

Importance of Early Learner Participation in the Wavumbuzi Entrepreneurship Challenge

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ABSTRACT

Entrepreneurship contributes to prosperity by increasing productivity, reducing unemployment, and improving livelihoods. In the past, African educational systems prioritized preparing young people for employment, over entrepreneurship. With the aim of contributing towards the early development of learners' entrepreneurial thinking, in 2019, the Allan & Gill Gray Philanthropies (AGGP) and its partners – mandated to work in secondary/high schools in Kenya – began implementing the free online 6-week Wavumbuzi Entrepreneurship Challenge. Wavumbuzi presents new Challenges every year, which are in line with the Competency Based Curriculum (CBC) and the Basic Education Curriculum Framework goals (BECF, 2017).

The Wavumbuzi Knowledge and Research Unit, conducted a study to assess the effect of learners re-engaging across two iterations using a longitudinal retrospective study methodology. Data of 4,982 learners (46% female; 54% male) was analysed. Of these, 2,978 (60%) were first-time participants and 2,004 (40%) were repeat participants. The median age was 16.9 years. Results indicated that on average, first-time users submitted four Challenges while repeat users submitted eleven Challenges. On the class grades, Form 1 & 2/Grade 8 & 9 learners had the highest propensity of re-engaging in subsequent iterations compared to Form 3 & 4/Grade 11 & 12 learners. However, descriptive statistics revealed that learners who had just started secondary/high school had a low participation rate.

Repeated exposure to the Challenges increases likelihood of learners improving their entrepreneurial competencies. Therefore, it is recommended that educators and parents/guardians should concertedly encourage and support lower grades secondary/high school learners to participate & actively engage in the Wavumbuzi Entrepreneurship Challenge.

Key words: entrepreneurial mindset development; entrepreneurial thinking; learners; early participation; Kenya

1. BACKGROUND

According to the African Development Bank Group (AfDB), one-third of the 420 million young people in Africa are unemployed, a third are vulnerably employed, and only one in six youths are gainfully employed (AfDB, 2018). Additionally, 10-12 million young people join the workforce yearly in Africa while only 3.1 million jobs are created annually, leaving most of the young people unemployed¹. The International Labour Organization (ILO) reported that globally, youth unemployment is more than three times as prevalent as adult unemployment and that the youth unemployment rates in Africa continues to be lower than the global average².

In the meanwhile, globally, the labour force is experiencing a paradigm shift with more unique skills and competencies required to venture into the competitive fields (ILO, 2020). It is envisioned that in the future some current jobs will be obsolete rendering many people jobless; whilst new opportunities will arise, which will be taken up faster by those who are creative, confident and have an entrepreneurial mindset.

However, the education systems, especially in Africa have, for a long time, prioritised preparing learners for employment over entrepreneurship. The education system in Kenya, for example, has been criticised for training learners to be job seekers as opposed to job creators (Langat, 2018). Further, although there are some successful entrepreneurs in Africa, research shows that they are mainly minority foreigners or diaspora with international education, past corporate experiences or of upper-middle-class family backgrounds (Nkontwana, 2022). There is need to explicitly change these trends as entrepreneurship contributes to prosperity by increasing productivity, reducing unemployment, and improving livelihoods³.

1.1 Developing young people's entrepreneurial thinking

Nurturing entrepreneurial mindsets among the young people is crucial to ensuring that they are well equipped for the evolving economic world (Farr, 2014). A British Council report recommended the revision of the secondary education curricula to provide learners with skills that are well equipped for the competitive working environment (Hall, 2017). Further, to improve the pipeline of future entrepreneurs, it is crucial that young people's entrepreneurial thinking is developed at an early age, more so innate competencies. Entrepreneurial competencies are defined as a set of skills that are required to develop, maintain, and expand a business (KICD, 2022).

Stimulating learners' ability to think entrepreneurially is a continuous process. Kolb's theory explains that concrete experience, reflective observation, abstract conceptualisation, and active experimentation form a four-stage process (or cycle) transformed into effective learning - as

¹ <https://www.un.org/africarenewal/magazine/april-2018-july-2018/african-youth-demand-seat-table>

² https://www.ilo.org/wcmsp5/groups/public/---ed_emp/documents/briefingnote/wcms_853322.pdf

³

<https://www.dbsa.org/article/how-youth-entrepreneurial-development-can-uplift-africa#:~:text=It%20also%20plays%20a%20central,through%20coaching%20and%20training%20programmes>

summarized in **Figure 1**. It provides a basis for learning and development by describing ideal processes where knowledge is generated through experience and repetition (Kolb, 1984).

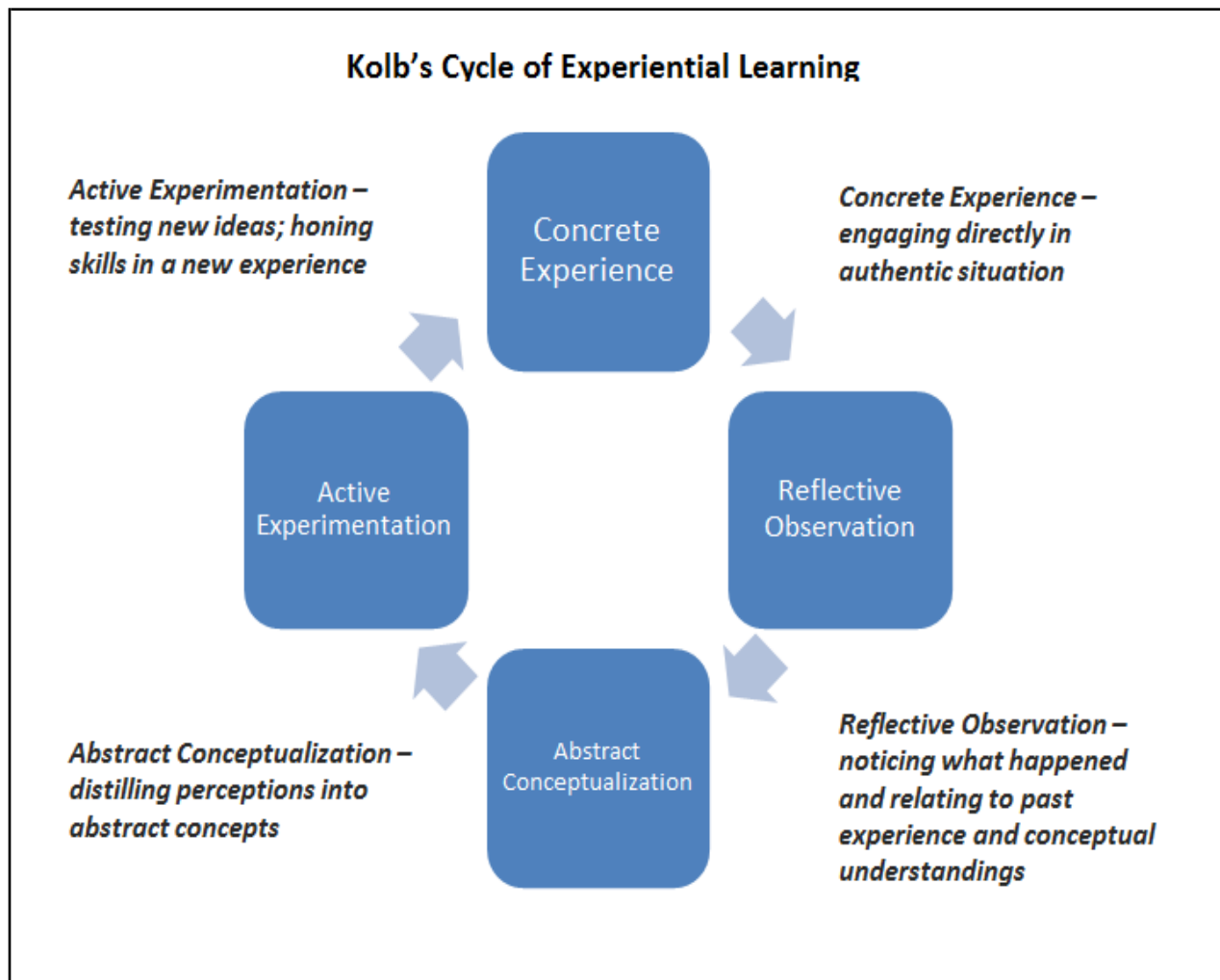


Figure 1: Kolb's Cycle of Experiential Learning

The future requires young people to efficiently see problems in society and effectively innovate and implement solutions. Applying Kolb's learning theory has benefits for learners, as repeated stimulation of learners entrepreneurial thinking is essential to concretize the practice into becoming an automatic ability.

1.2 The Wavumbuzi Entrepreneurship Challenge

It is against this background that the Wavumbuzi Entrepreneurship Challenge – a free online six (6) weeks annual Challenge is offered to learners in all secondary/ high schools across Kenya to contribute to developing the entrepreneurial thinking of young people at an early age (Wavumbuzi, 2022). Wavumbuzi is currently supported by the Allan & Gill Gray Philanthropies (AGGP). In 2019, Wavumbuzi and its partners - mandated to work in secondary/ high schools -

begun to implement the annual Wavumbuzi Entrepreneurship Challenge. The Challenge is designed to equip Learners with competencies to be the next generation of global leaders, change-makers, and innovative thinkers hence acquiring knowledge and skills required in job creation; a priority area in Kenya's Vision 2030⁴ and Kenya Kwanza Plan⁵.

Learners are not taught. Instead, learners get sets of Challenges - which they can access via computers or mobile phones - that stimulates them to think like entrepreneurs. Each task requires learners to apply new concepts and utilize their knowledge and skills in solving real-world challenges.

Teachers are trained on how to guide and encourage learners to engage in and complete the Challenges (Kareithi, R. M. & Mangira, S., 2021). These practices are in line with the Teacher Service Commission (TSC) Standards guiding Professional Development of Teachers (TSC 2019).

As summarized in **Figure 2**, learners are presented with online content that has been carefully



researched and developed that cover different contemporary industries and topics of interest to the learners and are based on global and national themes. The content is carefully designed to help the learners think critically and imaginatively and learn how to collaborate and work in teams in accordance with the competencies envisaged by the Basic Education Curriculum Framework (BECF, 2017). The more learners engage in the Challenge, the more they are stimulated to think like an entrepreneur. Some of the entrepreneurial competencies embedded in the Challenge include self-efficacy, resilience, proactively acting and taking initiative, need for achievement, innovative

problem-solving and value-driven service⁶.

Figure 2: Learners Entrepreneurial Mindset Development

The learners access the Challenge through their mobile phones or computers and proceed to the tasks that require the learners to apply new concepts and utilize their knowledge and skills in solving real-world challenges. Experience shows that learners have the desire for entrepreneurial

⁴ <https://vision2030.go.ke/publication/kenya-vision-2030-popular-version/>

⁵ <https://uda.ke/downloads/manifesto.pdf>

⁶ <https://wavumbuzi.africa/kenya/>

mindset development which calls for stakeholder and policy makers to create conducive environments to nurture the learners from an early age (Kareithi, Jenkins, & Hampton, 2019).

2. METHODOLOGY

Wavumbuzi's Knowledge and Research Unit (KRU) conducted a longitudinal retrospective study to scientifically quantify the effects of learners re-engaging in the annual Wavumbuzi Entrepreneurship Challenge across two iterations. Since the study was longitudinal in design, probabilistic record linkage was utilised to merge learner engagement data collected between 2019 and 2021.

A comparative analysis between first-time users and repeat users was then conducted to evaluate statistical differences in engagement metrics such as the number of submissions made, Challenge points garnered, system logins count, and other engagement indicators. Finally, to estimate predictors of re-engagement, a multiple logistic regression model was fitted while adjusting for effect modifiers and other potential confounding variables. Odds ratios, p-values (significance level of <0.05), and the corresponding 95% confidence interval were reported.

3. RESULTS AND DISCUSSIONS

Of the 4,982 learners' data (46% female; 54% male) included in the study, 2,978 (60%) were first-time users, while 2,004 (40%) were repeat users. The median age was 16.9 years. Findings established that there were statistically significant differences in engagement between first-time users and repeat users. As depicted in **Figure 3**, on average first-time users submitted only four Challenges while repeat users submitted 11 Challenges - a difference of seven Challenges. Similarly, repeat users recorded higher average points per challenge (47.3 points) compared to first-time users (18 points); logged in nearly four times more than first-time users, and gained nearly three times average points per week (665.9 points) compared to first-time users (246.1 points).

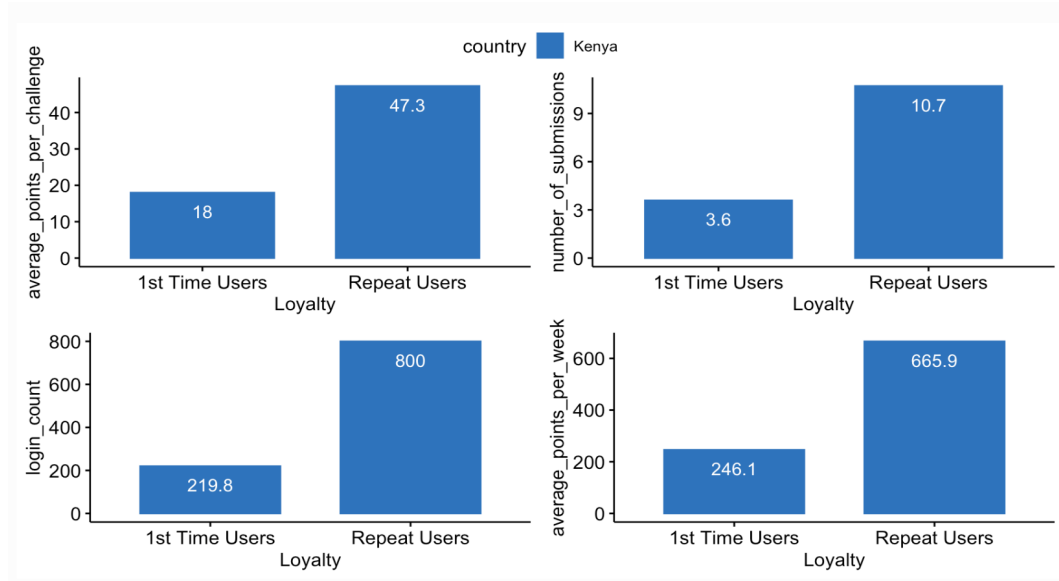


Figure 3: Learners Engagement Indicators

The findings confirm that there are advantages to secondary/ high school learners being encouraged and provided with the opportunity to think like an entrepreneur repeatedly. The initial concrete experience develops their muscle memory, which is essential because previously trained muscles are more responsive to training than untrained muscles (Blocquiaux S. et al, 2022). Secondly, learners feel more confident to re-engage in the annual Challenge as their digital skills have been enhanced, they are familiar with the Challenge-world / Wavumbuzi platform and therefore they are able to navigate through more easily. Experience also shows that learners aim to perform better than they did previously and emerge as top achievers in their school or at County level or nationally (Wavumbuzi, 2022). These factors contribute to rising the desire of learners to re-engage in the annual Challenge hence setting them along the path of effective learning (Kolb, 1984).

On the class grades, Form 1 & 2/ Grade 8 & 9 learners had the highest propensity of re-engaging in subsequent iterations compared to Form 3 & 4/ Grade 11 & 12 learners. However, descriptive statistics revealed that learners who had just started secondary / high school had a low participation rate. Learners reported that due to the limited access to computers with internet connectivity, learners in the higher grades in secondary/ high school have the first priority to participate in Wavumbuzi.

Personally, I am going to be honest, what motivated me to join Wavumbuzi is that when I was in Form 1... we did not have the opportunity as Form 1's to access the computers and the laptops because the Form 3's and Form 4's used to want it for themselves. So in 2021 I was like I have to join this because right now I am in Form 3. So I can also do it.

- Hilda Jepliting, Form 4, Moi Tea Girls Secondary School, Kericho County

(Source: Wavumbuzi, 2022).

4. RECOMMENDATION

These insights confirm that learners' repeated exposure to the annual Wavumbuzi Entrepreneurship Challenge can lead to more increased engagement and related treatment effects. However, whilst learners who have just started secondary / high school have the highest propensity of re-engaging in subsequent iterations, they have a low participation rate. Therefore, to improve the likelihood of re-engagement, Wavumbuzi stakeholders including partners, educators and parents/ guardians should sensitise and support the lower grades learners to participate and actively engage with the Wavumbuzi Entrepreneurship Challenge as early as possible. This strategic effort will increase the reach and impact of the Challenge in improving learners' entrepreneurial mindset and competencies.

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