



Flexible open distance education in rural Papua New Guinea: Innovative approaches to fixing a strained system

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List of abbreviations and terms

Abbreviation or terminology	Explanation
DHERST	Department of Higher Education, Research, Science and Technology (PNG)
FODE	Flexible Open Distance Education
ICDE	International Council for Open and Distance Education
KTF	Kokoda Track Foundation
NDOE	National Department of Education (PNG)
OER	Open Educational Resources
OFDL	Open Flexible Distance Learning
PNG	Papua New Guinea
UNDP	United Nations Development Program

Abstract

Rural Papua New Guinea (PNG) presents a challenging context for education, characterised by linguistic diversity, geographical isolation, and under-resourced communities. PNG ranks 160 out of 193 on the United Nation's Human Development Index with just 4.7 years of expected schooling (UNDP, 2025). Flexible Open Distance Education (FODE) addresses systemic barriers by providing students in remote areas with a pathway to achieve Grade 12 qualifications. International non-government organisation (NGO), Kokoda Track Foundation (KTF), has implemented an innovative model that integrates wrap-around support, case management, bespoke administration and technology solutions and outreach delivery approaches through flying health patrols and river networks. Villages are solar powered to support digital learning technologies, bridging the resource gap and raising community aspirations

KTF administered a semi-structured survey instrument to all staff involved in the operation and delivery of FODE to better understand the outcomes and success drivers of the KTF FODE program.

A key success indicator of this approach is its inclusivity, with deliberate strategies ensuring there is open and equitable access for women, girls, and people with disabilities to complete their education. Mandatory teacher upgrades to Grade 12, aligned with PNG Government regulations, further enhance the quality of education and build local teaching capacity. KTF's approach shows that tailored, community-driven solutions can transform a broken system into one that empowers students to overcome challenges and achieve educational outcomes that foster pathways into further studies and livelihoods. This paper explores the effectiveness of these interventions and the potential for scaling similar models to other rural contexts in Papua New Guinea.

Sub theme: Sustaining communities of learning and practice in innovative open education.

Introduction

Flexible Open and Distance Education (FODE) is a critical mechanism for addressing systemic inequities in education access across Papua New Guinea (PNG). With much of the country's population residing in remote and rural areas, traditional models of schooling often fail to reach those most in need. While global momentum has grown around open and flexible learning as a means to extend education to underserved populations, the adoption and effective implementation of such models in the Pacific, particularly PNG, has been inconsistent and underfunded.

Despite the PNG Government's introduction of free universal education in 2012 under the National Education Plan 2010–2019, FODE remains a fee-paying model and is often overlooked as a legitimate alternative to mainstream schooling. Students face geographic barriers, limited access to qualified teachers, a lack of infrastructure, and poor availability of learning materials; challenges compounded in the FODE system by limited institutional support and weak coordination mechanisms. These issues have constrained FODE's effectiveness and perceived legitimacy as a formal education pathway.

According to the *International Council for Open and Distance Education (ICDE) Quality Network Report* (2023), Open, Flexible, and Distance Learning (OFDL) has not yet been systematically embedded in the education systems across many Pacific nations, and the region continues to face significant structural and capacity challenges. Only 1.3% of PNG's GDP was allocated to education in 2021 (World Bank, 2024), underscoring the resource deficit facing the sector. The ICDE calls for enhanced investment in institutional capacity, educator professional development, and policy-level frameworks to support flexible learning models. It also advocates for regional collaboration and the mobilisation of support from international NGOs, donors, and more advanced OFDL (Open, Flexible, and Distance Learning) contexts such as Australia and New Zealand.

Against this backdrop, KTF has pioneered a flexible education model that responds directly to the realities of PNG's rural communities. KTF's approach combines distance learning with wrap-around support, technology integration, outreach delivery, and community partnership. Solar-powered FODE Centres, the use of digital tablets with offline content, and "FODE Patrol" teams that travel by river and air to remote villages are all components of this adaptive, context-sensitive model. These innovations have enabled greater participation and completion rates in areas traditionally underserved by government education services.

Importantly, KTF's model emphasises inclusion; ensuring deliberate access for women, girls, people with disabilities, and working adults. It responds to the lived realities of learners, many of whom are current elementary teachers or health workers now required to upgrade to Grade 12 with specific Grade Point Average (GPA) thresholds to remain employed. For these individuals, FODE is not remedial but rather a vital pathway to professional continuity and advancement.

In 2025, KTF undertook a qualitative study to better understand what drives the success of its FODE model. A semi-structured survey was administered to staff across its 14 FODE Colleges in five provinces, capturing insights into student motivations, staff support strategies, and perceived differences between KTF's model and government-run alternatives. The study aimed to uncover the conditions under which flexible education thrives and how these lessons can inform the scale-up of FODE nationally.

This paper presents the findings of that study and situates them within the broader policy and literature landscape. It contributes to ongoing discussions about how to sustainably and equitably expand education across PNG using flexible, learner-responsive approaches. The evidence suggests that quality distance education in PNG requires more than printed modules and independent study; it needs professional educators, community partnerships, dedicated support structures, and flexible technologies that reflect local contexts. As PNG contemplates the future of its FODE program, including integrating it within existing secondary schools, this research provides timely and practical insights into what works and what must be preserved in any national expansion strategy.

Literature Review / Background

The literature on Open Flexible Distance Learning (OFDL) has expanded significantly in recent decades, driven by global efforts to improve access to education for marginalised and geographically dispersed populations. In the Pacific, where terrain, infrastructure gaps, and cultural complexity limit access to traditional schooling, OFDL presents a particularly valuable opportunity. Yet, despite its potential, the adoption of flexible learning models in Papua New Guinea (PNG) has been piecemeal, underfunded, and lacking systemic integration.

According to the ICDE Quality Network (2023), many Pacific nations, including PNG, continue to face critical gaps in institutional capacity, digital infrastructure, and policy-level commitment to flexible education. Challenges include limited internet and electricity access, untrained teaching personnel, and an absence of formal quality assurance frameworks tailored to distance learning. Without these enablers, flexible education is difficult to implement effectively and at scale. These findings resonate with the World Bank's (2024) observation that PNG's education investment, at just 1.3% of GDP in 2021, is insufficient to support innovative delivery models or universal access (World Bank, 2024).

Given the exploratory nature of this research, inductive coding was employed as the primary analytical approach to allow themes to emerge directly from the data, rather than being imposed a priori. This approach aligns with principles of grounded theory and thematic analysis, which are well-suited to studies aiming to understand complex social phenomena in under-researched settings (Braun & Clarke, 2006; Charmaz, 2006). In the context of rural and remote PNG, where community-driven perspectives on education access, student motivation, and institutional support are not well-documented in the literature, an inductive approach enabled a nuanced and contextually grounded interpretation of stakeholder experiences. Coding proceeded through a structured but flexible process of reading, annotating, and categorising meaning units into emergent themes, allowing patterns and insights to develop organically from the transcripts. This framework ensured that the voices of stakeholders informed the analysis, and helped to surface context-specific barriers and enablers of flexible open and distance education.

One promising global model is the Blended Learning Open Source Science or Maths Studies (BLOSSOMS) initiative, founded in 2008 by Larson and Murray (Larson & Murray, 2008). It offers blended learning that combines digital media with face-to-face interaction and emphasises high-quality, low-tech media delivery, teacher engagement, and broader pedagogical strategies. The model also values mutual collaboration and localisation of content, supporting "translation" across language, culture, and educational context (Larson & Murray, 2008). BLOSSOMS has demonstrated positive outcomes in hybrid settings, particularly where resources are constrained. Its focus on teacher professional development and flexible content aligns closely with ICDE's (2023) recommendations for scalable, context-sensitive OFDL implementation.

Similarly, Aliazas et al. (2021) provide valuable insights into successful flexible learning adaptation from the Philippine context. Their study highlights key enabling factors: strong instructional leadership, quality teaching practices, reliable digital infrastructure, and robust student support systems. They argue that success in flexible education depends not only on content delivery mechanisms but also on comprehensive organisational

transformation. Institutions must embed leadership support, continuous professional development, and well-resourced infrastructure to sustain quality learning outcomes in flexible models.

These global findings offer parallels for PNG, where open and distance education must contend with chronic under-resourcing, complex geography, and a fragmented policy environment. Key learnings from the BLOSSOMS initiative (Larson & Murray 2008) and the Philippine study by Aliazas et al. (2021) include the importance of pedagogical leadership, staff development, digital and offline learning systems, and culturally relevant delivery. Importantly, both stress that flexible education is not a “one-size-fits-all” solution but must be adapted to local realities, an approach echoed by PNG-specific research.

A leading contributor to the PNG discourse is Rangou (2017), whose doctoral thesis provides a comprehensive examination of the structural, cultural, and ethical dimensions of Flexible Open Distance Education and Learning (FODE/L) in PNG. Rangou argues that FODE has been historically marginalised within PNG’s education sector, treated more as a remedial option than a legitimate alternative pathway. This perception has led to chronic underinvestment, weak governance, and policy neglect. FODE’s implementation has often lacked coherence, with unclear roles between the National Department of Education, DHERST, and delivery partners, resulting in poor coordination and limited impact.

Rangou (2017) identifies governance fragmentation as a critical barrier to effective FODE implementation. Without clear policy frameworks, institutional roles, and monitoring systems, FODE programs struggle to deliver consistent quality or scale. She advocates for a national coordinating body to oversee FODE implementation, improve accountability, and ensure alignment with broader education objectives. Her work also underscores the need for cultural and social sensitivity in FODE delivery. Many learners in PNG face competing obligations, such as subsistence farming, childcare, or community duties, that make conventional study timetables impractical. In response, Rangou (2017) calls for a culturally responsive model that includes flexible study hubs, peer learning, and community mentoring. This approach is particularly important for reaching women, girls, and people with disabilities, who face additional social and structural barriers.

Central to Rangou’s (2017) contribution is her Ethics Enterprise QA Model, which proposes a quality assurance system grounded not in bureaucratic compliance but in ethical, relational, and learner-centred practices. She stresses the importance of inclusive leadership, integrity, and institutional cultures that reflect the diversity of learners and foster trust. This model moves beyond mere administrative oversight, emphasising capacity-building, professional ethics, and student wellbeing as cornerstones of quality in FODE.

Rangou (2017) also outlines practical barriers to quality delivery, including limited learning materials, undertrained staff, and inadequate access to electricity and internet. She recommends scalable infrastructure investments, offline content delivery methods, and professional development to enhance teaching quality. These recommendations align with ICDE’s calls for targeted funding, regional cooperation, and context-appropriate technologies.

Together, the literature presents a compelling case for reforming and expanding flexible education in PNG, but with key caveats. Flexible education must be grounded in robust governance, educator professionalisation, and community-responsive delivery models. It must also be adequately resourced and adapted to PNG's realities: long travel distances, limited digital access, and deep socio-cultural obligations.

KTF's FODE model emerges within this body of knowledge as a practical example of how these theoretical concepts can be applied in PNG. The program incorporates many of the success factors outlined in the literature, including strong community engagement, culturally sensitive delivery, decentralised infrastructure, and support systems for both students and teachers. It addresses issues of access, equity, and relevance through a mix of face-to-face support, digital tools, printed materials, and relational mentoring.

This paper builds on the work of ICDE (2023), the BLOSSOMS initiative (Larson & Murray, 2008), Aliazas et al. (2021), and Rangou (2017) to explore how the KTF FODE model contributes to the evolution of flexible education in PNG. It offers evidence from the ground on what works and what challenges remain, adding new insights into how rural, resource-constrained settings can successfully deliver inclusive and high-quality education through alternative models.

Overview of KTF's FODE Program

FODE is PNG's dedicated open and distance learning program, operating as an integral part of the National Education System under the FODE and Inclusive Education Division of the Department of Education. FODE provides an alternative pathway for students to complete their secondary education - covering Grades 7 to 12 - outside of the traditional classroom setting. The model aims to allow students to study at their own pace and location, earning equivalent certification to their peers in conventional schools.

FODE has a long history dating back to 1957, initially established as the College for External Studies and later evolving into the College of Distance Education (CODE) in the 1980s. It was rebranded as FODE in the 2000s to reflect its broader reach and updated approach. Today, FODE operates through a network of 22 Provincial Centres - each typically located in the provincial capital - and numerous District and LLG Study Centres across the country.

The intended delivery method of FODE is primarily print-based, with students receiving hard copy learning materials, submitting aligned written assignments, and sitting for national exams. These assignments function as ongoing assessments and the completion of these is mandatory for students to qualify for national examinations in Grades 10 and 12. While most students study independently, some centres offer tutorial support or limited access to facilitators and learning spaces, although this varies significantly depending on resources.

FODE plays a critical role in addressing key gaps in PNG's education system, particularly in terms of access and equity. It supports national efforts to improve gross enrolment rates, extend access to secondary education, and promote lifelong learning, especially for those who are unable to participate in the mainstream system due to

geographic, financial, or personal barriers. Students range from out-of-school youth to working adults and parents, demonstrating the program's broad relevance.

FODE also aligns closely with the goals of the National Education Plan (NEP) 2020–2029, which emphasises inclusive education, second-chance learning, and improved access in rural and remote areas. However, the program continues to face a number of systemic challenges, including delays in material distribution, inconsistent support services, and limited infrastructure in a variety of forms, including software and platforms, technical support structures, professional development frameworks and regulatory compliance systems. These issues can significantly impact student performance, retention, and progression. Nonetheless, FODE remains a vital mechanism for expanding educational opportunity across PNG.

While enrolment figures are often similar across both KTF and FODE provincial centres, the disparity in outcomes when looking at the exam participation rates suggests that enrolment figures alone are not an adequate indicator of success. An example of this is where KTF and a government FODE centre are both established, the KTF FODE centre had an 81.77% rate for exam sitting when the comparable government FODE centre recorded 0%. These statistics underscore the critical investment required to ensure meaningful academic engagement. KTF's delivery is an approach which prioritises consistent, accurate and thorough wrap-around support for the staff, students and systems, core attributes for delivering FODE effectively.

Methodology

This study employed a qualitative research design to explore the barriers to scaling FODE in PNG, with a particular focus on the KTF's FODE model. The research aimed to gather insights from frontline staff working across 14 KTF-supported FODE Colleges located in New Ireland, Western, Oro, Central Provinces and the National Capital District (NCD).

KTF is a not-for-profit organisation established in 2003 with the mission to improve the lives of people in remote and rural regions of Papua New Guinea. KTF focuses on providing access to quality education and healthcare, promoting equality, and fostering the next generation of leaders, whilst empowering local communities and focusing on long-term, community-led development. KTF is a leader and specialist in education in PNG, with a strong portfolio of programs aimed at improving learning outcomes across the country. Across the 14 KTF supported FODE Colleges in PNG, there are 3,000+ students enrolled in 2025.

Data collection was undertaken through a semi-structured survey instrument administered to all staff involved in the operation and delivery of FODE at these sites. The survey comprised 24 questions, including both multiple-choice and open-ended items, designed to elicit detailed, context-rich responses. Participants included a range of staff roles: College principals, educators, learning support officers, outreach coordinators, and logistics personnel, ensuring that multiple perspectives were captured.

The survey asked respondents to report on the FODE College they are affiliated with, their role, gender, and the approximate number of students enrolled annually. It included multiple-choice and open-text responses exploring:

- Students' motivations for enrolling in FODE
- The importance of FODE to learners
- Types of student support provided (both in-person and remote)
- Perceived differences between KTF FODE and government-run centres
- Factors contributing to success and challenges in scaling FODE
- Inclusivity (with attention to gender and disability)
- Community engagement and support
- Perceived impact of FODE on students' lives

For example, open-ended questions asked staff to explain how they support students who attend the FODE Centre in person, as well as those who cannot attend due to distance or access issues. Other questions probed what makes KTF's model distinctive, whether and how it could be scaled, and what factors are essential for future success. Inclusion and community involvement were also addressed in depth, with respondents asked to provide examples of how inclusivity is promoted and how lives have been changed through participation in the program.

All survey responses were anonymous to encourage honesty and reflection, and participation was voluntary. The data were analysed thematically using inductive coding techniques. Researchers reviewed responses to identify recurring themes, patterns, and outliers related to operational barriers, educational impact, staff roles, and community dynamics. Codes were developed iteratively and refined through repeated readings of the data to ensure that the findings remained grounded in the lived experiences and professional insights of FODE personnel.

This approach provided a comprehensive understanding of the conditions under which FODE operates in rural PNG, the practical strategies employed by KTF staff, and the perceived limitations and opportunities for scaling the model. By centering the voices of staff on the front lines of program delivery, the study offers grounded, practitioner-informed perspectives on what is needed to overcome structural and contextual barriers to expanding access to secondary education in remote regions of Papua New Guinea.

Results

Survey responses were received from staff across all 14 FODE Colleges operated by KTF, ensuring comprehensive geographic and institutional representation. In addition to college-based staff, several responses were provided by cross-cutting personnel who deliver program management, monitoring, and support functions across multiple FODE sites. This diversity in response sources helped provide a holistic understanding of the FODE program's operations.

Student Motivations for Enrolling in FODE

A consistent finding across all centres was the wide range of motivations that lead students to enrol in FODE. 97% of respondents reported that students undertook FODE in order to upgrade their GPA to meet entry requirements for tertiary education, particularly teacher training and nursing colleges. With new national regulations mandating, not only a minimum GPA of 2.4 for existing teachers but also a minimum GPA, typically between 2.4 and 2.8, for entry into these professions, many students see FODE as a critical stepping stone for career advancement.

85% of respondents also reported that students enrol to complete their Grade 12 qualifications after dropping out or failing to access formal schooling. This includes individuals who lacked access to a local high school or who failed key national exams in Grades 8 or 10. For these learners, FODE represents a “second chance”, a theme strongly reflected in qualitative responses.

Other motivations included preparing for employment, personal development, and fulfilling a lifelong desire to return to school. Students were described as highly motivated, often balancing studies with work, parenting, and/or teaching duties. Many are adult learners, including elementary and primary teachers or nurses required to upgrade qualifications to retain their positions.

"Our students on Lihir are all teachers (elementary, primary and TVET) and nurses. They need to either upgrade to a Grade 12 qualification with a GPA of 2.8 or upgrade their GPA to 2.8 or above to remain in the teaching or nursing profession."

Staff also highlighted the importance of FODE’s flexibility, which enables students to study at their own pace and from remote locations. In communities with limited infrastructure, tablets preloaded with curriculum content and supported by solar power were seen as transformational tools.

Success Factors in KTF’s FODE Delivery

Staff described a holistic, student-centred approach that distinguishes KTF FODE from government-run centres. This includes strong academic support, flexible delivery, emotional and mentoring relationships, and practical help with logistics, food, and accommodation.

1. Academic and Pedagogical Support:

Tutors conduct face-to-face and remote lessons, explain assignments, organise tutorial sessions, and simulate exam conditions. Students receive regular feedback and are encouraged to resubmit work to improve their GPA.

“We offer flexible tutorials, walkthroughs of assignments, and even one-on-one help via WhatsApp or phone.”

2. Personalised Mentoring:

Many staff go beyond academics, offering encouragement, moral support, and emotional care. Students are contacted regularly and reminded of deadlines via mobile channels. Some staff travel to villages to check on learners and support them through life challenges.

“I did create a WhatsApp group for the students, which I regularly communicate with... If it's on certain questions on assignments, I call them up to explain.”

3. Flexible and Remote Access:

Support is tailored for students living in remote areas or working full-time. Materials are delivered by boat, plane, or foot. Patrol teams reach isolated communities to distribute assignments, monitor progress, and maintain connection.

“We travel to their locations checking and making sure they are doing their studies.”

4. Technology and Solar Power:

Each student receives a digital tablet preloaded with the year's materials. Solar charging stations and offline accessibility are key enablers in rural communities with no power grid.

“All students are supplied with tablets to use for home studies and completion of assignments.”

5. Logistics and Resources:

Centres provide food rations, printing services, accommodation support, and school supplies. Students travelling long distances or staying for intensive cohorts are supported with meals and housing with relatives or local families.

“Students who do come reside with their relatives in Morehead... KTF supports them with food stuff as supplements for meals during their stay.”

6. Career and Life Guidance:

Staff support students with tertiary applications, GPA calculations, subject choices, and future planning. This includes explaining entrance requirements for teaching, nursing, and other fields.

“We support our students by advising them on subjects to take in order to pursue certain careers... and explaining in Motu, English and Tokpisin for students to understand well. For example, careers in nursing and healthcare require science subjects and careers in teaching require minimum marks in maths and English.”

Why KTF FODE Works

Staff overwhelmingly agreed that KTF's FODE model is more effective than government-run alternatives. While 91% of respondents acknowledged this difference, many substantiated their views with specific examples of what makes KTF FODE unique, impactful, and more successful, especially in delivering education in some of the most remote parts of Papua New Guinea.

- KTF FODE deploys trained secondary teachers on full-time rotations to deliver face-to-face lessons.
- The timely distribution and collection of assignments, combined with strong academic tracking. Students receive their assignments in advance, work through them in a structured timeline, and receive marked feedback.
- Technology access: Tablets and solar kits are consistently available, whereas students in government centres often lack access to any digital resources.
- KTF's logistical strength and timely coordination, including transport, food rations, materials procurement, and professional support to teachers.
- Strong culture of accountability, monitoring, and follow-up through the development of bespoke administration and management tools.
- Community integration: Centres are embedded within communities, with strong local ownership and support for staff and students alike.
- Organisational professionalism: Staff cited strong coordination across KTF's national and regional offices, with policies, evaluations, and clear communication channels.

Expansion of KTF FODE

82% of staff respondents agreed that the KTF FODE model should expand across their regions, and 88% reported that their own centres could enrol more students over time. Staff offered rich, contextualised insights into what would be required to support this expansion in a sustainable, and context-sensitive way.

Key enablers for scale identified by staff included:

- Recruitment of subject-specialist teachers, particularly in science and mathematics.
- Expansion of FODE Patrols, with enhanced logistics (boats, flights, walking tracks).
- Development of more mobile or satellite hubs, equipped with solar-powered classrooms and offline technology.
- Stronger communications, including both high-tech (4G, WhatsApp) and low-tech (radio, printed flyers) strategies.
- Partnerships with local leaders, LLGs, churches, and MPs, to build community support and sustainability.

Staff also raised critical challenges to consider when scaling:

- Infrastructure: Many centres still lack sufficient classrooms, staff housing, and learning spaces.
- Transport: Reaching remote areas remains a significant logistical and financial burden.
- Workforce capacity: Staff shortages, especially in specialised subjects, could strain delivery if expansion is rapid.
- Cultural barriers: In some areas, traditional norms, particularly around gender, may limit participation.
- Environmental risks: Flooding and food insecurity were identified as emerging challenges in climate-affected regions.

Inclusivity of KTF FODE

85% of staff respondents stated that they believe the KTF FODE Centres foster an inclusive learning environment. Staff described a wide range of approaches and values that support the inclusion of students across gender, ability, age, employment status, socioeconomic background, and geographic location. The commitment to inclusion reported by staff is both structural and cultural, built into enrolment practices, teaching methods, and daily interactions.

- Gender Equity: Most centres aim for gender balance in enrolment. Young mothers and female school-leavers are actively encouraged to return to study.
- Disability Inclusion: Students with hearing or vision impairments receive seating support, customised materials through digitised resourcing, and moral encouragement. Accessible facilities, ramps, and walkways have been introduced.
- Cultural Respect: Staff adopt local languages in instruction and outreach. Students are treated with dignity and care, reinforcing a sense of belonging and motivation.

Staff also reported that community support is a key factor in student retention and program success. Many centres:

- Provide shelter and meals to travelling students and patrol staff.
- Assist with graduation ceremonies, security, and infrastructure maintenance.
- Offer land or labour to support the establishment of new satellite centres.
- Spread awareness through informal networks such as churches, schools, and markets.

Suggestions for increasing community involvement included:

- Establishing formal advisory committees.
- Offering volunteer or employment opportunities.
- Conducting regular meetings and outreach campaigns.
- Providing development “spin-offs” (e.g., solar lighting, water tanks).

Discussion

The findings of this study highlight the critical role that flexible, community-integrated education models can play in delivering meaningful and equitable access to education in rural Papua New Guinea (PNG). While Flexible Open Distance Education (FODE) has long been positioned as a second-chance option, the evidence from KTF's implementation shows that it is far more than a remedial service; it is a transformative educational pathway, enabling learners to pursue tertiary studies, retain professional roles, and contribute to the social and economic wellbeing of their communities.

One of the most significant insights from the data is that students do not view FODE as a fallback, but as a deliberate and often strategic choice. Many are motivated by newly introduced qualification requirements for teachers and health workers, while others seek a renewed opportunity to complete their education after early exit from the mainstream system. These motivations signal a shift in the perceived value of FODE and call for a reimagining of how it is delivered and resourced.

KTF's success rests on several interrelated factors. First, the presence of trained and motivated educators delivering structured, consistent academic support is fundamental. The government's reliance on self-directed study models, where qualified teachers are scarce or absent, undermines learning outcomes. KTF's model, which mirrors a formal school environment while preserving flexibility, demonstrates that pedagogical rigour can coexist with adaptability.

Second, the program's flexible and outreach-based delivery methods are key to reaching the most marginalised learners. Mobile patrols, digital tablets with offline content, and solar infrastructure collectively reduce barriers to access for students in geographically isolated areas. These approaches are not just logistical solutions, they are enablers of dignity and autonomy, allowing learners to study in ways that respect their personal, cultural, and economic contexts.

Third, the relational approach of staff, who offer mentoring, counselling, academic guidance, and emotional support, demonstrates that flexible learning succeeds not through technology alone, but through trust and human connection. The high-touch, student-centred model cultivated by KTF creates learning environments where students feel seen, supported, and empowered.

Furthermore, the strong integration of FODE into local communities through shared infrastructure, village-based learning hubs, and support from local leaders has fostered ownership and sustainability. This stands in contrast to many government centres, which struggle to engage communities or build long-term trust.

As the PNG Government explores nationwide FODE expansion, including aligning FODE delivery with existing secondary schools, caution must be taken. While this integration could streamline administration, it risks diluting the tailored support that second-chance learners require. Teachers at conventional schools already face heavy workloads and may lack the capacity to take on FODE responsibilities without targeted resourcing and compensation.

Instead, the evidence from this study supports scaling a dedicated, outreach-based model that preserves flexibility, responsiveness, and quality. KTF's success suggests that scaling FODE should involve building standalone teams and infrastructure capable of operating in remote environments with local leadership and community engagement at its core.

Conclusion

The literature on flexible and distance learning in low-resource and geographically dispersed settings highlights the need for coordinated, sustained, and contextually appropriate education models. In Papua New Guinea, where systemic barriers, such as remoteness, cost, and limited infrastructure, continue to exclude large portions of the population from formal education, flexible pathways like FODE are not just an alternative; they are essential.

This paper set out to understand what makes flexible, outreach-based FODE delivery effective in rural PNG and what must be replicated or strengthened to enable future expansion. In doing so, it explored staff perspectives on student motivations, program strengths, inclusion, scalability, and the role of communities. The findings reinforce key themes from the literature: that effective distance education is not simply about decentralising curriculum delivery, but about building a responsive, well-supported, and student-centred system of learning.

The paper shows that FODE, when delivered with structure, care, and flexibility, offers students a second chance not only at completing school, but at transforming their lives. It is both a recovery program for those failed by the traditional system, and a forward-looking platform for workforce development, gender equity, and community resilience. Far from being remedial, FODE is aspirational.

Staff insights from 14 FODE Centres identified a cohesive and compelling set of success factors: investment in specialised and dedicated staff; development of mobile and outreach infrastructure; practical use of offline and solar-powered technologies; inclusive practices that adapt to learners' needs; and strong community partnerships that embed FODE in local social and cultural life. These factors align with what the literature has long suggested but what policy and practice in PNG have often failed to deliver.

The findings raise important considerations for national FODE policy, particularly the suggestion that FODE could simply be bolted onto existing secondary schools. This approach risks overburdening already stretched teachers, undermining the flexibility and support that second-chance learners require, and replicating the same systemic failures including delayed certification, inaccessible technology, and erratic delivery, that have plagued government FODE centres.

Instead, this study recommends a deliberate, well-resourced model of FODE that builds on the proven success of KTF's outreach approach. With the right planning, partnerships, and political will, PNG has the opportunity to reimagine flexible learning not as an afterthought, but as a central pillar of its education system.

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