



BLUEPRINT PLAN OF DIGITIZATION AND CONNECTIVITY

2081-2086



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University Grants Commission (UGC)
Sanothimi, Bhaktapur

GRAMODAYA YUGAKABI SIDDHICHARAN CAMPUS (GYSC)
Likhu-06, Gamnang, Okhaldhunga

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INTRODUCTION

Okhaldhunga, hilly rural districts of Koshi Province, is characterized by natural beauty, cultural heritage. It is situated in hilly land with extreme geographic and socio-economic limitations. More than 80% of the population depends on subsistence agriculture as a livelihood and has minimal access to modern tools. The research indicates the digital literacy rate of the nation to be only 31%. The digital divide in the district is also driven by a lack of stable electricity since most households use micro-hydro power. Low digital literacy, particularly for women, elderly citizens, and rural residents, also serves to compound the gap. Low penetration of smartphones and computers makes it difficult to participate in the digital economy. Migration of youths to urban centers in pursuit of education and job opportunities underscores the necessity to create local opportunities through digitization. Digital Nepal Framework 2022 accord very high priority to connectivity and education at the national level, aiming to raise digital literacy and support the advancement of ICT in Nepal. But, its rollout in remote districts like Okhaldhunga has been unequal on logistical, economic, and technical bases.

Gamnangtar, located along the Likhu River in the Likhu Rural Municipality of Okhaldhunga district, serves as an essential educational hub for students, particularly those from economically disadvantaged backgrounds engaged in agriculture.

The Gramodaya Yugakabi Siddhicharan Campus offers a four-year Bachelor of Education (B.Ed) program under Tribhuvan University. This campus plays a crucial role in providing higher education opportunities, especially for females, addressing the educational needs of daughters and daughters-in-law who lack access to urban higher education. With approximately 250 students and 12 faculty members, the campus actively contributes to the educational development of the region.



Siddhicharan
Campus Chief

The 2019 pandemic has exposed the shortcomings in distance learning and telemedicine services. Arising the necessity and demand of connectivity even in the rural areas like Gannangtar, Gramodaya Yugakabi Siddhicharan Campus can serve as hubs for digital literacy initiatives.

OBJECTIVES

GENERAL OBJECTIVE

To build the capacity of Gramodaya Yugakabi Siddhicharan Campus to enhance digital connectivity, streamline campus operations, and improve access to online learning resources and remote learning.

SPECIFIC OBJECTIVES

- **Enhance internet connectivity:** Ensure fast, reliable internet access on campus for students and staff. Build Information Technology (IT) and networking infrastructure of Campus;
- **Digitize campus operations:** Acquire/customize software and provide for digitalization of campus operations and processes;
- **Establish e-learning and digital resources:** Develop an e-library, subscribe to online resources like journals and books, and provide access to digital learning platforms
- **Capacity Building on Technology Integration in Teaching:** Providing training opportunities to faculty and students about digital tools, its importance and uses in Teaching-learning process
- **Developing students' digital record:** Maintaining digital records of students' academic progress.




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- **Establish virtual classroom:** Providing virtual classroom opportunities to the students to enhance learning activities

PRESENT STATUS

At present, Gramodaya Yugakabi Siddhicharan Campus faces several significant challenges:

- **Limited internet access:** Currently, the campus relies on basic 3G/4G networks and irregular fiber connectivity
- **Inadequate computer resources:** There is a severe lack of computers for both students and lecturers, hindering the integration of digital tools into teaching and learning process
- **Lack of e-learning platforms:** There is lack of established platforms for online resource access
- **Manual record-keeping:** The campus still heavily relies on paper-based records for administrative works, leading to difficulties in data management
- **Poor student record keeping:** The record-keeping system for students' academic and extracurricular achievements is outdated and inefficient

STRATEGIES AND ACTIVITIES

1. Assess and Build IT & Networking Infrastructure

Sufficient and reliable IT and networking infrastructure is prerequisite to good network connectivity. Under this plan, an assessment of the existing and needed hardware and networking infrastructure will be made in respect of:

- **Broad band internet and Wi-Fi connection:** Expand internet access by establishing a stable broad band connection and implementing campus-wide Wi-Fi



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- **LAN setup:** Set up a local area network (LAN) that will connect workstations and servers for smoother internal communications and data sharing Server and workstation computers;
- **Remote learning equipment:** Procure necessary tools, such as laptops, projectors, screen, etc. to facilitate remote learning and online education
- **CCTV and security equipment:** Install CCTV cameras to ensure security and observation on campus
- **Document Scanner:** Acquire scanners for digitizing physical documents, records, and materials

On-campus internet access points would ensure connectivity, addressing the challenge of rural students lacking home internet

After assessing and identifying items that will need to be acquired, a purchase process will be initiated to get the items. In addition to this, necessary data packs will be acquired for distribution to students at subsidized rates.

Time line: This task will be completed by the end of 2082 B.S

Expected cost: 400 thousand rupees.

2. Digitalize Campus Operations

Digitalization of all academic, administrative and financial processes of Campus is needed in order to achieve better efficiency, transparency and also keep up with changing times. To that end, the Campus will implement the following tasks:

- **Campus Management:** Acquiring software like EMS for automating academic records, administrative tasks, and financial management
- **Microsoft Teams for virtual classrooms:** Provide access to MS-Teams to facilitate virtual classes, discussions and remote learning
- **Digitize past campus records:** Conversion of paper based records into digital formats for better storage and management

- **Maintain and update Campus website:** Develop and regularly update the campus website, to access important information to students and faculty
- **Staff Training:** Train teachers and staff on use of Campus Management/EMIS, Virtual Classroom, Digitization, and website maintenance, ensuring smooth integration into campus operations

Budget and timeline for implementing these activities is expected as follows:

Activity	Time	Budget Rs.	Remarks
Identify, evaluate/test, customize, and acquire Campus Management/EMIS software - open source or paid, Arrange access to Microsoft Teams	By end of 2082 B.S	100 thousand Approx.	
Digitize past Campus admin/finance records	By end of 2083 B.S	50 Thousand	
Website establishment and update website	Regular	60 Thousand per year	
Training of teachers and staff about the software systems	2081/82 B.S	40 thousand	

3. Develop E-library and Subscribe online resources

The Campus make wide range of learning resources available to students and teachers. We will arrange subscriptions to online Journals and E-books through various channels including through T.U Central Library. An e-library for learning



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materials developed in house will be set up and developed. In this regard, the Campus will implement the activities as below:

- Create the awareness about the E-library and its benefit to students and faculty
- Set up an e-library system to store and retrieve digital materials developed inhouse by the Campus;
- Digitize learning materials currently available in hardcopy and upload them in the e-library system;
- Subscribe to wide range of online e-books and journals through TU Central library and other sources;
- Make catalog of books available in the library on the internet/LAN, for easy retrieval and use by students and faculty
- Provide training to staff on online catalog and e-library maintenance and updating.

Time line: 2083 B.S

Budget: 60 Thousand per year

4. Training, Capacity Building and Technology Integration in Teaching

- **Workshops on basic IT skills:** Train students and faculty on using computer, internet usage, and online research
- **Classroom technology:** Equipping classrooms with projectors, and audiovisual systems, facilitating interactive teaching and learning activities
- **Digital tools for assessments:** Use of E-tools like google forms for quizzes, exams, and feedback
- **Faculty training:** On integrating digital tools into teaching, such as using interactive whiteboards and educational apps

Time line: 2082 B.S

Budget: 300 Thousand



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5. Developing students digital record

- **Academic records:** Maintain digital records of students' academic progress, grades, and attendance
- **Link to government portals:** Ensure that student records are accessible through scholarship and government portals
- **Integration with e-learning platforms:** Synchronizing records with online learning systems, allowing real-time tracking of student engagement and progress
- **Analytics for learning gaps:** Use various e-platforms to identify learning gaps and recommend interventions

PLAN IMPLEMENTATION, MONITORING AND EVALUATION

- Campus Management Team (CMT) will make necessary manpower and budget arrangements for implementation and monitoring of this plan.
- CMT will identify funding sources including local government and UGC and approach them to obtain the funding.
- CMT will monitor implementation of various activities mentioned above as parts of this blueprint plan. For this purpose, various monitoring mechanisms will be placed including periodic CMT meetings.
- CMT will also make necessary arrangements for evaluation of different works carried out under this plan.

CHALLENGES AND CONSIDERATIONS

- the rural location presents challenges, such as limited internet connectivity and power supply
- economic disparities among students may hinder device access, requiring targeted interventions



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- irregular network connectivity in the locality may hinder the targeted interventions among the students
- digital literacy levels among faculty and students may vary, necessitating robust training programs

CONCLUSION

The digitization blueprint for Gramodaya Yugakabi Siddhicharan Campus represents a transformative step toward bridging the digital divide in rural Okhaldhunga. By prioritizing robust IT infrastructure, digitized operations, and accessible e-learning resources, the plan aims to empower students, particularly females from agrarian and economically marginalized backgrounds, with equitable access to modern education.

The Campus faces significant challenges in digitization due to its remote location and financial limitations. However, the proposed blueprint outlines a structured pathway to transform the campus into a digitally enabled institution. By prioritizing high-speed internet, modern computer labs, and e-learning platforms, the campus can bridge the digital divide and enhance educational quality. Digitizing administrative processes, systems will streamline operations, reduce paperwork, and improve transparency. Capacity-building workshops are critical to ensuring staff and students can leverage these tools effectively.

By embracing digitization, the Campus can empower students with 21st-century skills, improve access to global knowledge resources, and position itself as a model for rural education in Nepal. By integrating technology into teaching and administration, the campus will enhance academic quality, operational efficiency, and student employability. Over time, these efforts will not only uplift local education but also serve as a replicable model for rural institutions, driving inclusive progress in Nepal's underserved regions.



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