& RMSA Higher Secondary School, Mynso**

By Romeo Lamare

**Government Senior Basic & RMSA Higher Secondary School,
Mynso Village, West Jaintia Hills, Meghalaya – 794 150**

**Submitted in partial fulfilment of the requirements
for the**

**Continuous Professional Development Program for School Leaders
(5th Cohort)**

October 2025



**Meghalaya School Leadership Academy
Directorate of Educational Research & Training
(MSLA - DERT)**



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Acknowledgements

I express my heartfelt gratitude to the **Meghalaya School Leadership Academy (MSLA)** and the **Directorate of Educational Research & Training (DERT)** for initiating this valuable professional development program for school leaders.

My sincere thanks to my course instructors — **Dr. David Nongrum, Dr. Carelene Kharmalki, Dr. Baladiangti Nongbri, Dr. Fitzgerald Hujon, and Smt. Bethsheba Rapthap** — for their expert guidance, encouragement, and constructive feedback throughout the course.

I am equally grateful to my colleagues at **Govt. Senior Basic & RMSA Higher Secondary School, Mynso**, for their support and cooperation during the data collection and project discussions.

Lastly, I extend my appreciation to my family and well-wishers for their constant encouragement and understanding during the course of this study.

Shri Romeo Lamare
Principal
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1. Introduction

1.1 Overview of the School

Govt. Senior Basic & RMSA Higher Secondary School, Mynso is a government educational institution located in Mynso Village, under West Jaintia Hills District, Meghalaya.

Originally an Upper Primary School, it was upgraded to the Secondary level in 2014 and further to the Higher Secondary level in 2024.

<i>Total Enrolment (2025):</i>	141 students
<i>Teaching Staff:</i>	13 teachers
<i>Computer Instructor:</i>	1
<i>Streams:</i>	Arts (Higher Secondary)

The school caters to students from rural and economically disadvantaged backgrounds. Despite steady growth, ICT integration remains a major challenge due to limited resources and inadequate training

1.2 School Mission:

To enable each child to reach their full potential in knowledge, skills, and values, becoming a responsible and productive citizen in a global society.

1.3 School Vision:

To empower every child to be confident, creative, and compassionate through a fully integrated and holistic curriculum.

1.4 Low Performance and ICT Gap:

The school faces persistent challenges in ICT infrastructure, digital literacy, and modern pedagogy, affecting teaching effectiveness and student engagement.

Key issues include:

- Limited ICT equipment (only one projector).
- Absence of a smart classroom and computer lab.
- Teachers' lack of digital skills and confidence.
- Poor internet connectivity and frequent power outages

This project seeks to analyze these gaps and propose sustainable strategies for improving ICT integration and academic performance.

2. Literature Survey

2.1 Existing Knowledge:

Studies have consistently highlighted ICT as a powerful tool for improving educational quality, engagement, and accessibility. However, rural schools in India face persistent barriers related to infrastructure, training, and connectivity (UNESCO, 2023; Kumar, 2021).

2.2 Key Factors Affecting ICT Integration:

Factor 1: Infrastructure and Resource Availability: Lack of digital devices, internet access, and power supply are major constraints in rural education. (UNESCO, 2023; Kumar, 2021)

Factor 2: Teacher Digital Competency: Most rural educators lack exposure to ICT training, hindering confidence and classroom innovation. (Mishra & Koehler, 2006; NEP 2020)

Factor 3: Pedagogical Integration of ICT: ICT is often limited to presentations instead of being used for interactive learning. (Anderson, 2018; Sharma, 2022)

Factor 4: Impact on Student Learning: Effective ICT use leads to improved motivation, understanding, and academic achievement. (OECD, 2022; Singh, 2020)

2.3 Research Gap:

Few studies focus on small rural schools in Northeast India. This project addresses that gap through a **context-specific, low-cost, and practical approach** to ICT integration.

3. Methodology

3.1 Research Design:

Type:	Qualitative Exploratory Case Study
Setting:	Govt. Senior Basic & RMSA Higher Secondary School, Mynso
Sampling Method:	Convenience Sampling
Sample Size:	8 teachers and 15 students

3.2 Data Collection Instruments:

Interviews:	Semi-structured with teachers.
Focus Group Discussion:	With students.
Observations:	Classroom teaching practices.
Document Analysis:	Lesson plans, exam records, and attendance data.

3.3 Measurement Scale:

Data analysed through descriptive themes: teacher attitude, infrastructure, pedagogy, and student engagement.

3.4 Limitations:

- Single-school study (limited generalization).
- Time constraints prevented multiple observation cycles.

3.5 Ethical Considerations:

All participants provided informed consent, and confidentiality was maintained.

4. Research Questions

- What are the key barriers to effective ICT integration in the school?
- How do teachers and students perceive the use of ICT in teaching and learning?
- What low-cost solutions can be introduced to enhance digital literacy?
- How can teacher professional learning communities (PLCs) support ICT skill development?

5. Results and Discussion:

5.1 Demographic Information

The study involved **three teachers** representing various academic disciplines such as Science, Mathematics, and English. Their teaching experience ranged from **5 to 18 years**, and all possessed at least a **graduate degree**. Two teachers had attended basic ICT training organized by the Education Department.

The participants' varied teaching experience provided diverse insights into classroom practices and ICT usage levels. Younger teachers were more confident using ICT tools, while senior teachers expressed willingness to learn but needed more support and training.



Teachers participating in the ICT survey at Govt. Senior Basic & RMSA Higher Secondary School, Mynso.
(Source: Field observation, August 2025)

5.2 Classroom Discussion with Students (Classes IX–XII)

A group discussion was conducted by School Principal, **Shri Romeo Lamare** with students from **Classes IX, X, XI, and XII** to gather feedback on ICT-based learning. Students shared that lessons using projectors, videos, and PowerPoint presentations made learning more interesting and easier to understand. They expressed a strong desire for more opportunities to use computers and digital tools in daily lessons.

PRINCIPAL INTERACTING WITH STUDENTS



Shri Romeo Lamare interacting with students of Classes IX–XII during a discussion on ICT-based learning.
(Source: Field Observation, September 2025)

5.3 Teaching Quality

Results revealed that teachers were **highly motivated** to integrate ICT into their teaching but faced **practical limitations**. They acknowledged the value of ICT tools such as PowerPoint, educational videos, and online simulations in improving student understanding, particularly in Science and Mathematics. However, limited equipment and poor internet connectivity reduced the frequency of ICT-based lessons.

Teachers emphasized that ICT use enhances **student engagement, curiosity, and retention of knowledge**. They also noted that regular hands-on practice and exposure to technology motivate students to participate actively in class.

5.4 Administrative Challenges

The study found that the school faces **significant infrastructural and administrative constraints**, including:

- Limited ICT devices and maintenance support
- Frequent power cuts and weak internet connectivity

- Lack of trained ICT coordinators
- Insufficient funds for upgrades and consumables

Despite these challenges, the school leadership continues to encourage digital practices by using available resources, coordinating with SMDC, and motivating teachers to integrate ICT creatively into lessons. The principal's proactive role reflects strong **instructional leadership** and commitment to school improvement.

5.5 Summary of Discussion:

Overall, the findings show that the teachers and students of **Govt. Senior Basic & RMSA Higher Secondary School, Mynso** are eager to embrace ICT-based education. However, the **digital divide** persists due to infrastructural, financial, and training-related constraints.

6. Recommendations Future Directions

- Establish a Basic ICT Lab – Use refurbished computers and UPS backup.
- Teacher Training Workshops – Partner with local ICT experts for short courses.
- Develop a Smart Classroom – Equip one room with projector, screen, and sound system.
- Utilize Free Digital Content – Encourage use of DIKSHA, ePathshala, and YouTube EDU.
- Strengthen PLC Initiatives – Continue teacher collaboration on ICT integration.
- Encourage Student Digital Clubs – Promote peer learning and ICT awareness.
- Seek Community & NGO Partnerships – For donations or CSR funding.

Further research could explore:

- The long-term impact of ICT integration on student achievement.
- Comparative studies between rural and urban schools in Meghalaya.
- The role of digital literacy programs in improving school outcomes.

7. Conclusion

The study concludes that bridging the ICT gap in rural schools requires **systemic effort**—combining infrastructure improvement, teacher empowerment, and administrative support.

Despite challenges, **Govt. Senior Basic & RMSA Higher Secondary School, Mynso** has shown commitment to progress through collaborative learning and innovation.

Sustainable ICT integration can transform not only academic performance but also digital readiness, preparing students for a rapidly evolving educational landscape.

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