Furthering lifelong learning to navigate through the new normal – A small island state perspective

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ABSTRACT
The COVID-19 pandemic has caused major disruptions to Higher Education Systems worldwide and Mauritius, a small island state, had to ensure that its people continue learning to navigate through the new normal. The Higher Education Commission (HEC) in collaboration with the Ministry of Education, Tertiary Education, Science and Technology entered into an agreement with the Commonwealth of Learning (COL) to secure scholarships under the ‘COL_Skills for Work Scholarship’, over the next 3 years. This timely initiative aims to close the skills gap of in-demand and high-demand jobs. Data from the first cohort reveals more than 50% of learners completed their courses. A survey is underway to gauge the benefits accrued through the scheme by 1500 learners in terms of unlocking their potential to face changes in their workplace, building employability skills and personal development as well as to investigate its impact on the livelihood of people in the island. The study will be used as a basis to create strategic directions towards lifelong learning in a small island state and will also give invaluable insights into how education can be tailored made to create a talent economy, assisting higher education institutions to reinvent their learnings to meet the new needs of the economy.

Key words: Small Island, online education, Lifelong learning, Employability Skills, Skills for Work

INTRODUCTION
Around the world, higher education systems are facing new and increasingly complex challenges, which are indicative of wide-ranging socio-economic crises, of which the COVID-19 sanitary situation remains the most disruptive. The successions of Covid-19 waves have had devastating outcomes for the world economy. The ensuing measures related to the containment of the outbreak, including several national lockdowns and measures relating to social distancing, has also disrupted the education community in ways which are unprecedented. The resort to online learning occurring due to the pandemic played an important role in exacerbating inequalities in higher education systems. Students with no access to computers and internet were penalized. However, the pandemic also created and accentuated other learning opportunities, in the form of online digital platforms, offering free or fee-paying short courses to a wide range of audiences around the world (Saire, et al, 2020).

In a context, where the Covid-19 pandemic has fast-tracked the digitization of education, there is a critical need for detailed scrutiny on how this digitization is redesigning the world of education. Around the world, and in Mauritius, educational specialists and governments are converging towards the use of digital education as a sustainable solution to the disruption of conventional teaching methods. One such practice is the use of online platforms offering short courses. This paper reflects on the benefits and challenges of inculcating employability skills to Mauritian learners through the use of digital platforms such as Coursera, Udemy and Grow with Google.

In 2021, the Higher Education Commission (HEC) submitted a project to the Commonwealth of Learning (COL) and subsequently was awarded 3000 scholarships under the skills for work programme to benefit Mauritian learners over a span of three years. The project is being run successfully by the HEC as one cohort of 1000+ learners has already completed their courses, and the second cohort is currently following their courses. One of the stated objectives of the Mauritian project was to ease the impact of the COVID-19 pandemic on Mauritian learners, whether they were students in the higher education system or employed in the labour market by providing employability skills to Mauritian learners in the form of short online courses on the Coursera, Udemy and Grow with Google platforms. The project also projected to evaluate the impact of such courses on employability of Mauritians.

This paper will present the methodology, major findings, recommendations and tools developed under this COL funded project project. It is hoped that this paper will assist other countries benefitting from the COL Skills for work initiative to better prepare their learners and evaluate project outcomes.

RESEARCH BACKGROUND
The Higher Education Commission (HEC) in collaboration with the Ministry of Education, Tertiary Education, Science and Technology, in Mauritius have partnered with the Commonwealth of Learning (COL) for the Skills for Work Scholarship, which aims at offering 1,000 scholarships per year to Mauritian learner between years 2021 and 2023.

The aims of the scholarships were to close the skills gap for in-demand and high-demand jobs and increase the chances of employment, both at the local level and abroad for Mauritian citizens. The scholarship offers the possibility for Mauritian learners to avail three different certification programmes on their online platforms, namely:

- COL-Grow with Google Skills for Work Certification Programme
- COL-Coursera Skills for Work Certification Programme
- COL-Udemy Skills for Work Certification Programme

The HEC leads the project in Mauritius in collaboration with the Ministry of Education, Tertiary Education, Science and Technology.

**Awards Made under COL Skills for Work Mauritius**

As at April 2021, 2 cohorts have been awarded, as detailed below:

<table>
<thead>
<tr>
<th></th>
<th>Coursera</th>
<th>Udemy</th>
<th>Grow with Google</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cohort 1</td>
<td>300</td>
<td>400</td>
<td>340</td>
<td>1040</td>
</tr>
<tr>
<td>Cohort 2</td>
<td>334</td>
<td>760</td>
<td>462</td>
<td>1556</td>
</tr>
<tr>
<td>Total</td>
<td>634</td>
<td>1160</td>
<td>802</td>
<td>2596</td>
</tr>
</tbody>
</table>

The HEC maintains weekly contact with its learners via the Mauritian Skills for Work Helpdesk. The helpdesk issues reminders for course completion regularly and the HEC team organises interactive sessions amongst learners of the same cohort to encourage sharing of information and promote course completion. A dedicated email address has also been created to liaise with learners and WhatsApp forums have been created to provide update to learners as well as to troubleshoot potential issues which may arise for learners.

So far, the completion rates for the Mauritian learners have proved to be higher than the average in other countries implementing the Skills for Work initiative, with roughly 50% completion across the three platforms.

**LITERATURE REVIEW**

This paper explores the impact on personal development and employability of Mauritian beneficiaries of the COL Skills for Work programme, following the completion of their courses through inter-institutional platforms such as Udemy, Coursera and Grow with Google.

**COL Skills for Work Initiative**

The Skills for Work is an initiative of Commonwealth of Learning (COL), aims to support the efforts of Commonwealth Member States to create skills essential for decent employment and entrepreneurship and lead to for skilling, reskilling, upskilling and lifelong learning.

According to COL, the Skills for Work takes a two-pronged approach:

- Through hybrid models that apply open and distance learning techniques, it helps women, girls, youth, people with disabilities, entrepreneurs, and the unemployed at the community level to acquire relevant 21st Century, life and essential skills, and access in-country mentorship support.

- Through varied partnership models, it enhances ODL capabilities of both TVET institutions and other non-governmental organisations involved in skill development to share and adapt open educational resources; develop capacity in blended teaching/learning practices; scale up outreach efforts; and, respond to the market needs.

This initiative of the COL seeks to tap into the proliferation of private eLearning providers in both the developed world and in emerging economies to contribute to closing the education and skills gap. The model of low-cost, extremely accessible as well as self-paced, malleable self-learning is a direct answer to the needs of society.
Massive open online courses (MOOCS)

It is universally accepted that Massive Open Online Courses (MOOCs) form an integral part of a series of disruptive forces occurring in the higher education field and whereby the increasing use of e-learning and technology-enabled learning is changing how education works.

A massive open online course is an online course intended for a wide audience based on open access online usually through universities or digital learning platforms. As well as conventional module resources such as recorded lectures and presentations, MOOCs can also deliver interactive user forums to encourage unrestricted exchanges between students and teachers (Agrawal et al, 2015).

Open educational Repositories as well as paid online courses are creating a world whereby teaching and learning are no longer limited to the confines of the classroom and are extended to members of society, rather than being limited to students. The MOOCs and platforms proposing certifications for short online courses are offering learning opportunities for large, and diverse set of people (Frezza, Pears, Exter, & Lunt, 2018). In that sense, MOOCs have the potential to create new educational arrangements operating outside traditional institutions for educational and pedagogical development.

New enterprises such as Coursera, Udemy and edx developed, which established global online gateways through which campuses and other learning establishments could propose courses. (Buhl and Andreasen, 2018).

The Market of Digital Education

Emerging educational technologies have permeated through all aspects of education provision and activities (Wiley, 2018). This comprises enrollment, staffing and admissions facilities as well as learner management systems and virtual learning environments and more. Taking the example of Coursera, for instance, it is interesting to note that it was incorporated in 2012 with a stated objective of democratization of higher education through competitive costing as well as increased access (Narang, 2021). Strategic partnerships with some 200 educational providers, including Stanford University and Yale University have enabled the platform to dominate the e-learning market by offering more than 6000 courses in a large number of disciplines. It is estimated that the platform has dispensed courses to more than 20 million learners and is projected to increase its reach, especially given the Covid-19 pandemic (Imp ey, 2020).

Hence, it is projected that a significant percentage of higher education’s prospective growth will be connected to the development of new online learning platforms, in the like of Coursera, Udemy and edX, which advertise online courses to approximately 200 million students across the world (Shah, 2020).

This phenomenon is part of a wider range of transformations occurring within the higher education sector, especially as methods of ‘marketization, privatization and consumerization of HE’ indicate that education providers are more and more motivated to attaining market value via competition, performance classification, customer demand, and return on investment (Busch, 2016). This state of affairs is supported by digital technologies (Selwyn, 2014).

In a bid to increase their competitiveness, higher education providers are increasingly turning to the use of digital infrastructures and platforms, predominantly by ‘ unbundling’ their amenities into constituent fragments and proposing them on the market for ‘ rebundling’ by outsourced marketable enterprises (McCowan, 2017; Muellerleile and Lewis, 2019).

The rapid expansion of private digital providers across and beyond higher education systems should be seen as a component of the ‘global education industry’ (Verger, Steiner-Khamsi and Lubienski, 2017). It is contended that the provision of higher education being currently dispensed via digital platforms and data infrastructures, which partner with higher education providers, consultancies, think tanks to provide courses for a wide range of audiences (Williamson, 2019). Indeed, this development of increasing collaboration between education providers and digital marketing and digital platforms is steering higher education systems toward market oriented provision of courses, whereby the customer is not just the student, but any individual with access to online platforms (Komljenovic & Robertson, 2016).

Life-long Learning and labour markets in the 21st Century
The advent of new educational opportunities in the form of Open Educational Resources (OERs) and MOOCs provides immense opportunities for life-long learning. Indeed, lifelong learning needs to be imagined as the indicator for producing an innovative knowledge economy. At the individual level, life-long learning provides the opportunity to learners to upgrade their pool of knowledge and acquire new and industry-relevant skills to better their prospects on the labour market (Bordoloi et al, 2021).

A momentous challenge being faced by institutes of higher education is employer discontent with higher education graduates who lack the essential skills and competencies for the workforce, and a growing industry demand for independent and self-motivated employees who can manage the intricacies of the labor force in resourceful and innovative ways (Jaschik, 2015; CBI/Pearson Education, 2015). The online platforms are uniquely positioned to inculcate lifelong learning to a wide audience, thus responding to employer needs.

METHODOLOGY

This section outlines the methodological considerations taken during the study, and lists the research objectives, sampling procedures, data collection instrument, data collection process, response rate as well as the data analysis used during the study.

Research Objectives

The aim of this study was to understand the impact of lifelong learning through Commonwealth of Learning- Skills for work scholarship carried out in Mauritius. The research also aimed to identify gaps in terms of difficulties encountered with the use of Coursera, Udemy and Grow with Google platforms, and identify areas for improvement in terms of recommendations for the implementation of Skills for Work Scholarships. To be able to meet the objectives of the research, a survey of 2135 Mauritian learners was undertaken.

Sampling Procedures

A census-approach was adopted with regards to sampling for the survey—all Mauritian learners hence were considered for the study. Indeed, the population and sample for the study consisted of all Mauritian learners from the COL Skills for Work Scholarship from cohorts one and two.

The figures for sampling population are displayed below, broken down by cohort.

<table>
<thead>
<tr>
<th></th>
<th>Cohort 1</th>
<th>Cohort 2</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Udemy</td>
<td>400</td>
<td>760</td>
<td>1160</td>
</tr>
<tr>
<td>Coursera</td>
<td>300</td>
<td>334</td>
<td>634</td>
</tr>
<tr>
<td>Grow with Google</td>
<td>340</td>
<td>462</td>
<td>802</td>
</tr>
<tr>
<td>TOTAL</td>
<td>1040</td>
<td>1556</td>
<td>2596</td>
</tr>
</tbody>
</table>

Data Collection Instrument

The survey questionnaire dealt with four different themes, as indicated in the table below:

<table>
<thead>
<tr>
<th>SN</th>
<th>Themes</th>
<th>Questions</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Demographics</td>
<td>Gender; Occupation</td>
</tr>
<tr>
<td>2</td>
<td>Course Details</td>
<td>Online Platform (Coursera, Grow with Google, Udemy); Courses chosen;</td>
</tr>
<tr>
<td>3</td>
<td>Skills Acquisition</td>
<td>Personal Competencies, skills acquired</td>
</tr>
<tr>
<td>4</td>
<td>Employability and labour market outcomes</td>
<td>Attributes, competencies and skills acquired related to labour market</td>
</tr>
</tbody>
</table>

Section 1 collected demographic details with regards to respondents in the study such as their gender, email address, contact number, and occupation.

Section 2 queried respondents with regards to the online platform they chose to pursue the short courses on, their choice of courses, the completion rates and so on.
Section 3 of the questionnaire delved into the skills acquired via the online learning platforms, in the like of personal growth skills, technical skills and others.

Section 4 looked further at a list of attributes, competencies and skills which contributed to increase the employability after the completion of a course.

Data Collection Process

The survey was created on Google forms and was administered by the HEC Skills for Work helpdesk. Regular emails requests and reminders were sent to Mauritian learners. Access to the instruments and collected data was given solely to members of the COL Skills for Work implementation team in Mauritius. The data was analysed on excel.

Response Rate

The response rate for the study stood at 15% of the sample, and representing 353 Mauritian Learners, of which 183 were male and 170 were female. Indeed, the data collection process was fraught with difficulties mainly due to the limited time frame available for the data collection process.

The HEC proposes to carry out another survey after the completion of Cohort 3, which will constitute the last cohort for a comprehensive analysis of the employability and employment impacts of the COL skills for work programme in Mauritius.

ANALYSIS OF FINDINGS

In Mauritius, as elsewhere, the advent of online courses, especially as offered in the context of the Skills for Work initiative, are very much welcome. However, due to the novelty of the programme, as well as the variations and availability of adequate resources amongst different groups of people in the country, the outcome or the success rate of such online courses is yet to be fully assessed. There is hence a lack of proper research on the usefulness of MOOCs with regards to their completion rates by learners and also on their usefulness in developing employability skills amongst learners.

This section deals with the employability skills and other skills obtained via the courses dispensed by Udemy, Coursera and Grow with Google.

Demographics of Respondents

The vast majority of respondents were employed (66%), while 16.4% were students, 9.6% were simultaneously carrying out their studies and were in employment whilst 7.9% were unemployed.

Platform for Online Learning

The respondents for the survey were mainly from the Coursera platform (50%), whilst 37% were from the Udemy platform and 13% from the Grow with Google platform.
Field of Study of Courses chosen

The majority of respondents chose Science and IT courses to pursue on their respective online learning platforms (33.2%) whilst 28.4% chose law and management, 14.8% business and economics, 11.4% languages and social sciences and 12.2% chose other fields of study for their courses.

<table>
<thead>
<tr>
<th>Field of Course</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sciences and IT</td>
<td>33.2</td>
</tr>
<tr>
<td>Law and Management</td>
<td>28.4</td>
</tr>
<tr>
<td>Business and Economics</td>
<td>14.8</td>
</tr>
<tr>
<td>Social Sciences and Languages</td>
<td>11.4</td>
</tr>
<tr>
<td>Others</td>
<td>12.2</td>
</tr>
</tbody>
</table>

Number of Courses Completed

31.4% of respondents had completed at least 1 course by the time of the survey, whilst 14.7% had completed 2 courses, 8.5% had completed 3 courses and 24.4% had completed 4+ courses. This reflects positively on learner engagement in Mauritius with regards to the online learning platforms. Indeed, one of issues of contention surrounding the proliferation of online short courses and certifications is learner engagement, and the low rates of completion.

<table>
<thead>
<tr>
<th>Number of Courses Completed</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>21</td>
</tr>
<tr>
<td>1</td>
<td>31.4</td>
</tr>
<tr>
<td>2</td>
<td>14.7</td>
</tr>
<tr>
<td>3</td>
<td>8.5</td>
</tr>
<tr>
<td>4+</td>
<td>24.4</td>
</tr>
</tbody>
</table>

Difficulties encountered during enrolment on Udemy, Coursera or Grow with Google

The survey also probed on the difficulties encountered during the courses. Indeed, a series of themes emerged from the findings of the survey, as detailed below:

- Connectivity Issues and Faulty Hardware

It was found that a large number of respondents reported connectivity issues as a difficulty encountered hindering the learning process. Indeed, the learners reported that low bandwidth caused issues such as difficulty loading course materials, which made it difficult for them to efficiently learn the course materials.

- Time Management
Learners also reported difficulties in managing their time efficiently. It is to be noted that the cohorts are time bound with some 6 months’ time to complete the number of courses they are enrolled in. Learners reported difficulties juggling between work, family life and other commitments as on difficulty encountered.

- **Access to Platform and Login Issues**
  It was found that there were persistent issues with the login and access to the platforms, which caused significant delays in the completion of courses for Mauritian learners. The Mauritian helpdesk usually helps students by relaying these concerns to the COL partners for troubleshooting and to resolve such issues.

- **Over Ambitious Enrolment**
  It was found that some learners did not complete all the courses they enrolled in as they had enrolled in too many courses at the beginning of the cohort.

- **Course Difficulty**
  Some learners experiences difficulties with completion as they had underestimated the course difficulty. It is recommended that learners peruse course contents and class schedules to ensure that they will be able to complete.

- **Demotivation**
  As the case with self-paced and isolated learners, Mauritian learners also experienced some levels of demotivation during their enrolment with their respective platforms. Indeed, user interaction and user-teacher interactions are essential to student engagement in such models of learning.

**Skills Acquisition**

99% of respondents believed that their enrolment on the online learning platform resulted in additional skills acquisition.

Respondents were also queried with regards to soft and technical skills they acquired during the course of their enrolment on the online learning platforms. Their responses are recorded below:

<table>
<thead>
<tr>
<th>Soft Skills</th>
<th>Technical Skills</th>
</tr>
</thead>
<tbody>
<tr>
<td>Communication Skills</td>
<td>IT (Microsoft tools, Excel, etc)</td>
</tr>
<tr>
<td>Leadership and Management Skills</td>
<td>Writing Skills</td>
</tr>
<tr>
<td>Adaptability</td>
<td>Mathematics and Statistics</td>
</tr>
<tr>
<td>Analytical Skills</td>
<td>Accounting</td>
</tr>
<tr>
<td>Negotiation Skills</td>
<td>Software design and programming</td>
</tr>
<tr>
<td>Critical thinking and Problem Solving</td>
<td>Digital Marketing</td>
</tr>
</tbody>
</table>

**Employability**

60.9% of learners agreed that the learning process helped them face changes and challenges in the workplace. Time management and adaptability were the reasons that helped them in the workplace. Indeed, the vast majority of respondents reported that the skills acquired during their enrolment in the Coursera, Udemy and Grow with Google Platforms enabled them to develop as employees and equipped them with the necessary skills to respond adequately to market demands.

With regards to labour market outcomes, it was found that 15% of learners secured a new job and the reason was better negotiation and communication skills, whilst 13.6% of learners created their own business following to the courses they followed.

**RECOMMENDATIONS**

Based on the surveys conducted and the assessment of the project, a number of recommendations have been identified:

i. **Learner Support and Engagement and Interaction**: As demonstrated by learners, demotivation and lack of interaction with both peers and interaction with teachers can result in low completion rates. Indeed, as is the case with many courses online, student support is key to the promotion of student engagement. Inductions, continuous communication by project implementing bodies, and the creation of common platforms for sharing of knowledge and experience are recommended to alleviate feelings of demotivation and to promote learner engagement.
ii. **IT infrastructure**: One of the most commonly reported problems hindering successful completion of courses was low bandwidth and internet connectivity issues. There is hence a need to ensure that learners have access to proper IT infrastructure to be able to complete their courses, be it internet connectivity or other required facilities for running a course smoothly.

iii. **Further Research**: It is recommended that further comparative research be carried out between receiving countries to ascertain the success rate of the existing courses and learner outcomes between countries.

**Conclusion**

As indicated by studies elsewhere, digital learning constitutes an innovative way of learning in Mauritius as well as worldwide. Respondents provided details concerning the courses they chose per field and the difficulties faced. The survey also looked at the competencies and skills which contributed to increasing the prospect of someone securing a job after the completion of the scholarship. It bodes well for the Mauritius Skills for Work Programme that 98.3% of respondents reported that the courses helped them in acquiring new knowledge and skills. The courses helped in personal development such as better communication, problem solving, integrity, self-confidence, work ethic, adaptability, leadership, better organisation, and interpersonal development.

**REFERENCES**


Shah, D By the numbers: MOOCS in 2020