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The Village Seminary Project: Sustainable Models for Interdenominational Theological Education in Resource-Limited Settings

Dr. Kyle Chalko[1]; & **Dr. Wanjiru Kinuva**[2]

[1]Vice Chancellor, Kenya Assemblies of God EAST University, Nairobi, Kenya.
[2]Deputy Vice Chancellor and Students Affairs, Kenya Assemblies of God EAST University, Nairobi, Kenya.
Corresponding Author: dvc.academivs@east.ac.ke
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Abstract

The challenges of poor infrastructure, digital exclusion, and curricula often limit access to theological education in rural and marginalized communities across Africa and the Americas. Additionally, traditional seminaries are typically urban-based and resource-intensive, making them unreachable to many grassroots ministry leaders. Besides, the curricula utilized seldom reflect local realities. The main aim of the Village Seminary Project (VSP) is to identify possible gaps in the delivery of theological education in sidelined communities; while designing and evaluating a sustainable, technology-supported model for delivering contextually relevant theological education in resource-limited rural settings. This may be achieved through a viable, technology-driven framework that combines solar energy, satellite internet, and mobile learning devices to deliver contextually relevant theological instruction in resource-limited settings. The VSP Action Research employed mixed methods in a rural Kenyan context with 24 participants, including pastors and community leaders. Data were collected through surveys and focused groups. Document analysis was conducted across three phases: needs assessment, program implementation, and evaluation. Quantitative data were analyzed using Likert-scale indicators covering ten domains; while qualitative data captured participants' experiences with cultural adaptation and ministry application. Findings showed that limited internet access (41.7%), unreliable electricity (33.3%), and high device costs (33.3%) were major barriers to theological education. However, participants strongly supported localized, technologically enabled training that reflects community realities. The introduction of solar-powered, offline-first learning systems improved engagement, fostered digital readiness, and enhanced collaboration across denominations. Cultural

contextualization and community-based leadership formation emerged as key enablers of sustainability and impact. The study concludes that integrating renewable energy solutions with digital and culturally responsive pedagogies can bridge the educational divide in marginalized regions. The VSP model promotes theological education that is both accessible and contextually relevant, reducing dependency on centralized institutions. It further establishes that interdenominational collaboration, community participation, and investment in local curriculum development are crucial for long-term success. By aligning technology with theology, the Village Seminary Project offers a scalable and replicable model for empowering rural leaders and transforming theological education in resource-constrained settings.

Keywords: Action Research, Asynchronous Learning, Cultural Relevance, Digital Divide, Village Seminary Project.

Introduction

Theological and ministry education remains inaccessible to many in rural parts of Africa and other disadvantaged contexts, where a lack of infrastructure and limited resources is likely to continue to limit opportunities to develop leaders. The main objective of the Village Seminary Project (VSP) Study is to not only identify gaps in delivering contextually relevant theological education in resource-limited rural settings; but to design and evaluate a sustainable, technology-supported model for delivering contextually relevant theological education in resource-limited rural settings. This article explores the Village Seminary Project as an empirical and conceptual response to those challenges and attempts to marry the academic training of theology with Community-Based-Practice (CBP). Findings discussed in the modern literature indicate the significance of the localization of theological education, its digitalization, and context-specific pedagogy (Hanciles, 2014; Gois, 2023). Yet there remains a major disparity in further applying such models to communities that are remote and lack access to physical classrooms, libraries, and sustainable communication networks (World Bank, 2021; Pew Research Center, 2020). The project balances this limitation by offering an innovative way of playing around technology, cultural adaptation and sustainability to empower communities in terms of leadership and spiritual formation. The extent of its importance is not only in furthering theologically accessible approaches but also in building up the resilience of social institutions, diminishing marginalization, and contributing to fulfilling the United Nations goals mentioned in the development agenda as the aspect of Sustainable Development Goals (Economic Commission for Latin America and the Caribbean (ECLAC), 2022).

The initiative also links theory and practice to make theological training a mandate of rigorous educational endeavor as well as empowerment of the entire community holistically. This is partly because theology curriculum is mostly designed in specific

cultural societies which fail to perfectly match the culturally diverse settings of the rural societies. This disengagement can diminish the applicability and effectiveness of the academic curriculum as compared to life situations of the learners in these geographical regions. So, the need to change theological learning to fit such contexts, to take heed of the local cultures and traditions as not to disrupt them, is paramount, but much more difficult. The great importance, consequently, is that theological education programs are established and sustained in remote areas with significant investments in finances. The expenditure of constructing infrastructure, delivering resources and employing trained instructors can be great. Moreover, potential students in these regions experience financial problems to cover tuition and other education-related expenses and this also constraints their access to the education system.

On the one hand, technology can bring solutions to make education more accessible to remote areas, in other words, but on the other hand, it gives rise to new challenges. The shift towards online learning presupposes not only having access to the Internet, but also the sufficient level of digital literacy of students and teachers. Numerous teaching-oriented schools have problems in transferring face-to-face classes into an effective and efficient virtual environment beneficial to students, hence positive and significant educational performance. In that regard, our Village Seminary Project teaches, has been a novel set of ideas that use emerging technologies to transcend these forms of barriers to access to systems of educational learning and that also provide education of high quality theology in distant regions. Triple issues that surround the complex facets of providing theological education in distant places are therefore considered with an approach that involves the holistic nature of ensuring that it is done appropriately through the provision of a proper infrastructure, cultural sensitivity, economic viability and integration of technology in the provision of the same.

In this spirit we shall endeavor to, first of all seek to replicate the burden which such a project poses to the world today, in order that, the material conditions or the infrastructural conditions at hand can be taken into consideration when coming to such a project. Second, make a suggestion that aims to adjust to the demands of the communities, considering their interests and cultural practices, in addition to providing a substitute that resorts to work in the development of the implementation of technology and connectivity in particular sectors, as well as the aspects that must be considered in the implementation of the project. Lastly, the attempt to assess some of the potential risks or the effect that this may have on some human groups.

Literature Review

Challenges in Teaching Theology in Marginalized Communities

Inadequate facilities in rural locations are one of the primary problems of theological training in the marginalized communities. Based on the World Bank (2021) and CRTC (2021), the challenges were particularly acute after the Covid-19 pandemic, which not only raised the concerns in the academic discourse about the necessity of pedagogical innovation, but also indicated the importance of expanding connectivity networks to previously remote locations that did not have enough structure to deal with the crisis. Besides, access to theological education in sub-Saharan Africa is hindered by infrastructural challenges such as poor internet

connectivity, high technology costs, and inadequate institutional support (Okyere-Manu, 2020 & Mawerenga, 2022). The studies further emphasize on the urgent need for innovative, context-aware, and technology-assisted models to make theological training more accessible and sustainable in marginalized communities. Researchers and policy analysts have highlighted the importance of approaching the issue on an integrated basis that enhances the educational system in disadvantaged areas, taking into account economic implications of investments in technological infrastructure and the training of social leaders by using mobile and digital tools (Global System for Mobile Communications Association (GSMA), 2022; The United States Department of Agriculture (USDA), 2021). As stipulated by the ECLAC (2022) and the United Nations Sustainable Development Goals (2015) the implementation of new pedagogical approaches is consistent with the mapping requirement of meeting the SDG goal of alleviating poverty and ensuring no one is left behind in terms of education and comprehensive coverage by 2030. However, four years later after the pandemic situation in the Americas, the social and digital divide has not been much reduced, which makes the introduction of culturally sensitive and technically based solutions even more urgent (Pew Research Center, 2020; TeleSemana, 2024).

In that regard, it is estimated that in Latin America and the Caribbean, 20 percent of the population residing in rural areas lack access to a reliable source of electricity (World Bank figures 2021). In such regions as Amazon, this percentage may amount up to 50 per cent, which directly affects the opportunity to use the education programs that presuppose the utilization of the latest technologies. However, this is not only so in Latin America. As evidenced by a report issued by United States Department of Agriculture USDA (2021) a mere estimate of 6 percent rural households have steady access to energy, especially remote areas like Alaska or a few of India reserves. In Canada, available statistics showed that fewer than 45 percent of households in rural areas had access to high-speed Internet, hindering the execution of education programs that relied on new technology in their setting (Canadian Radio-television and Telecommunications Commission, 2021). Moreover, even 20 years into the 21st Century, the issue of social inequality is still more or less acute, and the problem of accessibility to the Internet is still an issue in most of the Americas (ECLAC, 2022; Pew Research Center, 2020). In addition, rural areas have limited access to academic programs like theological education because of limited educational facilities (Hanciles, 2015). Theological education is needed to produce leadership that can help lead and empower other teaching people, yet the traditional means are not viable in most of the regions. Examples of these entail making sure that programs are culturally relevant. The rural communities are associated with values and practices that cannot be ignored when developing educational material (Truth and Reconciliation Commission, 2015).

Gois (2023) states that there is the ethical and biblical imperative to take the Word of God into every corner of the world, yet apply exegesis to culturally specific needs of marginalized or migrant communities. Such a vision is consistent with the biblical accounts in which migration and mission cannot be separated: migration is part of the divinely decreed mission of God, fulfilled by his people through the story of Abraham, through Jesus and the formation and growth of the church (Gois, 2023). A study conducted by Hanciles (2015) highlights the need

to contextualize theology practice in order to be effective and relevant in the livelihood of communities, especially in a region where there is prominent custom. Muroma (2024) suggests that effective theological training in Africa must be deeply contextualized; rooted in the social, cultural, and spiritual realities of the communities it seeks to serve. He argues that traditional Western seminary models often fail to address the lived experiences, languages, and indigenous wisdom of African learners, resulting in theological education that feels detached from local ministry contexts. He further advocates for an intercultural and community-based approach that values local participation, oral traditions, and experiential learning as legitimate sources of theological reflection. In his view, contextualization is not merely about translating curriculum content but about transforming theological education into a dialogical and participatory process where faith, culture, and community life inform one another. Such an approach, he contends, produces more relevant and transformative leadership for the African church.

In Canada, the Truth and Reconciliation Commission of Canada (TRC) (2015) recommended putting indigenous interpretations into the curriculum to rectify the historical damage of using traditional schools, thus demonstrating why culturally modified theological training is necessary. Similarly, in the United States, Pew Research Center (2020) noted a significant trend towards cultural diversification of both rural and urban southern and Midwestern agricultural regions with regards to it being caused by Latino immigration, as well. This underlines the importance of multilingual and culturally conscious theological education that will be able to speak to different people. In short, the cultural adaptation of theological education to material and existential requirements, in addition to supporting the preservation of the relevance of God where it is conveyed, also promotes self-esteem and group integrity (National Congress of American Indians, 2022). This is a multicultural approach that can enable the societies in the rural areas to become more powerful and resilient as far as spiritual and social leadership is concerned (Hanciles, 2015; TRC, 2015).

Innovative Solutions

Transformation of these issues entails a suggestion of different models which analyze and give practical solutions in the communities. In the context of the current case, we hold that the entry of novel technologies stimulates the development of solutions addressing the issues of educating people living in distant regions. Solar energy and the internet satellite connection like Starlink would be utilized to build autonomous and digitally connected education facilities even in distant suburbs far away from urban areas (Johnson & Kumar, 2019). This development promotes the introduction of educational initiatives that could not be adopted by these communities previously (Wong & Chow, 2021). In our case is will be done via seminars. Therefore, the Village Seminary Project suggests the implementation of the innovative way to address the existing educational barrier connected with the social and, consequently, digital divide that takes place in the areas of the world. This initiative includes solar technology and satellites connectivity combined with Android tablets in providing theological courses to be implemented in the remote communities (Anderson, 2020).

Based on GSMA statistics of 2022, across the entire globe, 75% of the population (with rural locations included) has access to mobile gadgets. This indicator will enable us to have a sure point of departure in implementing such program. Although many of these remote areas lack the infrastructure required based on connectivity, it is also true that it has become increasingly common to observe every person using mobile devices in everyday life (Hanciles, 2015). Leaning on this fact, the seminar project model enables students to download educational content and learn offline, i. e., asynchronously, but periodically assess their progress via the Internet networks (World Bank, 2021). This reduces the energy costs and input and increases resource utilization in line with the current trend of sustainable education practices (ECLAC, 2022).

SpaceX (2023) has already reported that the technology is available in some Latin American countries, providing the possibility to employ such an approach. Starlink is a satellite system founded by SpaceX, with satellites operating in low Earth orbit (LEO), providing high-speed internet services with low latency on a global scale (Starlink, 2023). It has been reported that the capability of Starlink, which could connect people in the remote regions, offers a viable way out to close the digital divide in these areas as well (Telesemana, 2024). In this respect, solar power has been a sound and eco-friendly source of electricity in remote regions away from civilization (National Congress of American Indians, 2022). The experience of projects undertaken in Ecuador in the Amazon region has demonstrated how the introduction of solar panels can change the routine life of people by providing them with solar energy to power schools and gain access to the possibility of communication technologies (Truth and Reconciliation Commission, 2015). Thus, the motivation of trying to use each of these resources in the most efficient way in running programs or seminars that facilitate the promotion of theological education.

What is the Village Seminary Project?

The idea of the Village Seminary Project is to use solar power and satellite communications (Starlink, 2023; SpaceX, 2023) to help break the barriers to the provision of theological education in remote locations. This can be achieved by developing a full self-sufficient mobile access kit that will combine both energy sources and allow us to provide a current and more reliable method of connecting those who do not have access to quality internet and power in remote areas. In such a way, not only does the Project aim at ensuring access to education on the community level, but it should also help individuals to achieve their independence and have a beneficial effect on social cohesion and the local development (ECLAC, 2022). According to the World Bank (2021) lack of access to power and internet is a major setback in rural communities in Latin America and the Caribbean; an aspect that directly undermines the possibility of developing sustainable educational frameworks. Likewise, the United States Department of Agriculture (USDA) (2021) argues that even in the United States, stabilized power, as with remote residents in Alaska and Indian reservations, remains elusive. This development can be compared with the situation in Canada where rural households are yet to enjoy reliable high-speed internet with less than 45 per cent of them accessing it (Canadian Radio-television and Telecommunications Commission (CRTC), 2021).

The project is thus imperative to fill in the education gap among the marginalized societies where the inaccessibility of educational facilities due to the absence of basic infrastructure is a primary factor (GSMA, 2022). Making available mechanisms that ensure a non-stop and self-directed education process will not only equip individuals, but also communities at large (Pew Research Center, 2020). Additionally, the culturally relevant approach is used to make learning materials meaningful and useful to target communities since it honors their peculiarities and traditions. Hanciles (2015) points at the necessity to localize teaching of theology in a fashion combining local practices and values. Similarly, the Truth and Reconciliation Commission (2015) in Canada and National Congress of American Indians (2022) in the U.S. identified the need to have cultural adaptation of education that can deal with tracks of exclusion and provide indigenous and migrant communities with resilient leadership tools.

Methodology

This VSP Action Research employed a mixed method approach with a view to devising, initiating, and testing the Village Seminary Project, which is an attempt to impart theological training in the isolated communities of the underserved rural areas. The research methodology used was suitable since there was a chance to reflect, adapt, and consult with participants two cycles, which would ensure that the intervention would be both contextual and practical. The research design focused on three inter-related phases, namely: needs assessment, implementation of a program and evaluation of the program. Data collection occurred in three sequential phases: (1) needs assessment, (2) program implementation using solar-powered, satellite-connected devices, and (3) evaluation of outcomes and sustainability.

Quantitative data were collected through structured surveys containing Likert-scale items measuring participant perceptions across ten domains: infrastructure, access, content relevance, cultural adaptability, engagement, and perceived spiritual impact, among others. These data were analyzed using descriptive statistics (frequencies, percentages, and means) to identify trends and dominant patterns of response. Qualitative data were obtained through focus group discussions, open-ended survey questions, and document reviews. To integrate findings, the study employed a convergent mixed-methods analysis framework. Quantitative results were first summarized to establish measurable trends, and then qualitative narratives were used to explain, enrich, and validate these findings. For example, statistical evidence on limited internet access was complemented by participant testimonies describing the lived realities of technological exclusion. Similarly, quantitative improvements in engagement scores were interpreted alongside qualitative accounts of spiritual growth and collaborative learning.

This integration of numerical data and lived experiences provided a comprehensive understanding of how technology and contextual pedagogy interact to enhance theological education in marginalized settings. The approach ensured both empirical rigor and contextual sensitivity in evaluating the Village Seminary Project's impact.

Participants and Context

The research setting was in the rural area in Kenya where the level of theological education is low. Needs assessment survey has been conducted on a total number of 24 respondents. The participants selected were representative of the various classes of community leaders, church workers, and writers which would give a balanced contribution in terms of gender, denominational, and economic status. The criterion of inclusion included people who showed interest or participation in local ministry and whose experience offered challenges against formal theological study.

Needs Assessment

A background situational analysis was done to determine the obstacles that existed to theological education among the rural and marginalized communities. Data were drawn out of two sources (1) secondary reports like World Bank, USDA and ECLAC which provided global and regional overviews on educational and infrastructural issues and (2) a primary survey of 24 respondents done in Kenya. The survey involved matters concerning internet connection, electricity access, affordability of the devices, cultural sensitivity of theological materials, and technology orientation. Findings showed that inadequate internet connection (41.7%), unreliable power supply (33.3%), and prohibitive prices of equipment (33.3%) were the considered to be the main obstacles. The participants also emphasized that culturally contextualized curricula and grass roots level development of leaders is vital.

Program Implementation

The approach used to curtail the identified barriers was based on the implementation plan. Underlying strategies were:

1. Accessible energy: Having solar panels and batteries as use of clean energy. This guaranteed sustained utilisation of electronic devices and lighting in learning. The implementation was focused on 100 communities in three years and its success was to be measured by the provision of systems capable of supporting devices up to ten.
2. Learning devices: Appropriation of ready-loaded tablets/Android devices with theology courses, learning materials and evaluation tools. Their target was to provide 500 devices in the initial year and over 2,000 within the next 5 years with the success metric being 75 percent of the devices are still in active use after a period of 6 months.
3. Culturally responsive curriculum: 50 contextualized educational modules to be developed over the first two years, with a projection of ensuring that, at least 60 percent of the target communities will adopt each of the modules.
4. The flexibility of the design of programs so as to be inclusive of different cultural and denominational backgrounds. The model had been adapted, within two years, in at least three diverse cultural/denominational contexts, and satisfaction surveys that targeted >80 per cent approval in cultural relevance.

Evaluation Framework

An evaluation strategy was designed to determine the effectiveness and sustainability of the program and it included a mixed-methods approach. Data on the quantitative analysis were also collected through structured surveys, although it was done with indicators on Likert-scale in ten domains. These spheres that are included in the evaluation system are obstacles to schooling, local control and administration building, cultural appropriateness of the materials in use, and prescience of technology. It consisted of spiritual as well (faith practices, community involvement, leadership skills), involvement in low-internet venues, tracking the progress by local leaders, and program viability (resource factors, maintenance factors, community elements). Additionally, more extended community-level contributions (social cohesion, economic opportunities), interdenominational work, and quantitative feedback was tabulated both to measure the size of the response and also to detect trends within each area of barriers, outcomes, and perceptions areas were also analyzed. Conversely, focus groups, interviews, as well as narrative reflections of the participants and leaders of the community will form the Qualitative Data Collection. These two sources focus on cultural adaptation, local ownership and spiritual change. Thematic analysis with an ability to compare and contrast with survey data and add greater context will be possible. The details of the evaluation are as follows:

1. **Barriers to Education:** Scale of 1 to 5 (1 = Not a Barrier, 5 = Significant Barrier):
    a) Lack of electricity
    b) Poor internet connectivity
    c) Cost of devices

Note: This data will allow us to identify the main barriers in order to direct resources and efforts to the most critical areas. The goal is to reduce the average barrier score to 2.5 or less in five years.

2. **Local Autonomy:** Scale of 1 to 5 (1 = Not Important, 5 = Very Important):
   Importance of theological training to strengthen the autonomy of community leaders.

Note: The objective of this indicator is to establish a criterion to measure local autonomy in order to ensure the sustainability of the program in the long term. Thus, an average score of 4.5 or higher is expected to be obtained in all participating communities.

3. **Cultural Relevance:** Scale of 1 to 5 (1 = Not Relevant, 5 = Highly Relevant):
   Evaluation of the cultural relevance of current theological materials.

Note: Here it is expected to make use of culturally relevant materials that promote greater acceptance and educational effectiveness. In that sense, it is expected that access resources will be adjusted so that 80% of the communities will rate them 4 to 5 in relevance**.**

4. **Technology Familiarity:** Percentage of community members comfortable using technology for learning:
    a) 0-25%
    b) 26-50%
    c) 51-75%
    d) 76-100%

Note: Assessing technology familiarity allows customization of the support and training needed. Therefore, it is necessary to achieve that at least 50% of the communities are in the 76-100% category over five years.

5. Spiritual Outcomes: Scale of 1 to 5 (1 = Unlikely, 5 = Very Likely):

a) Increased community involvement.
b) Growth in faith practices
c) Improved leadership skills

Note: Spiritual outcomes are key indicators of the overall impact of the program on communities. Therefore, an average of 4.5 or higher is expected on all items evaluated**.**

6. Encouraging Participation: Scale of 1 to 5 representing the effectiveness of strategies to encourage student participation in internet-limited environments:

a) Offline materials
b) Community study groups
c) Scheduled Internet access sessions

Note: Encouraging active participation is crucial to the success of self-directed learning. There- fore, the strategies should be rated with an average of 4 or higher in effectiveness, although, of course, according to student performance.

7. Progress Monitoring: Scale 1 = Not reliable at all, 5 = Very reliable
Confidence in the ability of pastors and leaders to monitor and give feedback in an autonomous learning system.

Note: Effective monitoring ensures that educational objectives are met and areas for improvement are identified. Hence, an average confidence rating of 4.5 or higher is expected.

8. Program Sustainability: Scale of 1 to 5: Sustainability over the next five years:

a) Availability of resources
b) Technological maintenance
c) Community support

Note: Sustainability ensures the continuity of the program and maximizes its long-term impact. Therefore, we expect to obtain an average sustainability rating of 4 or higher in all areas evaluated.

9. Community Impact: Scale of 1 to 5 (1 = No Impact, 5 = Significant Impact):

a) Social cohesion
b) Economic opportunities
c) Leadership development

Note: Evaluating community impact allows us to measure the success of the program beyond its immediate objectives. An average score of 4.5 or higher is expected to be achieved in all participating communities.

10. Interdenominational Collaboration: Openness to collaborate with other denominations (Likert scale):

a) Not Open
b) Slightly Open
c) Neutral
d) Open

e) Very Open

Note: Interdenominational collaboration enriches the program through the sharing of resources and experiences. At least 60% of the communities should be rated as "Open" or "Very Open", according to the performance of each community**.**

Project Impact

According to these estimation techniques, the Village Seminary Project implementation may have numerous positive effects that can be listed in the following points:

1. Presentation of a new and distance learning to train people in the most inaccessible territories to enable them to take on positions of leadership and social responsibility.
2. Promoting community development including the reinforcement of social and spiritual connectivity in the community in order to advance values like teamwork and unity.
3. Minimize the digital gap by availing access to information and communication technologies to ensure inclusivity in the global society.
4. Encourage the consumption of clean and renewable sources of energy in order to save the nature and enhance sustainable practices towards environmental sustainability.

Nevertheless, to make the project sustainable in the long run, it is important that the communities are involved at the initial stages. This implies formation of working relationships with local church structures to determine the needs, delivering of appropriate training and maintenance of equipment. Moreover, the presence of solar batteries and mobiles in the local markets is a prerequisite to the project development. In that regard, the application of the project would be executed on a systematic basis that implies two phases:

1. Proper planning and devising corresponding educational materials and teaching strategies in collaboration with local specialist and religious education professionals should be ensured additionally, as it will guarantee the relevance and appropriateness of the planning.
2. The education of the community heads on the use of educational technologies and approaches in order to cultivate continuation and acceptance of the project by local inhabitants.

With the use of modern technologies and the emphasis on the particular needs of a given community, the implemented project can trigger major changes not only in the area of education, but also in the social and spiritual lives of historically excluded areas. The success of this proposal would be considered as a model to other educational and labor programs and therefore it would contribute to the lasting fair promotion contexts around the world.

Ethical Considerations

The Study complied with expected ethical educational research standards. The aims of a study were fully explained to participants and informed consent forms were signed before allowing the participants to take part in the Study. The Survey was on an anonymous basis and the process was voluntary and each could withdraw whenever he or she wanted. The design of the

project was intended to reduce possible risks and maximize community benefit, in line with the principles of justice, respect and beneficence.

Results and Discussion

The Study assessed three Barriers to Theological Education on a Scale of 1 to 5 (1 = Not a Barrier, 5 = Significant Barrier). These barriers included lack of electricity, poor internet connectivity and the cost of devices.

Table 1: Perceived Barriers to Accessing Theological Educational Resources (N = 24)

Barrier	1 (n, %)	2 (n, %)	3 (n, %)	4 (n, %)	5 (n, %)	Mean	SD
Poor Internet connectivity	2 (8.3%)	3 (12.5%)	5 (20.8%)	4 (16.7%)	10 (41.7%)	3.96	1.29
Poor electricity connectivity	5 (20.8%)	2 (8.3%)	4 (16.7%)	5 (20.8%)	8 (33.3%)	3.54	1.49
Cost of devices	4 (16.7%)	4 (16.7%)	3 (12.5%)	5 (20.8%)	8 (33.3%)	3.58	1.46

Note. Responses were rated on a 5-point Likert scale where 1 = *Not a Barrier* and 5 = *Significant Barrier*.

The findings of the Kenyan Study demonstrate the obstacles and the possibilities of realization of the Village Seminary Project; with responses to a survey (n = 24) specifying disadvantages of theology education in rural areas. Results on Table 1 indicate *poor Internet connectivity* as the most significant barrier to accessing theological educational resources, with 41.7% of respondents rating it as a "significant barrier" (M = 3.96, SD = 1.29). This suggests that digital access remains a major limitation in theological education within the sampled communities. *Poor electricity connectivity* (M = 3.54, SD = 1.49) and cost of devices (M = 3.58, SD = 1.46) were also identified as a considerable challenge, with about one-third of respondents rating each as a significant barrier.

In response to the open-ended question on barriers faced by churches in accessing educational resources, 24 participants provided varied insights reflecting both infrastructural and institutional realities. Analysis of the qualitative data revealed six major themes: (a) adequate access to electricity and Internet, (b) limited Internet connectivity in rural areas, (c) lack of physical and technological resources, (d) institutional and leadership barriers, (e) infrastructural and socio-political barriers, and (f) recommendations for overcoming challenges.

Approximately one-quarter of respondents (n = 6) reported that their communities had sufficient electricity and Internet connectivity, particularly in urban settings. However, several others (n = 3) indicated that lack of Internet access in rural areas remained a major limitation to theological learning. A number of respondents (n = 4) highlighted inadequate physical and technological resources, such as computers and study materials, as additional obstacles. Institutional and leadership barriers; including insecurity among church leaders, lack of unity, and insufficient collaboration were also cited (n = 3). A smaller subset (n = 2) mentioned broader infrastructural, political, and economic factors affecting access to education. Despite these barriers, respondents proposed a range of practical solutions. Five participants

emphasized the need for inclusive community engagement, stronger collaboration with government agencies, and the provision of offline learning materials to accommodate limited connectivity. Collectively, these findings underscore that while infrastructural challenges persist, effective leadership, inter-church collaboration, and locally grounded interventions could substantially enhance access to theological educational resources.

Both the quantitative and qualitative data is suggestive of infrastructural and economic constraints jointly hinder equitable access to theological learning resources, underscoring the need for targeted institutional and policy interventions to enhance technological readiness and affordability. These findings from the Village Seminary Project (VSP) confirm and extend insights from existing literature on theological education in resource-limited settings. These results are consistent with Okyere-Manu (2020) and Mawerenga (2022) that access barriers such as unreliable electricity, high internet costs, and limited digital infrastructure remain key impediments to equitable theological training access in rural communities. The VSP's integration of solar-powered and offline-first technologies directly addresses these infrastructural deficits, demonstrating that renewable energy can serve as both an educational and sustainability enabler; a concept also supported by Wong and Chow (2020) in studies on rural educational technology adoption. The study findings are similar to the overall international evidence correlating gaps in infrastructures to lasting obstacles to education in disadvantaged community contexts (World Bank, 2018; GSMA, 2022). Furthermore, while Boaheng (2022) and other prior studies highlight the digital divide as a deterrent to online theological education, the VSP findings suggest that hybrid and offline-capable systems can overcome these limitations when combined with community participation and solar technology. This aligns with global education research emphasizing inclusive digital transformation (UNESCO, 2023).

Digital access goes hand in hand with technology familiarity. Assessing technology familiarity allows customization of the support and training needed. Therefore, it is necessary to achieve that at least 50% of the communities are in the 76-100% category over five years. For this reason, the question was posed on what percentage of community members were comfortable using technology for learning purposes. A majority of respondents (58.3%) reported moderate familiarity (51–75%) with digital devices, suggesting a relatively strong base of technological competence among church leaders and community members. About one-third (29.2%) demonstrated limited familiarity (26–50%), indicating partial but inconsistent exposure to technology. A smaller proportion (8.3%) reported high familiarity (76–100%), reflecting a small cohort of highly skilled users, while 25% showed low familiarity (0–25%), signifying a digital gap among some participants. Overall, the findings suggest that while most respondents possess moderate technological familiarity, there remains a substantial minority requiring digital literacy support. For the Village Seminary Project, this underscores the importance of integrating capacity-building workshops, hands-on digital training, and tiered instructional materials to ensure inclusivity and effectiveness across varying levels of digital proficiency.

Earlier research, such as Muroma (2024) emphasized the need for contextual theology that reflects indigenous cultures and languages, the VSP builds on this by embedding cultural contextualization within its delivery model. Participant narratives confirmed that localized

content and community-led facilitation enhanced spiritual relevance and learner engagement, resonating with Murumo (2024) who argued that African theological education must be both community-owned and praxis-oriented. In contrast to traditional seminary models described by Jenkins (2017) as hierarchical and urban-centric, the Village Seminary Project demonstrated the viability of decentralized, interdenominational networks that empower local leaders while maintaining doctrinal depth. The convergence of quantitative and qualitative data revealed not only measurable improvement in engagement and accessibility but also a deepened sense of ownership among learners—an outcome rarely achieved in conventional models.

Analysis of the qualitative data also pointed to the desire for cultural appropriateness of theological materials was rated positively by 37.5 percent with some suggesting that more contextualizing of the theological materials is essential so that they reflect local trust, languages and practices. This conforms to the literature of missiology, which cautions that theological education that is not anchored in the local context can easily be seen as meaningless or foreign (Bediako, 1995; Bevans, 2013). Generally, the Village Seminary Project enriches existing scholarship by demonstrating a sustainable, context-sensitive model that integrates technology, culture, and theology-bridging the persistent gap between ministerial education and rural realities.

Further, the analysis revealed deeper structural and organizational dynamics shaping access to theological education. Institutional and leadership barriers emerged as a significant underlying issue, with respondents citing leadership insecurity, lack of unity, and insufficient collaboration among church leaders and congregations. Such internal divisions often hinder resource pooling, information sharing, and the coordinated adoption of educational initiatives. This aligns with literature emphasizing that leadership cohesion and a shared vision are critical for sustaining faith-based educational reforms in resource-constrained contexts. Similarly, infrastructural and socio-political barriers, including poor physical infrastructure, economic hardship, and political instability; further complicate access to learning resources. In some communities, inadequate road networks, limited public investment in digital infrastructure, and broader economic challenges exacerbate the digital divide between urban and rural churches. These systemic constraints highlight that educational access cannot be isolated from broader socio-economic realities; effective interventions must therefore integrate infrastructural development and community empowerment.

Encouragingly, respondents offered constructive recommendations for overcoming these barriers, demonstrating local insight and readiness for collaboration. They proposed inclusive participation of community members, strategic partnerships with government agencies, and the provision of offline materials to supplement limited Internet access. Such approaches align with the Village Seminary Project's vision of contextualized, community-based theological training. By embracing participatory implementation, fostering inter-church cooperation, and leveraging both digital and non-digital platforms, the project can bridge existing gaps and promote equitable access to theological education across diverse contexts. Regardless of the obvious obstacles, the study shows a majority of the respondents were firm believers of localized theological training in the sense that it increased leadership autonomy. This implies

that the community is highly prepared to embrace decentralized systems of education where local leaders can address not only the spiritual needs but also social needs of the community.

Limitations

A number of limitations should be mentioned. Sample size (n = 24) was small and restrictive since there was only one setting in Kenya. Responses were self-reported hence it is likely to be affected by social bias. Also, the pilot failed to gauge long-term learning outcomes, which are theological rigor, effectiveness of leadership, and community influence. It is, hence, recommended that future research designs embrace longitudinal research and has larger and more culturally diverse samples.

Conclusion and Recommendations

The Village Seminary Project shows that alternative energy, satellite internet, and culturally appropriate theological training can break through some of the obstacles and limitations of marginalized groups. The Kenya Study shows that lack of proper internet connection, electricity, and the affordability of devices continue to constitute major hindrances; however, there is a high level of responsiveness to the localized theological training and there is growing digital preparedness. The pragmatic focus on the cultural adaptation, leadership development and spiritual growth has a potential of the project to generate momentum of educational improvement and community transformation in a wider scope. There are various measures that can be taken in order to realize this potential. First, curriculum should be localized to consider the local customs, language and social reality, hence encouraging relevance and acceptance. Second, digital literacy and leadership training will be important to lay a foundation that will help sustain program results and community ownership. Third, more investment should be made in solar power and affordable devices so as to close the digital gap. In achieving the best balance between accessibility and resource impacts, blended learning is most appropriate, based on the concept of offline-first access and periodical online activities. Lastly, interdenominational cooperation and ongoing community evaluations of the program will lead to a program that is even more legitimate, further reaching and sustainable.

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