



Evaluating University-Based Entrepreneurship Incubation for Youth Enterprise Development in The Gambia: Evidence from USET's 2023 Business Entrepreneurship Readiness Initiative

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ABSTRACT

This study evaluates the 2023 Business Entrepreneurship Readiness initiative at The Gambia University of Applied Science, Engineering and Technology—a university-based incubation program aimed at advancing youth enterprise development. Employing a practice-based action research methodology within a descriptive programme evaluation and institutional case study, the research draws on administrative records, participant surveys, formal observations, and programme documentation. The initiative integrated staff development with a five-week incubation intervention for 40 youth entrepreneurs. Participation was high at 92.5%, with nearly 89% advancing to the pitching phase. Approximately 90% of participants reported that the programme met their needs, 92% affirmed its objectives were achieved, and all respondents expressed willingness to recommend it. The findings also highlight institutional learning in facilitator capability, stakeholder mobilization, infrastructure, and adaptive delivery. Overall, the study demonstrates how resource-constrained universities can leverage internal and ecosystem resources to enhance entrepreneurial capacity and venture readiness.

KEYWORDS: entrepreneurial university; experiential entrepreneurship education; capability development; institutional learning; action research

1. Introduction

Youth unemployment and underemployment remain persistent challenges across many African economies, particularly where formal labour markets are unable to absorb the growing number of young people leaving education and training systems. In this context, entrepreneurship is increasingly viewed not simply as an alternative to wage employment, but as a pathway for young people to build livelihoods, create enterprises, and participate more productively in local economies. This has placed growing pressure on universities and Technical and Vocational Education and Training (TVET)-oriented institutions to move beyond conventional teaching roles and become more active participants in entrepreneurship and enterprise development.

One response has been the growing interest in the **entrepreneurial university**. Rather than treating entrepreneurship as a stand-alone subject, entrepreneurial universities combine education with incubation, mentoring, innovation support, industry engagement and access to wider entrepreneurial networks. Research suggests that entrepreneurship education and university incubation can influence graduates' entrepreneurial and employment pathways when they form part of a broader institutional ecosystem rather than operating as isolated activities (Guerrero et al., 2020). More recent work similarly emphasises the importance of stakeholder engagement and the connection between universities, external partners and venture-development processes within university incubation systems (Secundo et al., 2023).

This distinction is especially important in resource-constrained settings. New and emerging ventures often require more than classroom-based entrepreneurship knowledge. They may need mentoring, market exposure, business networks, institutional guidance, practical experimentation, and access to appropriate infrastructure. Business incubation provides one mechanism for bringing these forms of support together. Although incubation has evolved considerably from its earlier emphasis on physical

workspace and shared services, its developmental value increasingly lies in the combination of capability building, networking, mentoring and access to specialised support. African incubation systems, however, continue to operate within uneven institutional and resource environments, and recent scholarship has called for more contextually grounded evidence on what incubators actually do and what they enable enterprises to achieve (Egbetokun, 2025).

These issues have particular relevance for TVET-oriented higher education. Technical and vocational institutions prepare learners with practical and occupational capabilities, but technical competence alone does not guarantee successful enterprise creation. The transition from knowing how to produce a good or provide a service to building a viable enterprise also requires market understanding, financial capability, opportunity recognition, business management and access to supportive networks. University-based incubation can potentially provide the bridge between technical capability and enterprise application by combining entrepreneurship education with experiential learning, mentoring and exposure to real business environments.

The Gambia provides a useful setting in which to examine this relationship. Limited formal employment opportunities and persistent skills-to-employment challenges have increased the importance of entrepreneurship and self-employment within national youth and skills-development efforts. Against this background, The Gambia University of Applied Science, Engineering and Technology (USET) implemented the 2023 Business Entrepreneurship Readiness (BER) initiative with support from UNESCO and the Korea International Cooperation Agency (KOICA), in collaboration with the Ministry of Higher Education, Research, Science and Technology (MoHERST) and technical partners. The initiative combined staff capacity development with entrepreneurship training, mentoring, stakeholder engagement, technology exposure and pitching support for 40 youth-led ventures.



The programme is particularly interesting because it was designed not only to train young entrepreneurs but also to strengthen USET's own capability to operate a more incubation-oriented entrepreneurship support system. A seven-day Training of Trainers prepared USET staff for incubation-focused delivery, while the subsequent step-down programme exposed selected youth entrepreneurs to entrepreneurship, entrepreneurial marketing, finance, leadership, ICT, innovation and business pitching. The programme therefore provides an opportunity to examine university-based incubation as both an enterprise-development intervention and an institutional capability-building process.

Despite growing research on entrepreneurship education, entrepreneurial universities and business incubation, relatively little empirical work examines how these elements come together in practice within TVET-oriented universities in small African economies. Much of the existing literature focuses on entrepreneurial intentions, established university ecosystems or mature incubation environments. Less is known about how emerging universities build their own incubation capability while simultaneously supporting youth enterprise development under conditions of constrained infrastructure and institutional capacity.

Against this background, the purpose of this study is to evaluate the design, implementation and immediate outcomes of the BER 2023 initiative and to examine what the experience reveals about university-based entrepreneurship incubation in a resource-constrained TVET-oriented setting. Three questions guide the study: (1) How was BER 2023 designed and implemented as a university-based incubation intervention? (2) What do participant feedback and programme evidence indicate about its relevance, effectiveness and capability-development outcomes? (3) What institutional and implementation lessons does the experience offer for university-based incubation in comparable settings?

The paper contributes empirically by documenting an under-researched case of university-led youth incubation in The Gambia; conceptually by bringing entrepreneurship education, incubation and entrepreneurial-university perspectives into a common analytical frame; and practically by identifying lessons for universities seeking to connect training, mentoring, stakeholder engagement, technology exposure and venture-readiness support.

2. Literature Review

2.1 Entrepreneurship Education and the Shift from Teaching About Entrepreneurship to Learning Through Entrepreneurship

Entrepreneurship education has increasingly moved beyond the transmission of business knowledge towards learning through entrepreneurship, where learners engage with uncertainty, test ideas, solve problems and learn through action and reflection. Nabi et al. (2017) show that more experiential forms of entrepreneurship education tend to generate stronger learning and entrepreneurial outcomes than approaches dominated by conventional instruction.

This shift reflects the nature of entrepreneurship itself. Entrepreneurial capability involves recognising opportunities, making decisions with incomplete information, responding to feedback, mobilising resources and adapting ideas as circumstances change. These capabilities are difficult to develop through passive instruction alone. Experiential approaches therefore create opportunities for learners to work on ventures, interact with

entrepreneurs and mentors, engage with markets and apply knowledge to practical problems.

Recent evidence reinforces this orientation. Motta and Galina's (2023) systematic review concludes that experiential learning can contribute to entrepreneurial skills, competencies and intentions, although outcomes depend on how learning activities are designed and facilitated. Morland et al. (2021) similarly connect experiential entrepreneurship education with the wider entrepreneurial-university agenda, arguing that meaningful entrepreneurial learning depends partly on how universities provide the institutional context, resources and external relationships within which such experiences occur.

The quality of facilitation is therefore important. Moving from conventional teaching to experiential entrepreneurship education requires educators to shift from primarily transmitting knowledge towards facilitating experimentation, feedback, problem solving and reflection. Bell (2020) argues that experiential entrepreneurship education places distinctive pedagogical demands on educators and requires appropriate frameworks for its effective delivery. This is especially relevant where institutional staff are trained and then expected to facilitate incubation-oriented learning themselves.

For youth enterprise programmes, entrepreneurship education should consequently be judged not only by what participants are taught, but by what they become capable of doing. Activities such as business-model development, customer engagement, financial planning, mentoring and pitching can connect entrepreneurial knowledge to venture practice. This is particularly relevant in TVET-oriented settings, where participants may already possess technical skills but require support to connect those capabilities to markets and enterprise development.

This perspective provides an important basis for evaluating BER 2023. The programme combined structured entrepreneurship content with practical assignments, mentoring, stakeholder engagement, business planning and pitching, while preparing USET facilitators for incubation-oriented delivery. The relevant question is therefore whether the programme created opportunities for experiential capability development among both entrepreneurs and institutional facilitators.

2.2 Business Incubation as Structured Support for Venture Emergence

Business incubation has evolved beyond the provision of workspace and shared services towards a broader model of structured venture support. Contemporary incubators increasingly combine mentoring, business development, networking, access to expertise and, where available, physical and technological infrastructure. Their value therefore lies not simply in providing facilities, but in helping early-stage ventures reduce uncertainty, strengthen capabilities and connect to wider entrepreneurial networks.

This broader role matters because emerging ventures often face several constraints simultaneously, including limited finance, weak market knowledge, limited managerial experience, inadequate production facilities and poor access to mentors or external expertise. Incubation can help address these constraints by creating a coordinated environment in which entrepreneurs test assumptions,



refine business models and gain access to resources and relationships that may otherwise be difficult to reach.

The effectiveness of incubation, however, depends on the quality and contextual fit of the support process rather than the existence of an incubator alone. Mentoring, networking, institutional partnerships and responsiveness to venture needs influence what incubators are able to achieve. Evidence from African settings similarly suggests that incubation outcomes are shaped by local institutional and resource conditions, reinforcing the need for context-sensitive rather than mechanically transferred models (Egbetokun, 2025; Ssekiziyivu et al., 2023).

University-based incubation extends this logic by connecting venture development with education, knowledge, institutional resources and external ecosystems. Universities can provide expertise, laboratories, workshops, technology platforms and stakeholder relationships that support emerging ventures. Research on university business incubators increasingly shows that their development and effectiveness depend on how they mobilise resources and interact with the entrepreneurial ecosystems in which they are embedded (Nicholls-Nixon et al., 2021; Vardhan & Mahato, 2022). Other studies similarly demonstrate that university incubators can strengthen venture preparation and ecosystem engagement when they are integrated into wider institutional entrepreneurship systems (Ayad et al., 2022; Secundo et al., 2023).

For TVET-oriented universities, incubation can be particularly valuable because participants may already possess technical or occupational skills but still require mentoring, market exposure, business-development support and access to productive or prototyping facilities. Incubation can therefore provide a bridge between technical capability and market-facing venture development.

This perspective is directly relevant to BER 2023. The initiative combined entrepreneurship training with mentoring, stakeholder engagement, technology exposure and pitching rather than treating training as the complete intervention. It can therefore be examined as a structured incubation process intended to help emerging entrepreneurs progress from knowledge acquisition towards capability development and venture readiness.

2.3 The Entrepreneurial University and Ecosystem Logic

The entrepreneurial university perspective reflects a broader shift in the role of higher education institutions from teaching and research alone towards entrepreneurship, innovation, knowledge exchange and engagement with industry and society. Entrepreneurship support consequently becomes part of the university's wider developmental role rather than an isolated academic activity.

This perspective aligns closely with entrepreneurial ecosystem thinking, which views entrepreneurial outcomes as shaped by interactions among institutions, markets, finance, knowledge, human capital and networks. Recent scholarship reinforces the importance of these interdependencies and the contributions of universities, government, entrepreneurs and other actors to functioning entrepreneurial ecosystems (Bouncken & Kraus, 2022; Stam & van de Ven, 2021). Universities are particularly well placed within such systems because they can combine knowledge, skills, infrastructure and relationships with public and private actors around enterprise development.

Evidence from entrepreneurial-university research supports this role. Guerrero et al. (2020) show that entrepreneurship education and university business incubation can influence graduates' entrepreneurial and employment pathways when embedded within supportive university ecosystems. Secundo et al. (2023) similarly emphasise stakeholder engagement and connections between university resources and external actors. Prokop (2021) further demonstrates that connectedness is a critical characteristic of effective university entrepreneurial ecosystems, with differences in ecosystem configuration contributing to different venture outcomes. The university can therefore function as an intermediary or ecosystem connector, bringing together resources and actors that might otherwise remain dispersed.

This intermediary role may be particularly important in emerging and resource-constrained settings. Where specialised incubation services and business-development infrastructure remain limited, universities may combine entrepreneurship education with mentoring, technical facilities, stakeholder networks and opportunities for experimentation. However, institutional presence alone does not make a university entrepreneurial. Incubation spaces and entrepreneurship programmes are likely to have limited value if they remain disconnected from institutional capabilities and the external ecosystem.

For TVET-oriented universities, this role has an additional dimension. Workshops, laboratories and applied technical expertise can connect entrepreneurship with production, problem solving and technological experimentation. University-based incubation can therefore bring together technical capability, entrepreneurship learning and ecosystem resources around venture development.

This perspective is directly relevant to BER 2023. USET brought institutional staff, development partners, government actors, external facilitators, mentors and innovation resources around a cohort of emerging ventures. The case therefore enables the university to be examined not simply as a provider of entrepreneurship education, but as a potential orchestrator of relationships and resources within an emerging enterprise-support ecosystem.

2.4 TVET, Youth Enterprise Development, and African Incubation Realities

Technical and vocational education and training (TVET) institutions occupy an important position in youth enterprise development because they equip learners with occupational and technical capabilities that can potentially support self-employment and business creation. Yet technical competence does not automatically translate into enterprise capability. Producing, repairing or delivering a technical service requires a different set of capabilities from identifying customers, pricing an offering, managing finances and sustaining market relationships.

Entrepreneurship support in TVET must therefore extend beyond adding generic business content to technical programmes. Learners need opportunities to apply entrepreneurial knowledge, test ideas, engage with markets and receive practical feedback. Evidence from Ghanaian technical and vocational education similarly highlights learner-centred, problem-based and activity-based approaches as important for entrepreneurial skills development, while identifying tutor capability, inadequate resources and weak industry collaboration as significant constraints (Kissi et al. 2020).



Incubation can help bridge the gap between technical capability and market-facing venture development. For technically oriented entrepreneurs, support may include mentoring, industry relationships, business-development expertise, technology, workshops and prototyping facilities. African evidence also shows that learning within incubation occurs through interaction with experienced actors and through applying business knowledge to venture development, although support must respond to the particular needs of participating entrepreneurs (Bucci & Marks, 2022).

These functions operate within challenging institutional environments. African incubation programmes commonly face limitations in finance, infrastructure, specialist expertise and ecosystem connectivity. Consequently, effectiveness depends not simply on establishing incubation structures, but on the quality of mentoring, networking, institutional support and adaptation to local conditions (Egbetokun, 2025; Ssekiziyivu et al., 2023).

Resource constraints, however, need not prevent meaningful incubation. Universities and TVET institutions can mobilise existing workshops, technical expertise and stakeholder relationships while developing additional capabilities incrementally. Partnerships with government, development organisations and industry can extend available support without requiring every resource to be housed internally. In this sense, network mobilisation becomes part of the incubation infrastructure.

BER 2023 reflects these conditions. It combined entrepreneurship development with mentoring, stakeholder participation and exposure to ICT and fabrication technologies while operating within constraints relating to facilities, implementation time and facilitator capability. The case therefore provides an opportunity to examine how a TVET-oriented university can develop incubation capacity around existing institutional resources and external partnerships rather than waiting for a fully developed incubation environment.

2.5 Research Gap and Study Positioning

The literature establishes the value of experiential entrepreneurship education, business incubation, entrepreneurial universities and ecosystem-based support, but important gaps remain in understanding how these elements interact in practice within resource-constrained African higher education settings.

First, entrepreneurship education research has devoted considerable attention to entrepreneurial intentions and learning outcomes, while comparatively less is known about the implementation of incubation-oriented interventions that combine training with mentoring, stakeholder engagement and venture-development support (Motta & Galina, 2023; Nabi et al., 2017). This leaves an implementation gap concerning how institutions translate experiential entrepreneurship education into sustained incubation practice.

Second, although university incubation has received growing attention, much of the evidence comes from comparatively developed university and entrepreneurial ecosystems. Emerging African institutions operate under different conditions, including infrastructure limitations, restricted specialist expertise and fragmented support networks. African incubation research consequently points to the need for more context-sensitive evidence on how incubation support is organised and adapted in practice (Egbetokun, 2025; Ssekiziyivu et al., 2023).

Third, the intersection between TVET-oriented higher education and university-based incubation remains underexplored. TVET-oriented institutions may possess workshops, applied expertise and occupational capabilities with considerable enterprise potential, yet relatively little is known about how these resources can be combined with entrepreneurship education, mentoring, external networks and venture-readiness support.

This study addresses these gaps through a practice-based examination of BER 2023 in The Gambia. It considers participant experiences and immediate programme outcomes alongside implementation processes, adaptation and institutional learning. In doing so, it treats incubation simultaneously as an enterprise-development process and an institutional capability-building process.

Rather than testing a causal model, the study examines how ecosystem resources, university incubation arrangements and experiential learning came together within a resource-constrained setting. It therefore contributes contextually grounded evidence from a small African economy while offering insight into how TVET-oriented universities can develop pathways connecting technical capability with enterprise readiness.

3. Conceptual Framework

3.1 Theoretical Foundation

This study conceptualises university-based entrepreneurship incubation as a dynamic capability-development process embedded within a broader entrepreneurial ecosystem. The theoretical foundation integrates three complementary perspectives: entrepreneurial ecosystems, the entrepreneurial university, and business incubation.

The entrepreneurial ecosystem perspective provides the broadest level of analysis. It views entrepreneurship as shaped by interdependent conditions and actors, including institutions, markets, finance, human capital, knowledge, infrastructure and networks. Their value lies not simply in their availability, but in how effectively they interact and support entrepreneurial activity (Bouncken & Kraus, 2022; Stam & van de Ven, 2021). From this perspective, entrepreneurship support is relational: mentoring, finance, knowledge and infrastructure become more useful when connected to other resources that ventures require.

The entrepreneurial university perspective positions the university as an active actor within this ecosystem. Universities can support entrepreneurship through education, incubation, knowledge exchange, industry engagement and access to institutional resources. Their contribution depends partly on their ability to connect internal capabilities with external actors and opportunities (Guerrero et al., 2020; Prokop, 2021). The university can therefore function as an intermediary between emerging entrepreneurs and the wider ecosystem.

The business incubation perspective explains the programme-level process through which these resources can be organised around venture development. Contemporary incubation extends beyond physical space to include capability building, mentoring, networking, market exposure and specialised support. In university settings, these functions can link entrepreneurship learning with venture development and stakeholder engagement (Egbetokun, 2025; Secundo et al., 2023; Ssekiziyivu et al., 2023).

Collectively, the three perspectives provide the central logic of the study: entrepreneurial ecosystems provide resources and

relationships; the entrepreneurial university provides an institutional platform for mobilising them; and incubation provides the process through which they can be translated into entrepreneurial capability and venture readiness.

This framing is particularly relevant to BER 2023, where USET combined its own staff and institutional resources with government, development partners, external facilitators, mentors and other stakeholders. The analytical interest is therefore in how these resources were organised through the incubation process and what forms of entrepreneurial and institutional capability emerged from their interaction.

3.2 Conceptualisation of University-Based Incubation

Building on the theoretical foundation, this study conceptualises university-based incubation as a multi-layered capability-development system through which ecosystem resources are organised and translated into support for emerging ventures. The central assumption is that entrepreneurship outcomes are more likely to emerge when training, infrastructure, mentoring and stakeholder support are deliberately connected through an institutional process that enables participants to learn, experiment and strengthen venture readiness.

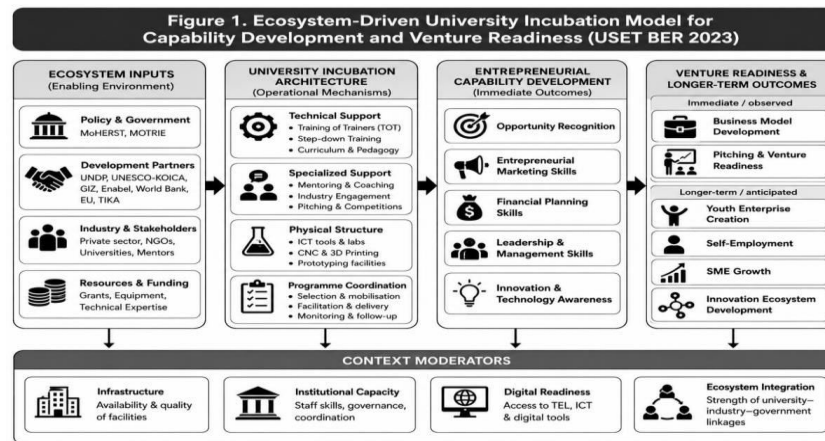


Figure 1: Ecosystem-driven university incubation model

Within this framework, the university performs three related functions. First, it acts as a translation mechanism, converting internal and external resources into support aligned with venture needs. Second, it serves as an intermediation platform, connecting participants with mentors, industry actors, regulators, technical experts and other ecosystem stakeholders. Third, it functions as a learning system, enabling both participants and facilitators to develop capability through action, feedback, reflection and adaptation.

The framework comprises four interconnected layers: ecosystem inputs, university incubation architecture, entrepreneurial capability development and venture readiness. Ecosystem inputs include government support, development partners, institutional expertise and external networks. These are organised through the university incubation architecture, which in BER 2023 included entrepreneurship training, mentoring, stakeholder engagement, pitching and access to selected technological and physical resources.

Through these activities, participants are expected to strengthen capabilities in areas such as opportunity recognition, market understanding, financial planning, business management, innovation and venture communication. These capabilities are not assumed to arise automatically from participation, but through repeated engagement with practical tasks, feedback and external actors.

The final layer is venture readiness: improved preparedness to refine, communicate and advance a business idea. In this study, this includes stronger business models and plans, improved pitching competence and better understanding of markets and finance. It does not imply that participation automatically leads to business

creation, survival or growth, which remain longer-term outcomes beyond the evaluation period.

The framework therefore links ecosystem inputs→incubation architecture→capability development→venture readiness, while recognising that the process is neither automatic nor strictly linear. Facilitator capability, institutional coordination, infrastructure and stakeholder engagement can strengthen or constrain these relationships.

For BER 2023, the framework provides a basis for examining how ecosystem resources were organised, how the incubation process was experienced, and what immediate entrepreneurial and institutional capabilities emerged from implementation.

3.3 Analytical Expectations

The conceptual framework generates five analytical expectations for examining how university-based incubation operated within BER 2023. These are not hypotheses for statistical testing, but theoretically informed relationships used to interpret programme implementation, participant experience and institutional learning.

AE1: Ecosystem resources become more useful to emerging entrepreneurs when organised through a connected university incubation process.

Entrepreneurial ecosystem research emphasises that resources such as knowledge, finance, networks and institutional support derive much of their value from how they interact rather than from their presence alone (Bouncken & Kraus, 2022; Stam & van de Ven, 2021). In BER, this directs attention to how government, development-partner, institutional and stakeholder resources were brought together through the university.



AE2: Incubation contributes to entrepreneurial capability when training is combined with experiential and relational support. Entrepreneurial learning is strengthened when participants apply knowledge, receive feedback, interact with practitioners and work on venture-related problems. Mentoring, pitching and practical assignments can therefore deepen the value of structured entrepreneurship training (Motta & Galina, 2023; Secundo et al., 2023).

AE3: Facilitator capability influences the effectiveness of incubation-oriented entrepreneurship education.

Experiential incubation requires facilitators to move beyond content delivery towards coaching, questioning, feedback and reflective learning. Facilitator capability is therefore treated as part of the incubation process rather than merely as a preparatory input (Bell, 2020).

AE4: Physical and technological resources support venture development when connected to practical entrepreneurial use.

ICT, fabrication facilities, prototyping technologies and related institutional resources can support experimentation and innovation, but their value depends on whether participants can apply them meaningfully to venture development.

AE5: Contextual conditions shape how effectively incubation inputs are translated into capability and venture readiness.

Infrastructure, implementation time, institutional coordination and ecosystem connectivity can enable or constrain incubation. This is particularly important in resource-constrained African settings, where effectiveness may depend on adaptation, network mobilisation and the ability to combine limited resources (Egbetokun, 2025; Ssekiziyivu et al., 2023).

Collectively, these expectations focus the analysis on how USET organised ecosystem resources through its incubation architecture and what the implementation experience revealed about entrepreneurial capability, venture readiness and institutional learning. They also allow programme achievements and constraints to be interpreted without assuming that participation produced longer-term enterprise outcomes.

3.4 Contribution of the University-Based Incubation Framework

The proposed University-Based Incubation Framework contributes by integrating entrepreneurial ecosystem, entrepreneurial university and incubation perspectives within a single analytical model. Its central value lies in explaining how ecosystem resources can be organised through a university-based incubation process to support entrepreneurial capability development and venture readiness.

The framework moves beyond a narrow programme-delivery view of incubation by positioning the university as an intermediary and coordinating platform linking external partners, institutional resources, facilitators, infrastructure and emerging entrepreneurs. This is especially relevant in resource-constrained settings, where effective incubation may depend as much on the ability to mobilise and combine available resources as on the existence of specialised facilities.

A further contribution is its recognition of institutional learning. Incubation capability develops not only among participating entrepreneurs but also within the host institution through facilitator learning, programme adaptation and stronger ecosystem

relationships. This makes the framework particularly relevant to emerging incubation systems in TVET-oriented and small-economy contexts.

In this study, the framework is used as an analytical guide rather than a causal model. It provides a basis for interpreting how BER 2023 connected ecosystem inputs, incubation processes, capability development and venture readiness within the conditions under which the programme was implemented.

4. METHODOLOGY

4.1 Research Design

This study adopted a practice-based action research design embedded within a descriptive programme evaluation and single institutional case study. This design was appropriate because the study sought not only to document the implementation and immediate outcomes of BER 2023, but also to understand how the programme evolved during delivery, how emerging challenges were addressed and what institutional learning resulted. Action research is particularly suited to organisational settings where cycles of action, observation and reflection contribute both to understanding and to the improvement of practice (Coghlan, 2019).

The action research element reflected the programme team's direct involvement in implementation and learning. Observations made during delivery informed programme adjustments rather than being treated solely as post-programme evidence. For example, difficulties experienced by some facilitators in adopting more experiential incubation methods led to closer pairing with external consultants and industry practitioners. The research process therefore involved an iterative relationship between implementation, observation, adaptation and reflection.

The study also incorporated a descriptive programme evaluation perspective. Programme records, participant feedback and implementation observations were used to examine recruitment, participation, completion, perceived relevance, facilitation experience and other immediate programme outcomes. The purpose was not to attribute longer-term enterprise performance causally to BER 2023, but to assess how the intervention was implemented, how it was experienced and what lessons emerged for subsequent programme and institutional development.

BER 2023 was further treated as a single institutional case study because it was bounded within a specific university, programme and implementation period. Case-study research is appropriate where a contemporary phenomenon is examined within its real-world organisational context and where understanding depends on interactions among multiple actors and processes (Yin, 2018).

Taken together, the design supported three complementary forms of inquiry: evaluation of programme implementation and immediate outcomes, observation of adaptation during practice, and interpretation of institutional learning within a bounded university-incubation context. It also aligns with the use of the University-Based Incubation Framework as an analytical guide rather than a causal model.

4.2 Case Context

BER 2023 was implemented at The Gambia University of Applied Science, Engineering and Technology (USET) as part of efforts to strengthen entrepreneurship and incubation support for young people in The Gambia. The initiative was supported by



UNESCO and the Korea International Cooperation Agency (KOICA), in collaboration with the Ministry of Higher Education, Research, Science and Technology (MoHERST), with technical and delivery support from CEPRASS, USET facilitators and other stakeholders.

The programme was situated within USET's emerging entrepreneurship and innovation environment, including the Entrepreneurship Hub and Innovation Lab (EHIL). It was designed not only to support youth entrepreneurs, but also to strengthen the university's own capability to deliver incubation-oriented entrepreneurship support.

BER therefore operated at two levels. At the institutional level, it sought to build facilitator capability and contribute to a more sustained university-based incubation system. At the participant level, it aimed to strengthen venture readiness through entrepreneurship training, mentoring, stakeholder engagement, technology exposure and pitching.

The case is relevant because it reflects an emerging rather than fully developed incubation environment. USET combined internal staff and institutional resources with external facilitators, development partners, public institutions and business stakeholders while operating within constraints relating to implementation time, facilitator capability and infrastructure.

For this study, BER 2023 is treated as a bounded institutional case, defined by the 2023 programme, its participating cohort, the USET implementation setting and the associated training, mentoring, stakeholder engagement and pitching activities. This boundary allows close examination of how the intervention was organised, experienced and adapted without extending claims beyond the evidence generated during the programme.

4.3 Programme Structure

BER 2023 was organised as a two-stage intervention combining institutional capability building with youth enterprise development. Its dual purpose was to strengthen USET's capacity to deliver incubation-oriented entrepreneurship support while preparing selected young entrepreneurs for venture development.

The first stage was a seven-day Training of Trainers (TOT) for USET/IEE staff. It introduced facilitators to the entrepreneurship curriculum, training materials and incubation-oriented facilitation approaches, with particular emphasis on practical, participatory and venture-focused delivery rather than conventional lecture-based teaching.

The second stage was a five-week step-down programme for selected youth entrepreneurs. It covered entrepreneurship, entrepreneurial marketing, finance and record keeping, leadership and management, ICT for MSMEs, and exposure to 3D printing and innovation technologies. Participants also worked progressively on business models, business plans and pitching.

The programme moved beyond classroom instruction through mentoring, stakeholder engagement, practical exercises and interaction with external actors. These activities enabled participants to apply concepts to their own ventures, receive feedback and access technical, specialised and selected technological support consistent with the University-Based Incubation Framework.

The sequencing of staff preparation before participant delivery also created opportunities for institutional learning during implementation. USET facilitators applied the TOT content during the youth programme, allowing facilitation practices to be observed, adjusted and strengthened in real time.

The intervention culminated in business idea and business plan pitching, which required participants to integrate market understanding, financial planning, business modelling and venture communication. Pitching therefore served both as a developmental activity and as an immediate indicator of venture readiness.

4.4 Participants and Selection Process

BER 2023 used an open recruitment and screening process to identify young people with existing or emerging enterprise interests. A public call generated 80 valid applications across sectors including agriculture, automotive services, catering, construction, fashion and design, electrical services, information technology and renewable energy.

From this pool, 69 applicants were shortlisted for interview. Selection considered qualification, business competence, motivation, perceived business viability and behavioural competence, to identify participants able to benefit from incubation-oriented support and engage meaningfully with the programme.

A final cohort of 40 participants was selected, comprising 20 men and 20 women. The cohort retained sectoral diversity and included participants with varying levels of business experience, technical background and venture development. BER 2023 was therefore not a general entrepreneurship-awareness programme, but an intervention for individuals with an identified interest in developing or strengthening an enterprise.

The Training of Trainers component involved eight USET/IEE facilitators, seven of whom subsequently provided evaluation feedback. These facilitators formed a second participant group because the programme also sought to strengthen USET's internal incubation capability.

The study therefore considered two linked groups: the 40 youth incubatees participating in the enterprise-development programme and the USET/IEE facilitators involved in institutional capability building. This distinction allows the evaluation to examine both participant-level outcomes and institutional learning arising from programme delivery.

4.5 Data Sources

Table 1: Data sources and their analytical contributions

Data source	Evidence captured	Analytical contribution
Programme administrative records	Applications, selection, attendance, participation and pitching records	Recruitment profile, engagement and completion
Structured evaluation surveys	Participant and facilitator perceptions of relevance, objective attainment, facilitation, pacing and recommendation	Immediate perceived programme effectiveness
Formal implementation observation	Contemporaneous observations of participant engagement, facilitator practice, stakeholder involvement, delivery challenges and adaptations	Implementation dynamics, action-research learning and institutional adaptation
Programme and institutional documentation	Training materials, implementation records, facilities and infrastructure information	Programme context and institutional readiness



Formal observation was undertaken by a designated data collector embedded within the training venues with the knowledge of participants. Observations were recorded during implementation and subsequently synthesised into findings incorporated into the programme report. This provided contemporaneous evidence of how the intervention unfolded and was particularly important for examining implementation adaptation and institutional learning.

The analysis combined descriptive quantitative analysis with qualitative thematic interpretation, reflecting the mixed nature of the programme evidence and the study's interest in both immediate outcomes and implementation learning. Mixed-method approaches can provide a richer understanding of programme processes and outcomes by combining numerical indicators with contextual evidence, including in youth entrepreneurship programme evaluation (Bamattre et al., 2019).

Administrative and survey data were analysed descriptively using counts, proportions and percentages. The analysis covered recruitment, participation, completion, perceived relevance, objective attainment, facilitation experience and willingness to recommend the programme. These indicators were used to describe engagement and immediate perceptions of programme effectiveness rather than to establish causal effects.

Formal observation notes and programme documentation were analysed qualitatively. Observations recorded during implementation were reviewed for recurring patterns relating to participant engagement, facilitator practice, stakeholder involvement, experiential delivery, time pressures, infrastructure constraints, programme adaptation and institutional learning.

The analysis was iterative, with particular attention to instances where observations informed changes in programme practice. Difficulties experienced by some facilitators in sustaining

experiential delivery, for example, contributed to closer collaboration with external consultants and industry practitioners. Such episodes were interpreted as action–observation–adaptation–reflection sequences consistent with the study's action research orientation.

Recurring observations were grouped into broader themes using principles of thematic analysis (Braun & Clarke, 2021). These themes were then considered alongside the descriptive programme results and interpreted through the University-Based Incubation Framework and the analytical expectations developed in Section 3.

Triangulation across administrative records, surveys, formal observations and programme documentation was used to examine convergence and divergence across evidence sources. Integrating multiple forms of programme evidence can strengthen interpretation by relating measured outcomes to implementation context and programme processes (Newton-Levinson et al., 2020). Positive participant ratings were therefore considered alongside evidence concerning facilitator adaptation, implementation pressure and infrastructure constraints.

The analysis did not seek statistical generalisation or causal confirmation. Its purpose was to examine how BER 2023 operated, what immediate outcomes emerged, how implementation was adapted and what these patterns suggest about university-based incubation in a resource-constrained setting.

5. Findings

The findings are presented in two stages. First, Table 2 provides a consolidated overview of the evidence against the study's three research questions. The subsequent subsections then examine the underlying programme records, participant feedback and formal implementation observations in greater detail.

Table 2: Summary of Findings

Study question	Main evidence base	Consolidated finding
RQ1. How was BER 2023 designed and implemented as a university-based incubation intervention?	Programme records; programme documentation; formal implementation observation	BER combined staff capability development, youth entrepreneurship training, mentoring, stakeholder engagement, technology exposure and pitching within a university-based incubation structure. Delivery was adaptive rather than fixed, with implementation adjustments made in response to emerging challenges.
RQ2. What do participant feedback and programme evidence indicate about its relevance, effectiveness and capability-development outcomes?	Participation records; TOT and youth evaluation surveys; formal observation	Participation and perceived programme value were high. Training participation reached 92.5%, pitching-based completion was approximately 89%, around 90% reported that the training responded to their needs, 92% indicated that objectives were met, 74% reported relevance to current or intended businesses, and all respondents were willing to recommend the programme.
RQ3. What institutional and implementation lessons does the experience offer for university-based incubation in comparable settings?	Formal observation; implementation records; institutional and infrastructure evidence	Incubation effectiveness depended not only on curriculum delivery but also on facilitator capability, mentoring, stakeholder mobilisation, adequate implementation time and access to appropriate infrastructure. The experience also showed that institutional capability developed through implementation, adaptation and collaboration with external partners.

The findings summary points to a programme that achieved strong immediate engagement and perceived value while also generating important lessons about facilitator capability, institutional readiness and the practical demands of university-based incubation. The following subsections unpack these findings and show how they emerged across the different evidence sources.

5. Discussion

6.1 University Incubation as an Ecosystem-Mediated Process

The BER 2023 experience suggests that university-based incubation is better understood as an ecosystem-mediated process than as a stand-alone training activity. USET brought together university staff, development partners, government actors, external facilitators, mentors and institutional resources around a common venture-development process. This aligns with ecosystem perspectives that emphasise the value of relationships and complementarities among support actors rather than the mere presence of resources (Bouncken & Kraus, 2022; Stam & van de Ven, 2021).



The findings also highlight USET's role as an ecosystem intermediary. The university connected participants with mentoring, stakeholder expertise, technology exposure and pitching opportunities, extending its role beyond classroom instruction. This reflects entrepreneurial-university research showing that universities can connect education, institutional resources and external actors within wider entrepreneurship ecosystems ([Guerrero et al., 2020](#); [Prokop, 2021](#); [Secundo et al., 2023](#)).

At the same time, ecosystem integration required active coordination. Stakeholder mobilisation, facilitator support and programme adaptation demanded sustained institutional effort, reinforcing evidence that incubation in resource-constrained environments often depends heavily on networks, partnerships and context-sensitive support structures ([Egbetokun, 2025](#); [Ssekiziyivu et al., 2023](#)).

BER therefore supports the first analytical expectation: ecosystem resources become more useful when organised through a connected incubation process. The case suggests that university incubation effectiveness may depend less on possessing every required resource internally than on the institution's ability to mobilise, connect and coordinate available resources around venture development.

6.2 Experiential Learning and Entrepreneurial Capability Development

A second major finding is that entrepreneurial capability developed most visibly where participants were required to apply rather than simply receive knowledge. BER combined structured entrepreneurship content with mentoring, practical exercises, stakeholder interaction, business-model development and pitching. This aligns with experiential entrepreneurship education, which emphasises learning through action, feedback and reflection rather than through classroom transmission alone ([Morland et al., 2021](#); [Motta & Galina, 2023](#); [Nabi et al., 2017](#)).

The programme evidence suggests that this applied orientation helped participants connect entrepreneurship concepts to their own ventures. Later-stage activities required them to integrate market understanding, financial planning, business modelling and communication into business plans and pitches. Capability development therefore involved not simply acquiring business knowledge, but progressively applying that knowledge to venture-related tasks.

The findings also reinforce the importance of relational learning. External mentors, practitioners and stakeholders exposed participants to perspectives and experience that conventional classroom delivery could not easily reproduce. This is consistent with incubation research showing that entrepreneurial learning is strengthened through interaction with mentors, practitioners and wider support networks ([Bucci & Marks, 2022](#); [Secundo et al., 2023](#)). It also supports the second analytical expectation that structured training becomes more effective when combined with experiential and relational forms of support.

Importantly, the evidence does not establish that these capabilities translated into longer-term firm performance. What BER demonstrates is that participants had opportunities to practise, refine and demonstrate venture-related capabilities during the programme period. The most defensible interpretation is therefore that experiential learning contributed to immediate capability

development and venture readiness, rather than directly producing sustained enterprise outcomes.

6.3 Facilitator Capability and Institutional Learning

The BER experience also shows that building an incubation system requires capability development among facilitators as well as participants. Although the Training of Trainers was positively received, formal observation during the youth programme showed that some facilitators initially struggled to sustain the experiential, case-based and action-oriented approach expected by the intervention. This distinction matters because positive reactions to facilitator preparation do not necessarily indicate mastery of incubation-oriented pedagogy.

The programme response was adaptive. USET facilitators were paired more closely with CEPRASS consultants and industry practitioners, allowing capability to develop through co-facilitation, observation and practice. In this sense, facilitator development became part of the action-research process rather than remaining a one-off preparatory activity.

This finding supports the third analytical expectation that facilitator capability influences the effectiveness of incubation-oriented entrepreneurship education. It also aligns with Bell (2020), who emphasises that experiential entrepreneurship education places distinctive pedagogical demands on educators. The BER experience extends this point by showing that facilitator capability can itself develop through implementation, especially where staff are supported by more experienced external practitioners.

The broader implication is that entrepreneurial universities must build internal delivery capability if incubation is to become institutionalised rather than remain dependent on external expertise. For emerging incubation systems, training manuals and workshops are therefore unlikely to be sufficient on their own. Co-facilitation, reflective feedback and repeated delivery experience may be equally important. BER consequently highlights facilitator capability as a critical component of both programme effectiveness and institutional learning.

6.4 Infrastructure, Resource Constraints and Adaptive Incubation

The BER experience shows that incubation effectiveness is shaped not only by programme design, but also by the resources and institutional conditions within which delivery takes place. USET possessed useful assets, including technical capability, available space and access to selected technologies, but the programme also exposed limitations in fabrication space, dedicated ICT facilities and implementation capacity. These constraints did not prevent delivery, but they influenced how support had to be organised and where external assistance remained necessary.

This finding supports the fourth and fifth analytical expectations: physical and technological resources can strengthen venture development, while contextual conditions can enable or constrain the incubation process. Importantly, infrastructure should not be understood only in physical terms. In resource-constrained settings, relationships, partnerships and institutional adaptability can themselves function as part of the incubation infrastructure, helping universities compensate for gaps in specialised facilities and internal expertise ([Egbetokun, 2025](#); [Ssekiziyivu et al., 2023](#)).

BER also illustrates the importance of adaptive implementation. Time compression, stakeholder coordination



demands and uneven facilitator readiness required adjustments during delivery rather than rigid adherence to a fixed programme sequence. This reinforces the broader argument developed earlier that effective incubation in emerging systems depends on contextual fit and the ability to mobilise available resources responsively.

The wider implication is that universities do not necessarily need to begin with a fully developed incubator. More important may be their capacity to combine existing resources, build partnerships and strengthen incubation capability progressively through practice.

6.5 Venture Readiness, Programme Outcomes and the Limits of Short-Term Evaluation

The BER findings indicate strong immediate programme outcomes, particularly in participation, completion, perceived relevance and willingness to recommend the training. Participants also progressed through business modelling, planning and pitching activities that required them to apply entrepreneurial knowledge in venture-related tasks. These outcomes are consistent with the programme's emphasis on venture readiness rather than entrepreneurship awareness alone.

At the same time, the evidence places a clear boundary around what can reasonably be claimed. BER 2023 did not track participating ventures long enough to determine whether the programme resulted in sustained business creation, revenue growth, employment generation, survival or market expansion. The observed outcomes therefore relate primarily to engagement, perceived effectiveness, capability development and preparedness for subsequent venture activity.

This distinction is important because positive participant responses and successful programme completion should not be treated as equivalent to longer-term enterprise performance. The University-Based Incubation Framework therefore positions venture readiness as an immediate outcome, while enterprise creation, survival and growth remain longer-term possibilities requiring longitudinal evidence.

The BER experience consequently supports a cautious conclusion: the programme appears to have strengthened conditions associated with venture development, but its longer-term entrepreneurial effects remain unestablished. Future evaluation should therefore track whether the capabilities developed during incubation translate over time into enterprise formalisation, survival, revenue, employment and market growth.

5. Practical Implications

The findings have practical implications for universities, incubation managers, policymakers, and development partners seeking to strengthen youth enterprise development in resource-constrained settings. University-based incubation should be designed as a connected support pathway rather than a sequence of stand-alone training activities. Entrepreneurship training becomes more useful when linked to mentoring, stakeholder engagement, technology exposure, pitching and follow-on venture support.

Greater attention should also be given to facilitator capability. Staff preparation should not end with a one-off Training of Trainers. Emerging incubators may benefit from co-facilitation, coaching, reflective practice and continued engagement with

experienced practitioners until experiential approaches become embedded in institutional practice.

The BER experience further suggests that universities do not need to possess every incubation resource internally. Partnerships with industry, government agencies, development organisations and entrepreneurs can extend institutional capability and compensate for gaps in specialist expertise and infrastructure. In this sense, network mobilisation is itself an incubation capability.

Infrastructure investment should therefore be prioritised around practical venture-development needs. Access to ICT, fabrication and prototyping facilities is most valuable when it is directly integrated into incubation activities and made accessible to participating ventures.

Finally, programme evaluation should extend beyond satisfaction and completion measures. Universities and funding partners should incorporate post-programme tracking so that venture formalisation, survival, revenue, employment, market access and growth can be assessed over time. This would allow future incubation decisions to be informed not only by positive participant experience, but also by evidence of sustained enterprise progression.

8. Conclusion

This study evaluated BER 2023 as a university-based entrepreneurship incubation initiative designed to strengthen youth venture readiness while also building USET's institutional capability for incubation-oriented enterprise support. The evidence indicates strong immediate outcomes in participation, completion, perceived relevance and participant satisfaction, alongside meaningful engagement with mentoring, stakeholder interaction, business planning, pitching and technology-oriented learning.

The findings also show that effective incubation depends on more than curriculum delivery. Facilitator capability, institutional coordination, stakeholder mobilisation, infrastructure and the ability to adapt during implementation all shaped programme delivery. BER 2023 therefore illustrates how a university can function as an intermediary connecting internal resources with wider ecosystem actors to support entrepreneurial capability development.

The wider contribution of the case is that university-based incubation in resource-constrained settings need not wait for fully developed infrastructure. It can begin by mobilising existing institutional assets, partnerships and expertise around a coherent support process that helps participants move from entrepreneurship learning towards venture readiness.

BER 2023 should therefore be understood as both a youth enterprise-development intervention and an institutional learning process. Its longer-term value will depend on whether the capabilities, relationships and incubation practices developed through the programme are sustained and translated into continuing enterprise support.

9. Limitations and Future Research

This study has several limitations. First, it relies primarily on programme-generated data, including administrative records, participant surveys, formal implementation observations and institutional documentation. These sources provide useful evidence on programme delivery, participant perceptions and institutional learning, but they do not permit causal attribution.



Second, the study examines a single institutional case involving one cohort of 40 youth participants and a small group of facilitators. The findings are therefore context-specific and are intended for analytical rather than statistical generalisation.

Third, the evaluation focuses mainly on immediate and near-term outcomes. BER 2023 did not systematically track participants after the programme to determine whether venture readiness translated into business survival, formalisation, revenue growth, employment creation or market expansion. The longer-term outcomes represented in the University-Based Incubation Framework therefore remain to be established.

Future research should incorporate longitudinal follow-up of participating ventures and, where possible, comparative studies across universities or incubation programmes. Further work could also examine how facilitator capability develops across repeated incubation cycles and whether stronger ecosystem integration improves venture outcomes over time. Such research would help distinguish context-specific features of university-based incubation from those that may be transferable across other resource-constrained higher education settings in Africa.

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