



Enhancing Distance Learning Practices in Educational Psychology and Promoting Equitable Knowledge Access Through Higher Education Institutions in Uganda

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Abstract

In recent years, the dynamics of advancing educational psychology within distance, remote, and online learning have gained significant global attention, including in East Africa, largely due to technological progress and the evolving needs of learners. In Uganda, higher education institutions have increasingly embraced distance learning to maintain academic continuity and safeguard public health during times of crisis. Despite its benefits, distance learning faces persistent challenges such as inadequate technological infrastructure, limited pedagogical capacity, issues of quality assurance, and concerns over cost-effectiveness. This article explores how both public and private universities in Uganda implement distance learning practices, while also analyzing the influence of socioeconomic factors, infrastructural limitations, and cultural contexts on the effectiveness of these initiatives.

Keywords: Distance Learning, Higher Education, Educational Psychology, Community Participation

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Introduction

Learning psychology in education is widely recognized as one of the most essential foundations for the development of knowledge within society. Higher education institutions are entrusted with the responsibilities of teaching, research, and community engagement, thereby contributing to the empowerment of individuals, the enhancement of personal well-being, and the promotion of happiness (Thomson et al., 2022). To live a fulfilling life within society, individuals must engage in continuous learning throughout their lifetime. Education serves as a vital tool enabling people to solve daily challenges, adapt to changing environments, and pursue the notion of “education for life and life for education.” In this sense, education is not confined solely to the formal school system, often referred to as “formal education” (Badran et al., 2023a). In the Ugandan context, education encompasses formal, non-formal, and informal dimensions, all of which combine into what is broadly defined as “lifelong education.” However, the global educational system today emphasizes formal learning for the majority, which is organized through rigid curricula and structured performance classifications (Brenner & Miller, 2024). Rooted primarily in Western educational traditions, the formal school system is typically divided into primary, secondary, high school, and university levels. In Uganda, this structure often grants students little autonomy in shaping their educational pathways: decisions regarding what to learn, the sequence of lessons, and even the instructional materials are predetermined (Brenner & Miller, 2024). Consequently, learners have limited

opportunities to align their studies with personal interests or prior experiences, while tutors equally lack the flexibility to modify assignments or teaching processes within the system.

In recent decades, Uganda has experienced significant changes in distance learning, largely influenced by technological advancement and innovation. Several open universities have emerged, employing distance learning approaches to expand access to education (Felder & Brent, 2024). Historically, education has been treated as the central mechanism of production, resulting in rigid instructional models; however, scholars argue that greater emphasis must now be placed on the learner rather than the teacher (Felder & Brent, 2024). In the early years of the Open University movement, course developers even attempted to “tutor-proof” their curricula to ensure uniformity and limit modifications (Bates, 2023). Within distance education, tutors often play a peripheral role, while learners bear the primary responsibility of engaging with learning materials and investing substantial time to acquire knowledge independently. Official policy documents explicitly recognize this reality, emphasizing that in home-based learning systems, tutorials are voluntary, and relationships between tutors and students are largely maintained through assignments (Cotton, 2024). Kirk, reflecting on her own tutoring experiences in Africa, noted that part-time tutors in such systems are typically restricted to assessment and basic support functions within centrally designed programs (Simon & Swerdlik, 2022).

Long-term observers of distance education emphasize that students must devote considerable time, commitment, and effort to meet academic demands and achieve their learning goals (Cantista et al., 2024). Yet, many learners are not ideally prepared for this level of responsibility, which often undermines distance learning outcomes. Moore’s Theory of Independent Study highlighted this challenge decades ago, noting that while distance learning shifted emphasis toward learner autonomy, students simultaneously required greater interaction with tutors to acquire practical skills and contextual knowledge. This dual demand autonomy coupled with structured guidance remains central to contemporary distance learning in Uganda.

The evolution of distance learning in Africa, and globally, has been driven by broader acceptance among learners and educators, grounded in three long-established but inconsistently applied principles (Stockard et al., 2020). First, learning is inherently individualistic, as each person acquires skills and knowledge differently and at unique paces, making the idea of a homogeneous “class” of learners unrealistic (Sewart et al., 2020). Second, effective learning is experiential, best achieved through active participation, whether explained through phenomenological or behaviorist perspectives. Third, learning in the modern era of rapid change must be lifelong, extending beyond rigidly defined academic stages (Bates, 2023). These principles align with Paulo Freire’s critique of hierarchical education systems in his *Pedagogy of the Oppressed*. Freire rejected the “banking model” of education, in which students passively receive information, and instead advocated for problem-posing education, which fosters critical awareness and engagement (Haskins, 2020; Alter & Fernekes, 2022). In Uganda’s lower secondary school curriculum, centrally imposed content often limits students’ opportunities to develop critical thinking, further reinforcing Freire’s argument that learner-centered education is indispensable for true empowerment (Bergmann, 2022).

Moreover, the construction of knowledge is inherently social and requires integrating the learner’s cultural and socioeconomic context. Freire (1972) emphasized that many educational policies fail because they overlook the lived realities of their intended beneficiaries (Loots & Oberholster, 2023). His call for contextualized, problem-posing education remains relevant for Uganda, where learners need to see education not as static knowledge transfer but as a transformative process that fosters critical reflection and adaptability (Ness & Farenga, 2017). This emphasis on diversity and dynamism resonates with contemporary educational debates about paradigm shifts, nonlinear learning models, and the rejection of uniformity in favor of flexibility (Brenner & Miller, 2024). Since the mid-20th century, Uganda’s education system has undergone significant transformations, responding to growing demand from increasingly diverse student populations. Inspired by global trends, institutions such as

Kyambogo University, Gulu University, Mbarara University, and Makerere University have incorporated distance education into their teaching and research mandates. These changes mirror developments elsewhere, including the integration of state normal schools into university systems in the United States, aimed at serving broader communities (Hallman & Mendoza, 2024). However, distance learning in the U.S. initially developed more slowly than in Commonwealth nations, partly because education there was managed at the state level and because one-way technologies like satellite broadcasts limited interactivity (Badran et al., 2023a; Wathen & Varcoe, 2023). Later innovations, such as interactive compressed video, improved outcomes but required significant planning and instructor effort (Cantor & Osher, 2021). By the late 1960s, debates about mechanization in education symbolized by emerging computer technologies sparked resistance from students, underscoring the need for greater learner-centeredness (Bates, 2023).

The rise of digital technology further transformed distance education from the late 1990s onwards, with the Internet and the World Wide Web providing new platforms for teaching and learning. In Uganda, as in many parts of the world, the COVID-19 pandemic accelerated the adoption of digital education tools, making distance learning a primary mode of delivery (Bates, 2023). Universities such as Uganda Martyrs University incorporated principles of good practice into online teaching, aligning with global trends that emphasized learner-centered strategies (Bolton et al., 2024). Nonetheless, the implementation of these practices varies depending on institutional capacity and student demographics (Wiseman & Wolhuter, 2013; Felder & Brent, 2024).

The commercialization of educational technologies in the 2020s reframed distance learning not merely as a public good but also as a profit-driven enterprise. This raised questions about cost-effectiveness and equity but also reinforced the need for productivity and accountability in higher education. Today, universities and policy makers continue to convene stakeholders—including administrators, faculty, and IT specialists—to align distance learning with both educational goals and societal needs (Nevarez et al., 2023).

Academic Productivity.

In speaking of IT's potential, Massy and Zemsky noted two major benefits: economies of scale and mass customization. Although the authors provided some detail about mass customization, their interest was clearly in economies of scale. The monograph extensively uses commercial and marketplace imagery, off-putting to many academics, who seek refuge from that in the academy (Collier, 2023). Perhaps more noticeable, though, is the emergence here and elsewhere of a tendency to talk about academic uses of technology using business terms like productivity. As noted, the investment in technology by colleges and universities will increase dramatically. Inevitably, colleges and universities (and a growing number of commercial providers) see a need to think strategically about their productivity. Badran et al., (2023b) made it clear that academic productivity must be viewed as learning productivity, not as financial return or even the traditional measures of-faculty productivity-research studies and class preparations. Learning productivity was not customarily measured, at least partly because measuring it's notoriously difficult to do. In any case, the concern for productivity has led on the one hand, some faculty resistance to new ways of thinking about their work and thus caution about the use of technology (Tambunan, 2023).

On the other hand, an efflorescence of commercial and commercial "learning" companies offering products or services to students, faculty. And institution dominant faculty and institutional purpose in using IT is often to serve those students who can readily demonstrate 'productivity,' that is, well-prepared students who can progress even more rapidly using learning technologies. These same technologies are capable of opening doors to learners otherwise unable to participate in the educational experience, such as working adults. Individuals with disabilities, and that not in proximity to university (Dyson & Humphreys, 2023). They are also capable of aiding learners not previously successful in traditional educational setting by providing holistic, knowledge-based frameworks that interact across subject areas.

Muss customization, unlike productivity, is an phrase that actually suggests something beneficial to humans-that through technology the learning needs of each person can be met (Cantor & Osher, 2021). However, with the quasi commercial push for productivity and its public policy counterpart, accountability, it has for the most-part come to mean flexibility within a fairly limited range, such as adding a synchronous chat to a lecture course or putting classroom lectures on video or even streaming video. What it might mean instead is education that is designed to meet the needs of individual learners' education that includes diagnostic assessments, curricula tailored to learning styles and personal contexts, and heuristic performance evaluations (Hernández-Serrano, 2021).

In 1995, the focus on 'learning productivity' was given a different spin in Barr and Tagg's important article on the new learning paradigm. Although Nicholson et al., (2022) did not shrink from discussing the business of education, their discussion was not narrowly targeted at technology- mediated learning activities. Instead, they explored the paradigm shift that occurs when the goal is no longer to provide instruction but 'to produce learning (Wareing, 2024). In fact, they delineated the implications of this shift in considerable detail, admitting that learning technologies will play a significant role but maintaining the focus on student learning:

"Under the Learning Paradigm,

Producing more with less becomes possible because the more that is being produced is learning and not hours of instruction (Felder & Brent, 2024). Fundamental to this paradigm shift, according to Dalkir, (2023) contends that, the learning theory that undergirds knowledge as one antithetical to the priesthood paradigm that has prevailed since the Middle Ages, in which many are called but few are chosen. As they stated, "Under the Learning Paradigm, faculty-and everyone else in the Institution-are unambiguously committed to each student's success. The faculty and the institution take an R. Buckminster Fuller view of students: human beings are born geniuses and designed for success (Hallman & Mendoza, 2024). This conviction, in fact, seems to inform the thinking of all those who espouse a learner-centered approach to education. Creating an educational approach, much less a system, that embodies this conviction, however, is a Herculean task, as was acknowledged (Kohnke et al., 2023)

Alongside the concern with productivity and the growth of accountability, we have seen efforts to create more learner-centered environments. Teaching and learning have been given featured roles, and the use of technology has been "institutionalized" in the formation of Teaching and Learning with Technology Roundtables at over 400 institutions across the United States (Badran et al., 2023b). Distance learning as well has assumed a more prominent role, but often within the framework of institutional productivity (i.e., as a way to serve more. Distance learning has become an alternative delivery mode taken up by many on-campus learners for a variety of reasons, including scheduling convenience, perceived course quality, and the use of technology. The Pew project focuses specifically on large-enrollment courses making innovative use of technology in order to achieve substantial savings of money and time with the same or better learning accomplishments (Bergmann, 2022). Most Pew projects are not targeted at distance learners, although all use technology. Access, especially access to successful learning experiences for underserved populations, has not been a high priority. Yet the components for success do exist distance learning process (Dennen et al., 2022).

Responding to Learner Differences

Many institutions across the United States have created teaching and learning centers focused on incorporating innovative pedagogies into their teaching practices. For the most part, distance-learning activities have been kept separate, often owing to their primary association with technology or their peripheral relationship to main campus activities (Alcorta et al., 2021). Rarely is distance education accorded first consideration for improvements in program design or pedagogical development. Even the leaders of the national Teaching and Learning with

Technology. Green, are only marginally supportive of the pedagogical effectiveness of distance learning not even mentioning it on their extensive TLT Web site (Mizza & Rubio, 2020)

In fact, distance education and its close cousin distributed learning are in a number of ways considerably closer to the learning paradigm than are most campus programs, and the solution to Walter Perry's concern is most likely to be found there. Ironically, as developments in distance education are found to be successful, they are incorporated into mainstream educational practices, with little memory of their origin (Lars et al., 2023)

The term distributed learning appeared in the educational technology literature in the mid- 1990s, signaling recognition of a concept important for realizing a strategy to construct knowledge from the learner's perspective. Kohnke et al., (2023) define distributed learning as not just a new term to replace the other distance learning. Distributed learning is an instructional model that allows instructor, students, and content to be located in different, no centralized locations so that instruction and learning occur independent of time and place (Experts, 2020), (HUB, 2021). The distributed model can be used in combination with traditional classroom-based courses, with traditional distance learning courses, or it can be used to create wholly virtual classrooms.

This concept of distributed learning, embedded in the theory though often not in the practice of distance learning, goes beyond delivery of instruction and embraces the context of the learner. Within this expanded conception of the learning environment, learners have access to content, experts, peers, and services that can be used to fit the learning styles and needs of individuals (Medicine et al., 2020).

A framework for revising the design of Learning and learning structures resides in a distributed resources environment. In this setting, teaching and learning are no longer within the purview of autonomous teachers designing instructional environments to which passive learners arrive (Wareing, 2024). Instead, learning resources are jointly identified by learners and teachers and assembled in a variety of formats the teachers become the facilitators of knowledge construction. Learners gain a greater degree of control over how, what, when and, where their learning occurs. Faculty gain greater flexibility and a wider range of resources with which to organize environments that maximize learning opportunities. Institutions benefit from effective, coordinated, and accessible resources for learning opportunities across the organization. Sewart et al., (2020) and Badran et al., (2023a) identified the potential for moving from "educational atomism" to a structure where learning environments and experiences are organized by methods that work better for student learning and success" and noted that they expected 'even these to be redesigned continually and to evolve over time.

Technology, as an enabler of distributed resources, furthers the practice of a systems approach requiring integration across the organization to maximize new capabilities. For example, learning management systems integrate functions and services students need to achieve success (Cantor & Osher, 2021), (Badran et al., 2023b) asserts that, access to courses, learning materials, and instructors; advising and tutorial assistance; library resources; and interactions with other learners.

Yet universities have been slow to recognize the advantages of rethinking their mission in light of the learning paradigm, as pointed out by (Bergmann, 2022) and have been even slower to embrace a systems approach to all their endeavors. Rather than starting at the institutional level with holistic restructuring. Most imitations have instead continued the "craft" approach to teaching and learning:

They think that by moving cameras, computers, and microphones into the classrooms, schools, universities, and training departments, they can increase enrollments, provide new curricula, and save money without doing anything else (Paraskeva, 2023). According to this view, once the technology is in place, there is little else to be done except let teachers get on with practicing their craft as they have always done.

At the broadest level, an institution must undertake the redesign of basic access. Every aspect of communication must be seen as part of an integrated web, from a learner's first inquiry through each process designed to help the learner achieve her or his learning goals and from the design and delivery of a single course through the

interdependence of all courses within the curriculum (Resources, 2020), (Resources, 2021) and (Resources, 2022).

Technology facilitates multidirectional communication, and the hypermedia environment of simultaneous information resources brings benefits of interconnectivity and versatility to the institution all the way through to each individual learner. More fundamental to the success of these systems, though, are the underlying philosophies, policies, and practices of the institution (Nadia et al., 2024). Recognition and acceptance that anything that happens in one part of the system affects the other parts is a necessary first step. Also needed is to form mechanisms to network management functions so that development and operation of each "unit" requires a connection with every other unit (III, 2024). In practice, functional teams of department managers approach consensus-driven decision-making, leaving behind the individual unit autonomy model currently in place in most institutions. For this to occur, commitment to the recruitment and continuous development of personnel possessing the attitude and skills required for collaborative management must be clearly visible in the mission and vision of the institution. The development of policy and the procedure building process is not easily accomplished, and dedication, persistence, and practice are required (Biyani et al., 2022). Some of the necessary changes at the institutional level include revised admission and registration procedures, intention programs for students and personnel, and special support services for learners and instructors utilizing distributed resources. Technology can be seen as a catalyst for this fundamental philosophical shift because electronic networking requires human networking (Liu et al., 2022). Emerging technologies, including distributed learning management systems, portals that connect a variety of resources under one user-friendly gateway, and electronic databases that store and merge information resources, are capable of providing the infrastructure for the redesign and integration necessary. Beginning with the learner

A systems approach to instructional design enables the building of a learning environment consistent with the new learning paradigm adumbrated by Freire, Moore, Chickeling, Gamson, and many others. This type of environment offers the following Learnercenteredness within a context familiar to the learner. Individual construction of knowledge directed toward goals important to the learner (UNESCO, 2020).

Contextual or experiential learning characterized by authentic interactions within the learning context or community. These qualities, which are necessarily interrelated, provide an integrated and supportive learning environment that begins by validating what the learner knows and enables her or him progressively to broaden the reach of the known to encompass goals (Naebeck, 2023). The identified ended perhaps modified in the course of the learning journey. None of the strategies discussed here are particularly new, and several have been employed by existing institutions for many years. However, the systems approach, facilitated by educational technologies, permits the practice of these approaches in ways that are effective for nontraditional as well as traditional learners and their institutions. Components may include these:

Recognition of the learner's familiar community, perhaps established through study of self, context, and learning (Bringle et al., 2023). A senior mentor, guide, or learning companion to provide consistency and support throughout a student's program. Orientation programs that bridge past and future learning by identifying strengths and skill needs for future learning success. These programs can provide opportunities for building virtual learning communities, engaging in metacognitive activities, and establishing a learning identity (Miller, 2021).

Assessment of prior learning, validating past learning and linking it to future goals. This is particularly valuable for adult learners. Constructivist course designs within a dynamic curriculum that uses experiential activities within the learners' real-life context when possible (Kelley, 2023). Examples include community-based learning such as service learning activities.

A web of support components navigated with a mentor's help. The web might include advisors, instructors, supplemental instruction and online tutorial resources, community resources, peer tutors, and special interest groups. A systems-grounded learning design approach holds the promise of not only integrating previously disconnected structures but also mass customizing learning environments, giving every student the opportunity to achieve success and adding to the institution's ability to increase learning productivity. Learning design strategies, when aggregated and approached from a holistic perspective, can accomplish the goal of constructing knowledge learner by learner, regardless of whether the learners are served at a distance or through a campus-based curriculum (Kelley, 2023). Combining and approaching design strategies holistically is critical for many nontraditional learners:

If nontraditional students are to be adequately prepared for academic success- then there must be substantial transformations in their very conceptions of education and in their sense of themselves as learners. Settings must be constructed to help nontraditional students experience education as something more than simply memorization and recitation. Put another way, they must be initiated into the intellectual community and enticed to participate in its practices (Ellerbrock et al., 2022) and (Bates, 2023)

The teachers or Tutors abilities of "intellectual communities" or "learning communities" to provide a supportive educational environment for learning has been documented and celebrated widely. Yet the terms used describe the students of whom we speak minimal, undersigned, or at risk convey the sense that they lack full membership in the academic community (B. Walker, 2021) and (C. Walker et al., 2022). Insofar as a feeling of membership is critical to full and effective engagement in the learning enterprise, programs and institutions can provide orientation and entry programs incorporating met a cognitive activity that benefit all students, not simply those for whom college. Learning autobiographies, for instance, have proven an effective means for exploring identity, learning styles, and one's relationship to the learning environment (Kawai et al., 2024). When these are shared in online peer learning group, learners reflect on their own and other learning approaches in ways that encourage experimentation and a more assured sense of self

Done at a distance in asynchronous discussions. Sharing learning autobiographies can provide opportunities for inquiry that is often award in face-to-face settings. These explorations of self and context enable learners to "place" themselves in relation to learning and to find a distinctive "voice" in the learning community, explaining to themselves how they have come to higher learning-through what struggles and toward what goals (Bodie et al., 2023), (Ott, 2024) and (Mayot, 2024)

Their goals frequently are powerfully personal rather than pre- dominantly academic and often provide learners with the motivation they need to continue their studies. Instructional design for distributed learning starts from the perspective of the learner's needs (Bolton et al., 2024). This does not mean that individual needs assessments are conducted for every student but that the design is based on principles grounded in learning theory and is directed toward creating settings where learners with varying abilities, experiences, and levels of motivation and self-directedness can each achieve success. Active learning strategies and cooperative, situational, social, and problem-based learning models are integrated to form a learning process that allows learners to gather and analyze information, react on previous understandings, and interact with others to synthesize new constructions of meaning and knowledge (Badran et al., 2023a).

Because the distributed learning model supports multiple approaches, it allows teachers to develop courses that match teaching strategies with an individual student's readiness for learning. The less self-directed learner has the organizational structure, subject matter focus, performance objectives, materials, activities, and opportunity for feedback he or she needs to be successful. The more self-directed learner has the resources to pursue learning goals more independently while still having the ability to interact with the instructor and the other learners (Bolton et al., 2024)

An individual's learning identity provides the foundation for the construction of knowledge accomplished within a context familiar to and directed toward goals identified by the learner. Subsequent studies can take best advantage of this foundation by employing a constructivist approach, enabling each learner progressively to build toward his or her goals as they align with those of the educational program. As Jonassen et al. (1995) reminded us, "Learning environments are constructivist only if they allow individuals or groups of individuals to make their own meaning for what they experience rather than requiring them to 'learn' the teacher's interpretation of that experience or content" (Badran et al., 2023a)

The curriculum in this system, then, rather than a set of disciplinary givens, is dynamic, recognized as the ongoing pursuit of truth. Truth itself is a moving target, subject to the changing membership and perspectives of the knowing community. For example, culture, gender, and socioeconomic status each act as a prism through which truth is refracted. In the diverse populations served by distributed and distance learning, it becomes appropriate to "teach at the boundaries," to draw out and study perspectival differences. Confronting these borders and their possible permeability enables learners to engage subject, self, and other in a powerful heuristic (Berg, 2021).

The mediating role of the curriculum, and thus its effectiveness with diverse students, can itself be enhanced by rendering it more explicitly dynamic; that is, by recognizing and beginning with the contingencies of the individual student as well as the ultimate indeterminacy of the field of study. By conceptualizing Curriculum as process, rather than as a predetermined course of study, one can successfully acknowledge the contingencies and idiosyncrasies of the student, the field of study and their intersections (Patterson et al., 2023)

The role of faculty in the distributed learning setting is central, as suggested (Akbar et al., 2023). They act as designers of learning methods and environments" and facilitators of interaction to "develop every student's competencies and talents. Barr and Tagg's paradigm, deeply rooted in constructivist pedagogy, emphasizes the active engagement of learners in ways respectful of their individual needs and contexts. Much in alignment with this distance learning noted that this constructivist approach "engages learners in knowledge construction through collaborative activities that embed learning in a meaningful context and through reflection on what has been learned through conversation with other learners (Ford & Smith, 2020)

They also stated that "knowledge is a function of how the individual creates meaning from his or her experiences ...Constructivists engage the learners so that the knowledge they construct is not inert, but rather usable in new and different situations (Berg, 2021). Therefore, an important emphasis of constructivist beliefs about learning is the need for embedding learning in real- world situations in which learners function as part of a community of practitioners helping to solve real-world problems. The distributed framework supports this by focusing away from the classroom toward a larger context incorporating the personal and professional setting of the learner (Lewis & Novak, 2022). An important implication is that the role of the designer shifts from creating prescriptive learning situations to developing environments that engage learners and require them to construct the knowledge that is most meaningful to them.

A systems perspective on instructional design for distributed learning also gives emphasis to a need to restructure the role of faculty in the development of courses and programs. It is not realistic for a single teacher to design, develop, and teach effective distributed learning courses, and conventional structures in colleges and universities have not supported the advancement of collaborative distributed learning development (Badran et al., 2023b). Individual innovators have taken on the task of experimenting with the use of distributed resources in their courses, usually without the assistance of instructional designers and multimedia specialists and without an institutional commitment to support their efforts. Examples abound of faculty frustration and burnout from attempts to move forward without the institutional support required (Edensor, 2020)

Yet, these independent efforts have achieved considerable success in providing settings where learners gain greater control and responsibility for constructing knowledge (Choudhury, 2024). Institutional strategies that treat learning and curriculum design as a holistic process, involving functional teams that pair faculty with other professionals knowledgeable and skilled in learning theory. Instructional design methodology, and communication and delivery technologies, holds far greater promise than the traditional "craft" approach, in which independent courses are designed and taught by individual instructors (McConnell et al., 2020).

Beyond the creation of course "learning environments," another role emerging for faculty and for advanced students as well is that of mentor to individual students. Typically, a mentor "converses" with a student throughout her or his studies to provide continuity of advice and information based on knowledge of the student's learning background and goals (Bodie et al., 2023). The mentor may first connect with the student when acting as the student's guide during orientation or degree-planning work, being sensitive both to the requirements of the academic program and to the student's needs in negotiating that program. Later, the mentor can provide counsel and assist the student in accessing resources, whether personal or academic, and even occasionally act as an advocate (Ott, 2024). The mentor, for example, might recognize the need for additional work in writing, math, or critical thinking and direct the student to appropriate resources. Many off-campus and distance students are unaware of virtual writing labs or the wealth of online tutorials and supplemental instruction opportunities in a range of skill areas (Badran et al., 2023a). Because they are online, they provide a comforting anonymity and can be used repeatedly with no negative consequence. An attentive mentor, then, can often make the critical difference to a student's learning success.

Conclusion

Distance and distributed learning emerged in response to a convergence of need and possibility. Its modern origins can readily be traced to the social, intellectual, and technological changes wrought by the Industrial Revolution. Its subsequent evolution encompasses changes not only in learning needs and (mostly communication) technologies but in processes and applications as well. The "business" of technology, the product life cycles of Moore's law, and the attendant systems processes extends inevitably to the fields that employ them. Thus, we have seen the introduction of concerns about productivity and return on investment. There is now a real "business" of education.

For the most part, new pedagogical approaches have revitalized interest in teaching and learning, but the need to demonstrate shortterm results (the business world measures success in terms of quarterly profits) has blunted the initial driving purpose of distance learning- to provide access. In spite of this, the systems thinking of the business world can be and is being merged with the results of a large body of research that tells us how people learn and how they can best be supported-a marriage that can serve those hitherto effectively excluded from mainstream society. Distance and distributed learning programs, learner and learning centered by definition, are in a particularly strong position to employ the new pedagogical approaches) effectively. Undoubtedly, distance learning is liable to the distraction's attendant on its technological tools and business affiliations. But well used, these are resources that will enable us to increase access to learning in ways that will allow all students, especially those formerly excluded, to be truly successful.

Recommendation

This article recommends that, big resources which researchers have not yet exploited to explain different reasons for declining levels of distance learning education in Uganda. Uganda as a country should try as much as possible to popularize distance learning due to its competitive advantages of the students and their places of work for quality service delivery. These include general public including teaching, researching and community engagement in facilitating academicians distance learning process.

Distance learning also should entail interactive blended session be carried out on webinar platform to compliment modules provided to the students since it is easily available free learning environment from traditional teaching approaches.

This article further for accommodates diverse schedules of students' interaction and learning styles, maximizing participation and understanding. This synergy will enhance generating a lot of knowledge researching for the materials in order to improve on the distance learning practices.

The article recommends for more utilizing the technology tools to aid distance learning like discussion boards, quizzes, and collaborative platforms is required to strengthen e-learning model to compliment distance learning process whereby facilitators engage the students for maternal education control. However, that engagement and controlling has other limiting factors like household socio-economic status, rural urban residence that may affect the effectiveness of distance learning to be carried in certain areas in Uganda.

Another area the article recommends is continuous support of distance learners using distance learning model through virtual office hours, chat, or email, ensuring students stay connected with the instructor and receive the help they need performance of students living with their biological mothers controlling for maternal education with those not living with their biological mothers.

This article nevertheless recommends incorporating multimedia such as videos, animations, and gasification increases engagement and helps reinforce learning and demonstration of great importance of distance learning education, the government through either the Ministry of Education and Sports or Ministry of Gender Labour and Socio Welfare should resume adult studies that used to take place in the 1970s to reinforce lifelong learning skills. However, these adult studies should target the use of technology to help teachers and students as well in this mission. It can cover basics like creating and having an email, how to use online platform and so on in order to improve on distance learning process in Uganda.

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