

# **Insights from student views on employability-entrepreneurship-enhancing strategies: a case study of a Uganda-based university**

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## **Abstract**

The study explores the views of engineering and health sciences students at a leading African university on how strategies aimed at ensuring their employability and entrepreneurship on graduation can be improved. In light of high unemployment rates among university graduates and the youth generally in the country hosting the study and in other African countries, the findings contribute to evidence-based insights regarding this grand challenge. A mixed methods approach is used to gather and analyse the relevant data. The students paint a picture of a situation that needs urgent intervention going forward in order to drastically improve the strategic approaches to making students more employable and/or entrepreneurially agile. The skills that the students identified as critical to them largely mirror what engineering and health science students in other developing countries have suggested. This therefore suggests an emerging global view on the issue and strengthens the confidence in the utility of the findings to inform the design of a robust employability-entrepreneurship framework. The framework can further feed into and be informed by the business sustainability strategies of employing organisations.

## Introduction

In light of the scale of unemployment among university graduates and the youth generally in many African countries, it would not be an exaggeration to talk of one of the deepest crises that tertiary institutions and their support organisations have been facing on the continent in the last decade. Some examples of countries with major unemployment challenges include Cameroon, Kenya, Nigeria, Uganda, and South Africa (e.g., British Council, 2016; Njapteh, 2021; Appel, 2022). It would be further accurate to suggest that not only does the situation translate into major immediate challenges for the students and their parents or guardians who must deal with the frustrations and multiple implications of not reaping the benefits of the hard work and sacrifice invested during the years of study. The situation is also a ticking time bomb for social unrest given the number of unemployed (and underemployed) graduates that is growing each year. To compound the situation, the continent has the fastest rate of population growth globally and is projected to host 25% of the global population by 2050 (Paice, 2022). It also has the youngest population, translating into an almost insatiable hunger by the youth for an education that can give them a strong footing in life (e.g., Ausubel, 2020).

On the positive side, the economies on the continent are some of the fastest growing globally (AfDB, 2023). As an example, the continent's pre-Covid-19 top five performing economies are projected to grow by more than 5.5% on average in 2023-2024 and to reclaim their position among the world's 10 fastest-growing economies. These countries are Rwanda (7.9%), Côte d'Ivoire (7.1%), Benin (6.4%), Ethiopia (6.0%), and Tanzania (5.6%). But this economic growth has nevertheless not been enough to absorb the thousands of graduates that campuses and other tertiary institutions are churning out in colourful graduation ceremonies every year. Governments and universities in the region are therefore facing an unprecedented double challenge: on the one hand, they need to urgently improve the rate at which these graduates are absorbed in working life by, not least, working with current employers to inform labour policy improvements; on the other hand, they have to look beyond the rim of the plate and identify new ways of creating modern and sustainable work and enterprise opportunities for the new generation of educated workers. This calls for the development of innovative strategies that will enable governments and universities to get ahead of the problem. In a reflection of the scale of the problem, one participant in the study that informed this paper chuckled when they were asked about the extent to which the government was being supportive in helping the graduates to find gainful and sustainable employment. It would appear that expectations for effective government interventions are generally low.

Informed by the magnitude of this challenge, the paper examines the situation at a leading university in East Africa. It gathers views from some students at the institution in order to generate an evidence-based understanding of their perceptions on employability and entrepreneurship after graduation. The evidence provides a first-hand view of how the main victims of the crisis are managing their fears and their hopes and how they see the university and other stakeholders on the employability and entrepreneurship value chain getting their act together. Analysing all this will translate into a student-oriented view of employability and entrepreneurship. Consequently, it would need to be complemented with the views of employers, policy makers and other key stakeholders as part of developing a multi-stakeholder perspective (e.g., Wait and Covender, 2016; Olo et al., 2020). The student perspective is however the starting point in helping them to co-own and co-develop an employability and entrepreneurship framework that can translate into a more dynamic and effective use of the years at campus. This would in turn be expected to translate into a seamless transition into working and/or entrepreneurial life. A growing occurrence of such high-quality transitions would also be expected to impact positively on strategies of affected employers to strengthen their business sustainability by tapping into the young talent pool.

The development of a research instrument for the study was guided by the following overall research question: *To what extent can an employability-entrepreneurship framework support students to prepare more strongly for employment and/or entrepreneurial initiatives after graduation?*

## **Theory background**

In this section, a theoretical background to the study is provided. Two major interpretations of employability have emerged during the past decade: aspects that can be measured through available information versus aspects that are so embedded in the complex pedagogy of HE institutions that they may not be easily accessible (e.g., Pegg et al., 2012). Within these broad theoretic interpretations, human capital theory, e.g., Kim et al., 2015, Marginson, 2019; social cognitive career theory, e.g., Qenani et al., 2014, Lent et al., 2002; and career construction theory, e.g., De Guzman and Choi, 2013, Rudolph et al., 2019 have established themselves as the most influential perspectives at a finer grained level.

Other work has attempted to place employability skills (e.g., Harvey, 2001) in the context of bipolar conceptualisations of skills (specific versus generic skills, e.g., Green et al., 2009; soft versus hard skills, e.g., Andrews and Higson, 2008; cross-curricular skills, e.g., Bridges, 1993). A limitation of most of this work is that it has mainly drawn on highly institutionalised and economically advanced market contexts. The fast-changing, high-growth and often uncertainty-laden dynamics in new frontiers have in contrast not been given enough consideration, thus missing the opportunity to make strategic recommendations that can make sense of the unique market circumstances and ensure business sustainability. We therefore have a research gap here that has become even more urgent given high unemployment rates in these countries on the back of explosions in population growth and fast-growing demand for higher education (British Council, 2020).

Yorke (2006, p.8) has defined employability as a set of achievements – skills, understanding and personal attributes – that make graduates more likely to gain employment and be successful in their chosen occupation. In recent times, there has been a concern about the skills level of fresh graduates given the tendency by universities to prioritise subject-specific knowledge and good grades rather than the acquisition of more robust employability skills (e.g., Bhora et al., 2017; Kalec, 2016; McCowan, 2015). Other research has observed that there are hardly any programmes that foster job mobility, internationalisation, or entrepreneurship of graduates (e.g., Guardia et al., 2021). That last aspect of entrepreneurship would be particularly imperative as it would contribute to informing the integration of employability and entrepreneurship strategies, with important implications for the situation in new frontiers like those on the African continent (e.g., Rae, 2007).

Increasingly, micro-credentials and e-portfolio have emerged as a practical way to present graduates' skills to potential employers (e.g., Guardia et al., 2018; Maina et al., 2022). These scholars have also highlighted the growing importance of digital skills in empowering the education community, creating new learning and employability opportunities, promoting social inclusion and reducing the gender gap. These views have been enhanced in the aftermath of the Covid-19 pandemic where the risk of further excluding or disadvantaging thousands of students with low access to online resources, especially in developing countries, has dramatically increased (e.g., Chisadza et al., 2021; Tsolou et al., 2021).

In other research, Khalid & Qazi (2015) have examined the challenges and potential of teaching engineering students in developing countries using new trends and technologies. They have noted the emphasis on knowledge acquisition rather than creation, yet the latter would be the more relevant option in light of global trends and the need to support locally-oriented innovation, promote sustainable entrepreneurship and drive job creation. A study in Togo has explored perceived employability and entrepreneurial intentions across university students and job seekers (Atitsogbe et al., 2019). The study

established that career adaptability and general self-efficacy are positively related to self-perceived employability. There is also an observation that the contribution of career adaptability is particularly strong. In light of the rate of change in African economies, such adaptability is critical to success on the job market. Weinberg et al., (2018) further established interdependent relationships between engineering and professional skills that enabled engineering graduates to attain employment. These scholars and Maton (2014) have further deployed a social realist framework to understand the relevance of social dimensions to employability. A gap here would be on the corresponding dimensions from an entrepreneurship perspective and the implications of an integrated framework for these dimensions. Shane and Venkataraman (2000) have further observed that the lack of such a conceptual framework limits the scope for predicting phenomena associated with entrepreneurship. Clark and Harrison (2019) propose that a multi-perspective conceptualisation would be needed. Complicating things further, there is no universally accepted definition of entrepreneurship (e.g., Carlsson et al., 2013; Shane and Venkataraman, *op cit*). But Venkataraman (2019) has suggested that it may in fact not be possible to come to a unified position on the definition, given disparate viewpoints.

Nudelman (2020), basing on findings in South Africa, identifies a ‘hidden’ curriculum underneath the official curriculum in employability skills development courses. Such hidden agendas represent vested interests that exceed the official aim of openly helping to widen skills development. According to this scholar, current curricula are consequently not equipping graduates to contest or challenge existing practices – in effect, graduates are not equipped to develop criticality. A possible explanation is the clash of expectations of accreditation regimes with rigorous employability skills development initiatives. Implicitly, this suggests a need to align across different stakeholder expectations.

At a more qualitative level, Mtawa et al. (2019) suggest that a service learning approach would be more effective in enhancing graduate employability attributes. Walker and Fongros (2017) have taken this idea further and proposed a Community Service Learning (CSL) approach that would ultimately address both employability requirements and social/personal development. Central to effective CSL is an adequate engagement with experiential learning and formative elements. Butin (2010) further suggests a deeply social transformative process as the more appropriate route in seeking to more effectively progress approaches like CSL.

Phoko and Molefhe (2017) went a step further and proposed 14 key skills that should form the core of a dynamic employability framework – literacy, communication, enthusiasm, commitment, numeracy, time keeping, personal presentation, team working, IT, customer care, problem solving, vocational job-specific skills, advanced job-specific skills, business awareness and enterprising skills. Other work has however criticised the overemphasis on skills and qualifications at the cost of non-measurable values of education (e.g., McCowan, 2015; Powell & McGatz, 2014). In essence, this means that there would be need for a wider conceptualisation of employability and its associated skills and a strategically contextualised curriculum and pedagogy. Steur et al. (2012) have further expanded the interpretation of employability to inculcate the wider notion of ‘graduateness’. This wider notion is consequently reflected in four domains – reflective thinking, scholarship, moral citizenship and life-long learning. Arguably, the first domain – reflective thinking, underpins the other three. Similar to the studies above, the studies here were almost exclusively concerned with employability and hardly with entrepreneurship, let alone an aligned perspective.

We contribute to extant literatures by filling the gap on studies that address new frontiers generally and which use empirical evidence to develop employability frameworks that are integrated with entrepreneurship dimensions. This would not only support graduates in finding gainful employment and/or engaging in successful entrepreneurship, it would also assist the employing organisations to consolidate their strategic business sustainability capabilities. Given the importance of such integrated approaches for new frontiers as part of fast-tracked development dynamics, whatever can contribute to strengthening the approaches is of strategic importance to these countries.

## Methodology

In this section, the methodological decisions that informed the study are presented. A mixed methods approach was deployed, benefiting from its strengths in triangulating data collection and analysis methods to compensate for the limitations of individual methods (Greene, Kreider and Mayer, 2005; Creswell et al., 2006). The initial phase of data collection used qualitative methods to extract in-depth insights about the context of the study, focusing on five colleges (education, business science and management, agriculture, health sciences and technology and engineering) at Makerere University in Uganda. Focus group discussions (FGDs) proved to be an especially efficient data gathering method and were hence deployed as the main qualitative method. Their advantages in supporting the collection of extensive and rich data using relatively limited resources were drawn upon. Other support methods for data collection were semi-structured interviews and archival materials.

Considerations that informed the development of the catalogue of discussion issues included the implications of the case institution being at an early stage of developing and using employability frameworks, the high unemployment rate among its graduates, the tendency of graduates to initiate various forms of start-up rather than staying unemployed and the growing phenomenon of going for ‘kyeyo’ (e.g., Monitor, 2021).<sup>1</sup> By using one institution in Africa at this stage, this enables the utilisation of in-depth approaches to understand a single case in a way that makes it easier to understand other cases later. Such cases include other institutions in the same country prior to reaching out to other countries in the region. Case study is a common method in qualitative research and has the advantage of relating with the real world and clarifying the boundaries of the entity under study (e.g., Eisenhardt, 1989). The potential to provide rich, in-depth insights is one of its strongest advantages. Thematic analysis was applied to the transcripts resulting from the FGDs leading to a coding process that paved the way to theorisation. The qualitative findings informed and consequently paved the way for the design and administration of a survey instrument to a larger body of students, thus making it possible to generalise the findings for this institution. The project was carried out between January and July 2022.

## Findings

The transcripts from the FGDs were thematically analysed to identify the most common skills that were suggested by the participants. These skills were: Communication and networking, creativity and innovation, soft skills, flexibility and adaptability, ICT, critical thinking, team working, multitasking, Emotional intelligence, negotiating skills, management skills, accounting skills and marketing skills. Other important aspects that emerged from the thematic analysis included: creating university-wide communities of practice, institutional facilitation and enablement, broader capacity building at various levels, linkage to staff assessment and appraisal, training to adapt to C-19 demands, communication skills and embedding in curriculum development. These skills and wider aspects were expanded by those identified in extant literatures to inform the development of the survey instrument.

The survey was administered to students at Makerere University’s College of Engineering, Design, Art and Technology (CEDAT) and the College of Health Sciences (CHS) using *Google Doc*. A total of 273 responses was recorded (53% CHS; 47% CEDAT). In addition to multiple choice format questions, respondents had an opportunity to provide wider responses to key questions using a free-style space in the instrument. This enabled the study team to capture important views that deepened the understanding

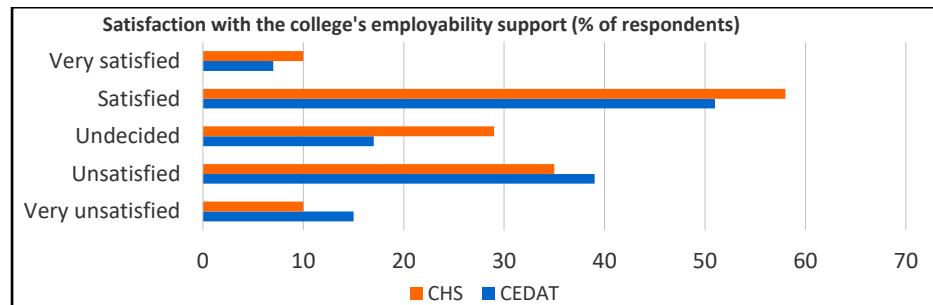
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<sup>1</sup> A local name for low-skilled jobs abroad which can provide the savings for start-up investments back home for a better life – while Europe and North America were the main destinations in the past, the Middle East has been a big attraction in recent times.

of the thinking of students about their employability and entrepreneurship. The key findings are summarised below.

### Perceptions of support from the colleges

In this subsection, we present an overview of the satisfaction of the students with the employability support from their respective colleges.



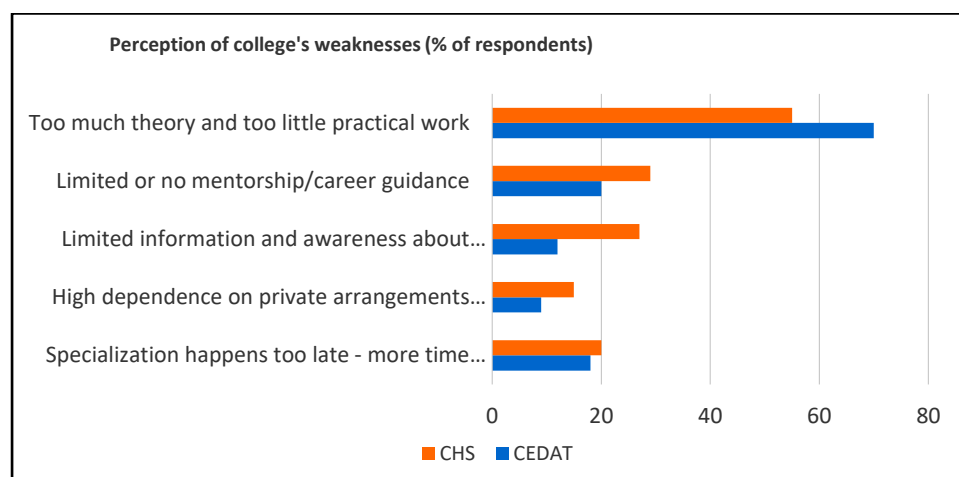
**Figure 1:** Satisfaction with support from the college

CEDAT students were significantly less satisfied than CHS students with how their college was supporting them to become more employable. This could reflect structural challenges in the economy by which absorbing engineering students after graduation is traditionally harder than for the health sciences in developing countries like Uganda. It also reflects a persistent challenge of developing a curriculum that is emphatically locally oriented and reflects the valid dynamics of development rather than sustaining priorities laid down during colonial times (e.g., Khalid and Qazi, 2015).

Under normal circumstances, these responses should ring alarm bells for any university and government and should translate into urgent action to improve the situation. It would however be important to explore historical data and assess whether in fact there has been a relative improvement, despite the generally poor current picture. Further, it would be important to understand what measures the university and the government are taking to improve the employability of these students. All this suggests a need for a longitudinal study to track developments, something that the project team will consider as part of the wider sustainability of impact of the findings (e.g., White and Arzi, 2005).

### Perception of the most important weaknesses of the colleges

This subsection presents the perceptions of the most important weaknesses by the students.



**Figure 2:** Perception of weaknesses

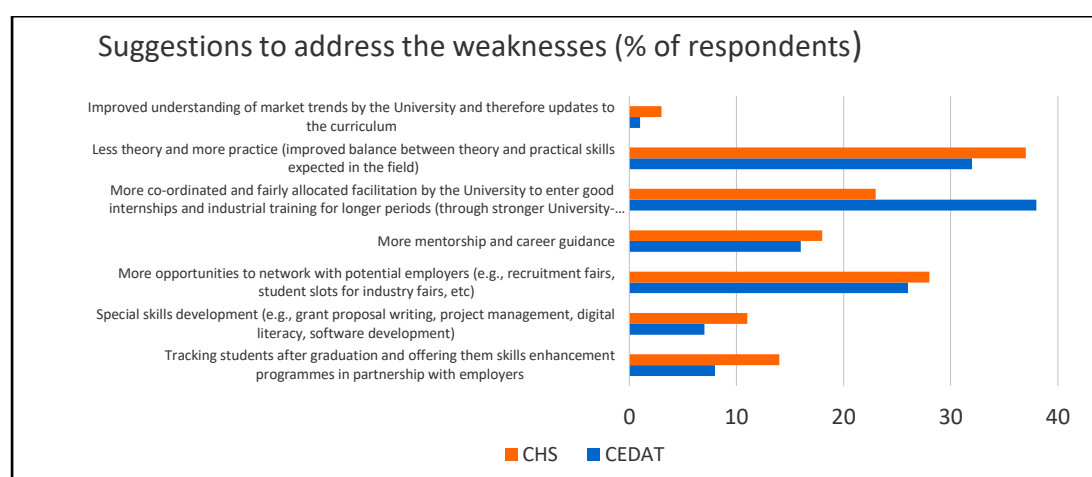
The high perception of a poor balance between theory and practice by both groups in the study effectively echoes the earlier finding and the observation about a curriculum needing major change. Not surprisingly, the CEDAT students were strongest with this view given the limited opportunities they have for internship, apprenticeship and other practice-based programmes where theory can be brought to life. An employability framework that aims to make a significant difference would have to include a strategy that helps fill this important gap. This could include a strategic shift in the curriculum from problem-based learning to practice-based education (Mann, Chang, Chandrasekaran, et al., 2021). It would also necessitate exploring possibilities for closer partnerships between the university and potential employers, thus opening up possibilities for the two sides to share their needs and align their expectations (e.g., Damoc, 2017; Rybnicek & Königsgruber, 2019).

In a previous study, Chandrasekaran et al. (2013) also studied issues surrounding a project-oriented design-based learning (PODBL) approach and came up with conclusions that reflected much of what the students in our study were saying about potential solutions to the challenges. This earlier study concluded, for example, that the prospects for acquiring skills like collaboration, critical thinking, creativity, innovation, and problem solving were critical in motivating engineering students. Any engineering college would therefore be well advised to carefully study how an environment that nurtures such skills can be created and sustained.

The respondents however also named other factors that will need to be carefully addressed and integrated in a robust framework. As an example, not compiling and presenting coherent and solid information to the students about what to really expect on the job market (and hence how to properly prepare) looks like a major oversight in the system. It is something that can be relatively easily addressed, however. Our proposed framework makes some pilot experiences with addressing the issue. While it would be expected that the students need to be in a position to research the market themselves, they also have many limitations in doing the right research and coming to the suitable conclusions. There is also a need to develop strategies to consistently assist and sensitise them to a diverse range of issues as well as practically offering them opportunities to fill the gaps.

## Addressing the weaknesses

This latest subsection captures the suggestions of the students about how to address the weaknesses



**Figure 3:** Suggestions to address the weaknesses

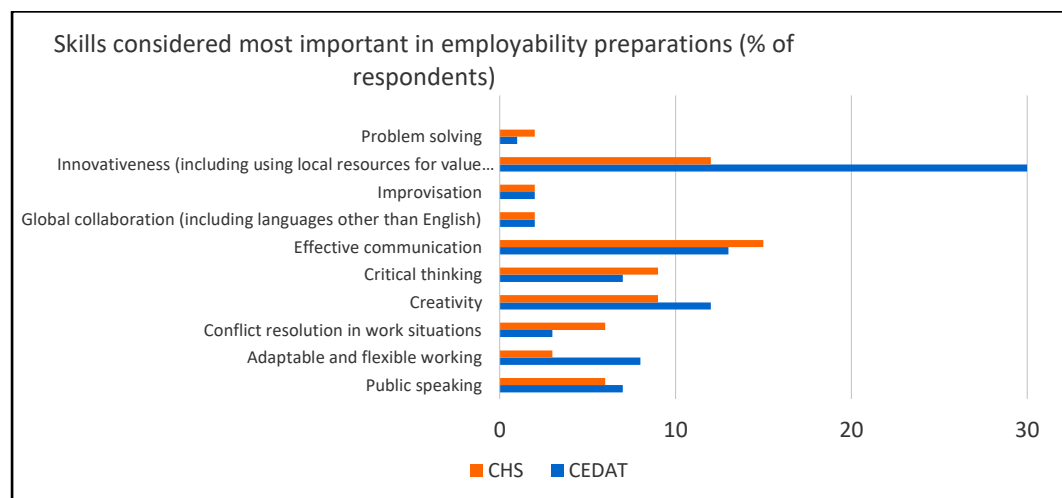
The proposed solutions to the weaknesses naturally reflected what had been previously advanced as weaknesses. As an example (second row in Figure 3), the strongest view was that a better balance between theory and practice needed to be attained. This not only emerged in the structured part of the

questionnaire, but it was also evident in the part where respondents could provide free-style answers – it was the issue that was named most times in this latter section.

There was further a recognition of the need for better support from the university to find a fitting internship and/or industrial training as well as opportunities to network with potential employers. In light of the relatively few opportunities available for high quality internships in a relatively small economy like Uganda, the need for co-ordination and planning to make the best use of these limited opportunities becomes even more important.

### Most important skills in preparing for employability

This subsection presents one of the most important findings of the study, i.e., what the students recognised as the most important skills for employability.



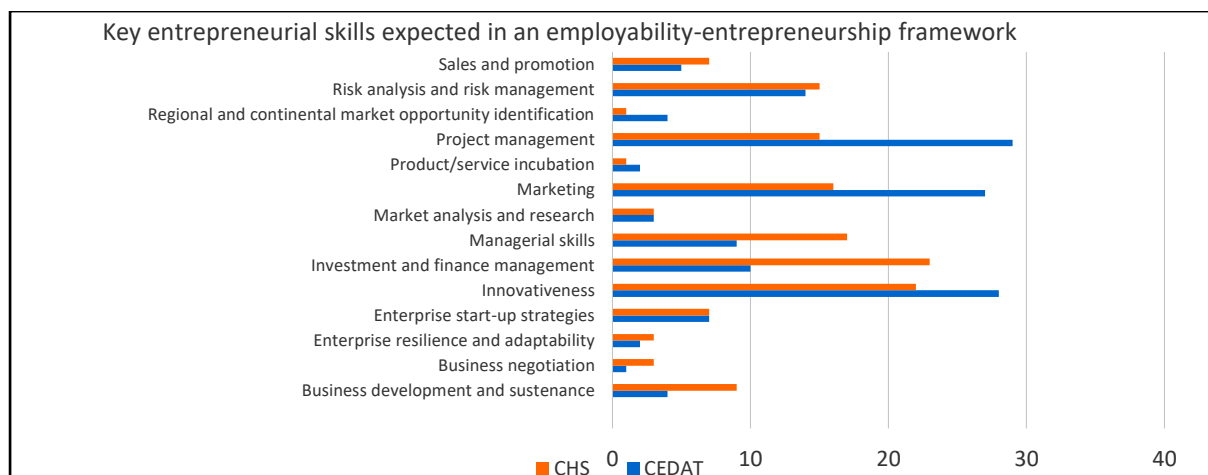
**Figure 4:** Skills considered most important in preparing for employability

As evident in Figure 4 above, innovativeness, effective communication, creativity and critical thinking stood out as the most important skills that students felt needed to be cultivated. This is a highly informed selection and points to a good understanding of trends in the economy and the pressures on firms and other organisations to be competitive through innovativeness and creativity. It was also noteworthy that CEDAT students were significantly more convinced of the importance of innovativeness than CHS students. Structural and historical differences between the two professions and the demand on innovativeness emanating from the market could be deduced from these outcomes.

The next phase of the project that will study the views of employers will be important in developing a common understanding of the most important skills that support employability and which therefore need to receive focused attention during the years at university.

### Perception of key entrepreneurship skills that need to be integrated in the employability-entrepreneurship framework

In this subsection, we explore the possibilities and the implications of integrating entrepreneurship in the employability-entrepreneurship framework, a measure that would constitute a significant departure from contemporary practice.



**Figure 5:** Entrepreneurship skills to integrate in an employability-entrepreneurship framework

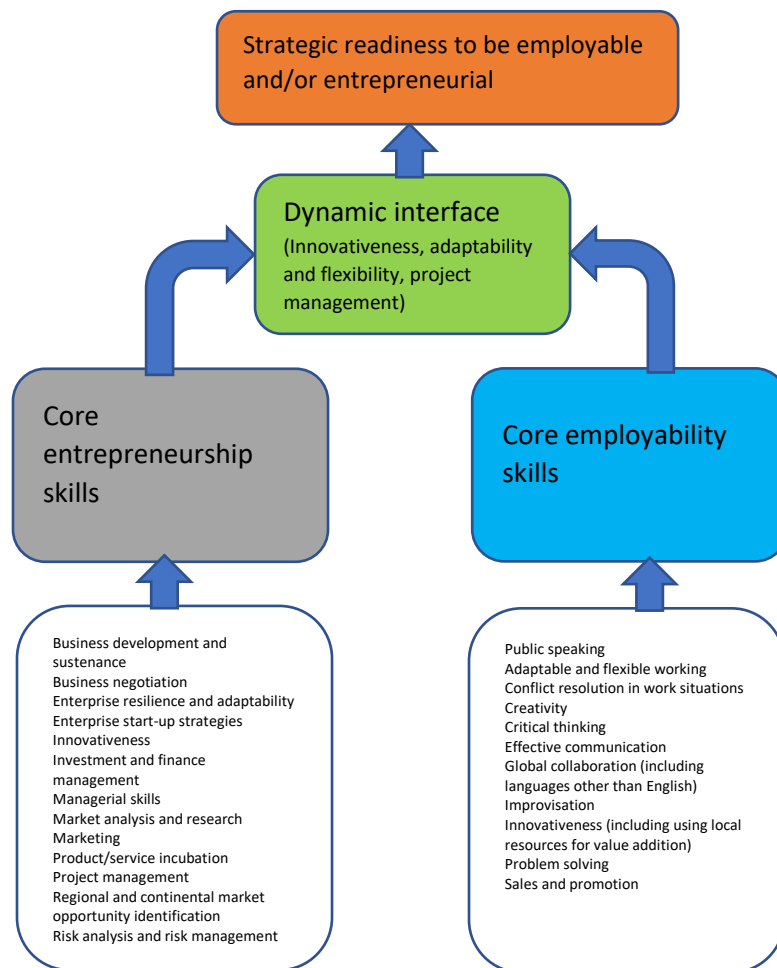
There was a predominant view (85% of respondents – graph not shown here) that entrepreneurship and employability skills needed to be concurrently developed. This points to a now accepted understanding in Uganda and many other developing countries that having a formal job is not enough for an assured livelihood and that there is a need for extended income-generating activities. The situation is also a reflection of the fact that the over 700,000 youth reaching working age in Uganda every year have to compete for a meagre 9,000 new jobs that the market is currently churning out annually (Patton, 2016; World Bank, 2020). The World Bank estimates further that the figure will rise to one million working-age youth entering the market per year in the decade 2030-2040, signalling a worsening of the already existing mismatch between job supply and demand, unless something significant happens to change the situation.

One important result of all this has been the transformation of Uganda into one of the globally most enterprising countries measured on the rate at which new enterprises are started (e.g., Patton *op cit*). While many of these start-ups go on to flourish, the rate of collapse is conversely very high, suggesting major quality and resilience issues. The implication is that developing an integrated framework that concurrently addresses employability and entrepreneurship skills makes strategic sense. It would not only improve the chances of developing the skills that employers are generally looking for, but it would also nurture capabilities to successfully start and sustain enterprises as a strategic alternative to scarce formal jobs for the immediate years after graduation or even longer. The calculus would be that in case of not getting suitable employment, the graduate would have a robust set of entrepreneurial skills to draw on. They would also benefit from the possibility to further engage with a dynamic employability framework that would now have a post-university outreach option.

In light of the above findings, we propose the following employability-entrepreneurship framework (Fig. 6) that is informed by the views of students (and academic staff). One of its most important features is having ‘innovativeness’ as the explicit link between the two aspects of the framework. Such an approach places a multi-dimensional interpretation of innovativeness at the centre of skills development at an HE institution. Further, it facilitates the development of dynamic capabilities that operate in both directions and lead to cross-fertilisation of skills. Such innovativeness also needs to be adapted to local conditions in order to create an enabling environment for the development of skills that are capable of fundamentally and sustainably addressing local development challenges. As an example, it would be important to comprehensively examine the needs of the university colleges used in this study to make sure that the skills being nurtured are indeed what the market is looking for and which can sustainably and simultaneously support employability and entrepreneurship. But this also means looking beyond short term needs and attempting to predict what might be needed in future. In other words, part of the

dynamism involves preparing graduates to adequately adapt to changing conditions on the employment and start-up market.

The framework, not least, aligns well with recent studies on the ‘entrepreneurial university’ which is characterised, among other factors, by a high degree of knowledge spill-over between academia, start-ups and industry (e.g., Etzkowitz et al., 2022; Radko et al., 2022). It would in effect contribute to improving the quality of spill-over and acting as a conduit for dynamic capabilities that strengthen business sustainability. Various aspects of the framework are addressed in the discussion section below, especially the last two sub-sections.



**Figure 6:** Employability-Entrepreneurship Framework

More broadly, it would also help improve future versions of the framework if the beneficiaries provided feedback about their experiences. While much of this already happens informally, there is room for a more strategic approach that systematically mobilises, captures and processes diverse feedback, followed by disseminating it efficiently. In other words, a future version of the framework would involve an explicit feedback loop to the three levels, thus improving the quality of outputs.

## Discussion

The subsection now discusses the key findings presented in the previous subsection. It consequently lays the foundation for making conclusions and identifying any limitations in the study.

### Quality of support to students from HE institutions

While the exploratory evidence in this study suggests that substantial work is being done by all key stakeholders, it has not yet reached the critical mass that is needed to initiate a decisive turning point which would be reflected in much higher student satisfaction levels. The next phase of the project will take a closer look at the situation, including the investigation of the evolving needs of employers and emerging possibilities available through entrepreneurship strategies (e.g., Atitsogbe et al., 2019). This latter point of engaging employability and entrepreneurship is so important that it will be discussed at length in a separate sub-section below.

But for both groups in the study, there has historically been a high rate of ‘escape’ into the diaspora to find ‘greener pastures’ as an alternative to the generally low-salaried and unstable local offers (e.g., Adeyemi et al., 2018). The implications in terms of loss of talent that would otherwise have been needed to support development in the country can hardly be accurately computed. The influential *Mo Ibrahim Foundation* estimates that Africa has, for example, lost \$4.6 billion in training costs for home-trained doctors recruited by the four-top destination countries – US, UK, Canada and Australia (Mo Ibrahim, 2018). In other words, the loss is not only in terms of skills that would be urgently needed, but also in terms of significant investments by families and some of the poorest countries in training these professionals.

There is therefore much that needs to happen to improve the prospects for more stable and sustainable employability as part of the proposed employability and entrepreneurship framework. Taking an extensive look at the prospects for staying in the country and how it can be successfully structured would be one angle to take in developing relevant broader skills. Success stories of staying and what can be learnt from them are a potential resource here.

The satisfaction levels observed in the study are a big contrast to those elsewhere, for example one institution where the most recent national survey indicated satisfaction levels in the 80-90% bracket or above on all measures among research students and the third highest satisfaction of any institution in the Black Minority Ethnic (BME) group (Open University, 2022). Given the contextual and historical differences between developing countries and a country like the UK, such comparisons need to be approached with a level of caution, however.

### **Addressing the weaknesses**

The students’ prominent identification of the need for a better balance between theory and practice in their studies is encouraging as it suggests that they recognise how important it is to be able to acquire practical skills to support their employability and entrepreneurship. This willingness needs to be leveraged for the creation of pedagogical strategies that can produce the expected results. But this also offers an opportunity to review the curriculum in such a way that the theory that is taught is more reflective of the realities in practice (e.g., Olagunju et al., 2019; Denoon-Stevens et al., 2020). Further, it is an opportunity to strengthen local content and locally adapted innovativeness in the curriculum (e.g., Sathorar & Geduld, 2018). Such locally-oriented ingredients are critical for finding sustainable solutions to the challenges of employability and entrepreneurship in fast-growing new frontiers.

The students’ perspectives also indicate the need for a dynamic curriculum that enables them to go for internships at different times without affecting their progress with lectures and the coherence of the whole programme (e.g., Mbalyohere et al., 2019). More widely, it is also imperative that universities in developing countries are more creative in making the best use of the few internship and apprenticeship opportunities that are available. As an example, it would be helpful to explore how online-based interactions with employers could be utilised more effectively, whilst recognising the irreplaceability of some face-to-face interactions.

## **Recognising the most important skills for employability and entrepreneurship**

Extant studies corroborate the skills that students in this study (Fig. 6) identified as critical for employability (e.g., Chandrasekaran et al., 2013; Azmi et al., 2018). Given that these other studies were conducted in different geographical, cultural and socio-economic settings, it can be deduced that there is a globally convergent view by students that is emerging, at least in the professions under study. A common understanding of critical skills would be supportive of the readiness for international mobility that the predominant majority of students in the study indicated and which other researchers have drawn attention to (e.g., Guardia et al., 2021). It is to be noted that the predominant majority of the skills that have been identified in this and other studies are effectively what are sometimes referred to as ‘soft’ skills (e.g., Andrews and Higson, 2008). This suggests that whereas there is generally satisfaction with strategies to pass on the classical ‘hard’ skills at HE institutions (notwithstanding the theory-practice imbalance that was emphasised earlier), there are challenges with acquisition of the more intricate and less tangible skills on which employers increasingly attach a premium. The proposed framework is therefore an opportunity to explore these skills and how they can be integrated in the wider scheme of things.

Further, in light of an appallingly high unemployment rate among graduates in Uganda and other African countries (e.g., Monitor, 2021), coming to a common understanding of the key skills that enhance employability and entrepreneurship is critically important. It is one of the routes to rectifying the situation by producing graduates that are equipped with what the employers are looking for. An important observation in secondary data suggests that while there are several initiatives trying to address the problem, both at government and private levels, these initiatives are hardly coordinated and aligned (World Bank, 2020). There therefore tends to be a high level of reinventing the wheel amidst scarce resources, thus seriously undermining the potential impacts. It would therefore be important to work out ways to achieve more alignment of strategies and the creation of synergies between various efforts. A more explicit multi-stakeholder approach would be one of the possibilities for approaching the situation (e.g., Cake et al., 2021).

The next sub-section takes a look at growing efforts to address both employability and entrepreneurship in the frameworks under study.

## **Integrating entrepreneurship skills in an employability-entrepreneurship framework**

The findings in the study build on previous work that has recognised a dynamic relationship between employability and entrepreneurship skills and the strategies needed to support the concurrent development of the skills (Mbalyohere et al., 2019). In light of the projected fast economic and population growth of new frontier economies like Uganda and the persistent challenges with creating enough jobs for the graduates and the youth in general, the dynamic relationship would be expected to assume more importance in future. Not only will HE institutions be expected to be more innovative and enterprising themselves in creating conducive environments for the integrated frameworks, but other key stakeholders like employers and governments will need to respond dynamically too.

It is also important to point out that the benefit for HE institutions in the Global North becomes evident as they seek to adapt their own employability frameworks and to become internationally more relevant (e.g., Beelen, 2019). They can do this by explicitly adding an entrepreneurship dimension to their frameworks. The emerging Makerere framework could provide some useful insights to draw on inasmuch as a significantly different socio-economic, cultural and political situation would necessitate adaptations.

It might not be far-fetched to predict that the future will reveal intensified competition between countries for students from new frontiers who are not only well set to get immersed in their subject matter during

the years at university but are also entrepreneurially savvy. Such students would hence be expected to offer opportunities to enter into partnerships with their UK-based counterparts to develop robust new enterprises or to competitively transform existing ones. But this also implies that such a programme needs to actually start earlier, i.e., laying the foundation during high school, followed by building on it at university. The further implication is that the inflexible, heavy and inward-looking systems we predominantly currently have are no longer fit for purpose and need a major overhaul to be dynamically relevant in the face of fast-changing job market and enterprise start-up dynamics.

Seen differently, countries like Uganda in fact have a unique opportunity to design systems that are well-adapted to current and (more importantly) future job market and entrepreneurship demands. Such systems should hence be able to not only meet in-country needs, but they should also help to meet the growing global demand. In other words, these countries can position themselves to have a better strategic management of their most important resource going forward, rather than suffering from the uncontrolled brain-drain of the past under which some of their best human resources got 'lost' to more forthcoming markets. Given projections of a very high population growth in African countries with indications of the continent becoming home to 25% of the global population by 2050 (from only 10% in 1950), this emerges as one of the most important challenges for African governments and their partners to address (Paice, 2022). Effective, dynamic and aligned employability and entrepreneurship frameworks at all campuses on the continent that can feed into this globally highly consequential demographic trajectory can therefore be approached as one of the core issues to take into account as part of strategic policy formulations and national planning efforts.

Other findings of the study indicated readiness (90% of respondents) to participate in a comprehensive skills audit to inform a skills development programme; flexibility about industry sector in which to work (65% of respondents were either flexible (48%) or very flexible (17%)); recognition of international mobility by a predominant majority (over 75%) as either very important (43.5%) or important (32.1%).

## Conclusions

In conclusion, the study has advanced our understanding of the employability and entrepreneurship situation at one of sub-Saharan Africa's leading academic institutions. It has thrown light on the strengths and the weaknesses of the status quo, at least from a student perspective. The respondents were very forthcoming and candid in their responses to the survey. They painted the picture of a situation that needs urgent intervention going forward in order to drastically improve the strategic approaches to making students more employable and/or entrepreneurially agile. The skills that the students identified as critical to them largely mirror what engineering and health science students in other developing country settings have suggested. This therefore indicates an emerging global view on the issue and strengthens the confidence in the utility of the findings to inform the design of a robust employability-entrepreneurship framework. A major finding was that the bridge between employability and entrepreneurship skills consisted of the dynamic capabilities of innovativeness, adaptability/flexibility and project management. There is consequently room to develop the framework further using these dynamic capabilities.

A strong foundation has now been laid for the next phase of exploring what other key stakeholders like potential employers and policy makers think of the framework and the contribution they want to make from their vantage point. The new findings will contribute to a truly dynamic conceptual foundation for the framework as the project team seeks to develop it further and link it to the business sustainability strategies of diverse employing organisations. The first phase of gathering the student (and academic staff) perspective has however been fundamentally important to the whole process.

## Limitations and future research

The study depended predominantly on data that reflected the views of students. While this is a key perspective that focuses attention of how this core stakeholder group sees things, there are some other views that are not less important. Such views would include those of employers, policy makers and civil society. Gathering these views and integrating them with the student perspective would be expected to provide a more holistic perspective. A future study would therefore do well to engage equally dynamically with these other stakeholder groups and to consequently revisit the current findings to identify points of commonality. Ultimately, these wider perspectives would be expected to strengthen the robustness of the emerging employability-entrepreneurship framework.

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