

Higher education student work placement and employability

Badroonesha Aumjaud¹, Brinda Ramasawmy², Brigitte Marie Francoise Driver²,
Deena Ramful-Baboolall¹

¹Department of Agricultural & Food Science, Faculty of Agriculture, University of Mauritius, ²Department of Agricultural Production & Systems, Faculty of Agriculture, University of Mauritius, Réduit, Mauritius.

Abstract

This study aimed to evaluate student work placement experience with reference to employability skills. An email/phone survey was conducted in 2016/2017 with on-site placement supervisors and alumni of the Faculty of Agriculture, University of Mauritius, who had completed 6-month work placements. Placement specifications and evaluation responses were retrieved from records. 25 out of 28 (89.3%) food science and technology students had secured employment less than one year after graduation, with 14.3% being employed by organisations where they undertook the placement. 21 out of 25 (84%) alumni stated that the placement opportunity had enhanced their employability. Placement providers commented positively on students' attitude, progress and output. Student work placements may have contributed to boost graduate employability. The Faculty of Agriculture 6-month work experience programme was extended to other courses. From 2014 to 2023, it has included 221 students who have been trained for jobs in the agricultural and food sectors.

Keywords: *Higher education; student work placement; food science; agriculture; graduate youth unemployment; employability.*

1. Introduction

Unemployment, working poverty, labour market inequalities and poor quality employment, especially among the youth and women in developing countries, are concerns which need to be addressed globally (ILO, 2019). The United Nations Sustainable Development Goal 8 (SDG 8) promotes inclusive and sustainable economic growth, employment and decent work for all (UN, 2023). However, the International Labour Office reports major deficits in decent work and warns that attaining SDG 8 seems unrealistic for many countries. Young people, especially young women, are disproportionately affected (ILO, 2019). According to the United Nations (2020), unemployment among youth is one of the greatest global issues.

OECD (2023) defines youth unemployment rate as the number of unemployed 15-24 year-olds expressed as a percentage of the youth labour force. In 2016, it was estimated that over 40% of the world's active youth was expected to be unemployed or have a job but live in poverty (ILO, 2016). The COVID-19 pandemic exacerbated youth employment challenges with anticipated scarring effects. The proportion of youth not in employment, education and training increased to 23.3 % in 2020, an unprecedented level in at least 15 years (ILO, 2022).

Mauritius, a small island developing State (SIDS), located off the southeast coast of the African continent in the Indian Ocean, has a population of 1.26 million (Statistics Mauritius, 2022a) and an adult unemployment rate estimated at 8.7% for the first quarter of 2022 (Statistics Mauritius, 2022b). Youth experience a higher-than-average unemployment rate which was 25.3% in 2021 (World Bank, 2023a). Two main factors contribute to youth unemployment: some sectors such as agriculture and export-oriented enterprises, no longer attract low skilled youth due to working conditions and social status associated with these jobs; youth competencies do not meet the demand of employers for proficiency in technical skills (World Bank, 2019).

To tackle the youth employment crisis, the United Nations launched the Global Initiative on Decent Jobs for Youth in 2016. The goal is to leverage knowledge, alliances and resources to create action that leads to tangible results for young people (Decent Jobs for Youth Organisation, 2023). The nexus between youth education and employment was recognised by the United Nations declaration in 2015 with the following statement: "all countries stand to benefit from having a healthy and well-educated workforce with the knowledge and skills needed for productive and fulfilling work and full participation in society" (UN, 2018). Thus, youth education plays a vital role in developing knowledge, values and competencies required to secure decent jobs for a dignified life and sustainable growth.

Since independence in 1968, Mauritius has undergone economic transformation from a low-income, agriculturally-based economy to a diversified, upper middle-income economy with growing industrial, financial, and tourist sectors (Moody's Analytics, 2023). Government strategies have contributed to increase access to higher education and build the knowledge-

based economy towards the creation of an education hub (Knight and Motala-Timol, 2022). The gross tertiary enrollment rate increased from 3 % in 1970 to 44 % in 2020 (World Bank, 2023b). However, graduate youth unemployment has emerged as a socioeconomic concern. The proportion of unemployed youth who had attained tertiary education increased from 7.9% (2010) to 17.4% (2014) and 20.9% (2021) (Ministry of Labour, Industrial Relations, Employment and Training, 2015; Statistics Mauritius, 2021). Skills mismatch has been reported as a key determinant of jobless university graduates (Ministry of Labour, Industrial Relations, Employment and Training, 2015; Ndyali, 2016). According to Hardin-Ramanan, Ballasoupramanien, Gopee, Rowtho and Charoux (2017), corporates and educational institutions in Mauritius identified lack of experience/expertise and no prior preparation/training as important graduate work-readiness challenges.

To address youth unemployment and the graduate skills gap, the Government of Mauritius has invested in initiatives such as the Youth Employment Programme and the Graduate Training for Employment Scheme which engages employers in the skill formation process (Ministry of Foreign Affairs, Regional Integration and International Trade, 2019). The University of Mauritius has been supportive of the government's vision to promote graduate employability and initiated the Otto Essien Programme (United Nations Development Programme/University of Mauritius) student placements project in 1994 and 1996-1998. The Student Work Experience Programme (SWEP), was introduced in 1999 and was designed to expose students to short work placements, real life tasks and activities. It was integrated with the Work-based Learning (WBL) programme for a more structured, modular and progressive approach, and offered to students as an optional experiential learning opportunity (UoM, 2023).

The Faculty of Agriculture of the University of Mauritius plays a leading role in national capacity building for the agricultural, food and biotechnology sectors (UoM, 2023). Interaction with stakeholders, alumni and students signalled the need to integrate student work experience within the programmes of study. In 2002, the Faculty responded proactively by including compulsory 6 to 8 weeks student placements in some undergraduate courses. Student work placements in the field of study were organised by the Faculty of Agriculture and undertaken in external organisations to create opportunities for application of acquired theoretical knowledge. The Faculty experiential learning provision was embedded in other undergraduate and postgraduate courses to benefit a larger number of students. In 2012, the short placement was extended to 6-month sandwich work placement in one undergraduate food science and technology course in light of students' and employers' feedback. The first cohort of graduates who had completed a 6-month work placement entered the job market in 2016. In this context, the study intended to evaluate student work placement experience with reference to employability skills to inform future practice and research.

2. Methodology

2.1. Placement students, organisations and academics

77 students undertook 6-month work placements in 2014 and 2016. Undergraduate students belonged to the 18-24 age-group, with a high proportion of young women (81.2%). They were from Mauritius and Rodrigues, a dependency of Mauritius and the smallest of the Mascarene islands. Postgraduate students on the MSc Agribusiness Management, EU funded intra ACP mobility programme, were from 4 African countries and Rodrigues. 31 public and private organisations in the agricultural, food and hospitality sectors provided 6-month placement opportunities. Each placement provider hosted 1 to 4 students who were mentored by on-site supervisors. Placement providers designated one or more on-site supervisors depending on the number of students being placed at the organisation. 21 academics of the Faculty of Agriculture, University of Mauritius, were appointed as academic supervisors to guide, monitor and assess students' performance during the 6-month work placement, as per guidelines of a Faculty work placement handbook.

2.2. Data collection participants, instruments, methods and analysis

On-site supervisors' and students' placement evaluation reports were maintained as records by academic supervisors at the Faculty of Agriculture, University of Mauritius. Student work placement reports were reviewed to retrieve objective evidence relating to learning outcomes. The "supervisor's final evaluation form" was completed by on-site supervisors. It consisted of a quantitative assessment of student competencies and 1 open-ended question on student performance. The "student work placement evaluation form" was filled in by students and contained open as well as closed-ended questions on quality of experience at the organisation concerned. An email survey was administered (December 2016-January 2017) with 18 on-site supervisors from 14 host organisations (45% of placement providers in 2014 and 2016), as well as 25 alumni of the Faculty of Agriculture, representing 32% of the student population who had completed the 6-month work placement. Feedback questionnaires included open-ended and closed-ended questions. The alumni feedback questionnaire defined the term "employability" as "the ability to secure a relevant job and having the required knowledge, skills and attitude to fulfil job responsibilities effectively". A phone survey was conducted to establish the employment status of 28 Faculty alumni who graduated with a degree in food science and technology with 6-month work placement in April 2016. 5 academics and 1 administrative staff shared their reflections on the organisation, implementation and assessment of student work placements. Their thoughts were critically analysed in light of the internal context as well as the educational, economic and social landscape in Mauritius. Quantitative data was processed by making use of descriptive statistics. Qualitative data was categorised and themes were identified based on the frequency of reported issues to provide insights into the outcomes of experiential learning.

3. Results & Discussion

Table 1. Alumni and placement providers' feedback.

Alumni	On-site supervisors
<ul style="list-style-type: none"> ▪ 25 out of 28 (89.3%) had secured employment ▪ 22 out of 28 (78.6%) had obtained a job in the food sector ▪ 4 out of 28 (14.3%) were employed by organisations where they undertook the placement ▪ 6 out of 28 (21.4%) were recruited by a major group of food companies in Mauritius ▪ 21 out of 25 (84%) stated that the 6-month placement had enhanced their employability ▪ Suggestions for improvement: exposure to various departments of the organisation; on-site visit of academic supervisor; more interaction between on-site and academic supervisors; payment of stipend; sandwich placement shifted to the end of the course to enhance chances of securing a job in the organisation 	<ul style="list-style-type: none"> ▪ Positive comments on students' attitude and output: skills enhancement; progress in learning and developing professional behaviour; contribution to organisation's activities ▪ All on-site supervisors expressed their organisation's willingness to participate in the student work placement programme in the future ▪ Suggestions for improvement: enhanced communication with academic supervisor; more clarity in articulation of programme expectations; less paperwork; extension of placement activities to research undertakings

Table 2. Learners' reported placement benefits and Faculty's staff reflections.

Alumni & students' reported benefits	Academic & administrative staff reflections
<ul style="list-style-type: none"> ▪ 33 out of 40 (82.5%) rated placement experience as good or excellent ▪ 30 out of 38 (78.9%) considered that there were job opportunities in placement organisations ▪ 27 out of 38 (71.1%) were paid a stipend ▪ Best part of work placement and aspects relevant to the programme of study: development of knowledge, hard and soft skills 	<ul style="list-style-type: none"> ▪ Academic supervisors: eye-opening experience and connectivity with the food system ▪ Administrative staff : constructive learning experience ▪ Challenges: securing high number of placements; ensuring student work placement readiness; equivalence of work placement opportunities; workplace language barrier for regional students

89.3% of food science and technology students with 6-month work placement experience secured employment in less than one year after graduation, with 78.6% obtaining a job in the food sector and 14.3% being employed in host organisations. 84% of alumni surveyed stated that the placement had enhanced their employability (Table 1). Furthermore, alumni and students stated that they developed knowledge as well as hard and soft skills during the 6-month work placement (Table 2). 82.5% rated their placement experience as good or excellent and on-site supervisors commented positively on students' attitude and output (Table 1 & Table 2). According to a literature review on higher education work placement/experience research in the United Kingdom, work placement benefits realised by students include general skills development and greater ability to secure a job (Atfield, Hunt and Luchinskaya, 2021). Other authors have also reported the positive effect of work placement on employability skills in Italian and Malaysian contexts (Volpe, 2017; Abdul Wahab, 2022). Teng, Ma, Pahlevansharif and Turner (2019) provided empirical evidence of a significant relationship between soft skills development and job readiness from students' perspectives in Malaysian and Chinese university settings. Two competing theoretical mechanisms have been proposed to explain placement's positive labour market outcomes: the human capital effect which involves skills development; the signalling effect which relates to the assumption that high-ability students opt for voluntary placements to get spotted and not necessarily acquire skills (Atfield et al., 2021). Inceoglu, Selenko, McDowall and Schlachter (2019) have postulated a theoretical model which depicts that intertwined learning and re-structuring of identity processes in novel social environments influence career-related outcomes of placement experiences. Thus, student's receptiveness and ability might have contributed to integrate learning cycles and identity change into meaningful competencies.

On-site supervisors valued students' contribution and expressed willingness to maintain their organisation's participation as placement providers in the future (Table 1). Atfield et al. (2021) reported that employers mentioned the following student work placement benefits: inflow of novel ideas and cheaper human resource. Interestingly, in the present study, alumni suggested payment of a stipend to students (Table 1) which could be important for financial autonomy and self-esteem. Arguments for paid internships include motivation to deliver quality work, job performance and efficiency (Belleenfant, 2022; Legal Service India, 2023). Other suggestions for improvement related to communication/interaction between on-site and academic supervisors (Table 1). Faculty's staff reflected on their constructive experience in arranging and supervising work placements. However, key challenges involved securing a high number of equivalent placement opportunities and ensuring students were well prepared for transition into real-world situations (Table 2). Divine, Linrud, Miller and Wilson (2007) elaborated on HEI time and resource challenges in getting enough internships offers in the US context. Moreover, previous studies reported that joint learning materials developed between universities and employers, effective student support and integration of reflexive activities were crucial for work placement success (Atfield et al., 2021).

4. Conclusions

From the findings of this study, it can be concluded that students who completed 6-month work placements as a requirement of courses at the Faculty of Agriculture, University of Mauritius, experienced positive outcomes in terms of skills development and employability. Placement providers and Faculty's staff demonstrated positive attitudes to the student work placement programme. Since 2017, more students have benefited from 6-month work experience. Some identified areas of improvement have been addressed to ensure quality of experiential learning. For example, a professional development module was introduced to enhance student preparedness for transition to employment. Language skills and intercultural awareness is an emerging challenge in the context of higher education internationalisation. Sustainability of workplace learning opportunities depends on continued engagement of Faculty's staff, students, alumni and stakeholders. It is important to strengthen external organisation, alumni and student participation in design, planning and communication of experiential learning activities for sustained career-related outcomes. More research is needed on work placement/internship learning processes as well as benefits and costs to students, HEIs and employers.

Acknowledgements

The authors wish to express their gratitude to: Associate Professor D Puchooa, Dean, Faculty of Agriculture, University of Mauritius; Professor S Facknath; Mr K Boodhoo, Head of Department of Agricultural Production & Systems; Dr S H Neetoo, Head of Department of Agricultural & Food Science; Faculty's staff, students, alumni and on-site supervisors.

References

- Abdul Wahab, D. (2022). Who's to blame for graduate unemployment? *Malaysia Now*.
- Atfield, G., Hunt, W., & Luchinskaya, D. (2021). *Employability programmes and work placements in UK higher education*. Research report. UK: Department for Education.
- Belleenfant, R. (2022). Top reasons to offer paid internships. *Technology Advice*.
- Decent Jobs for Youth Organisation (2023, February 9). Retrieved from: <https://www.decentjobsforyouth.org/about>
- Divine, R.L., Linrud, J.K., Miller, R.H., & Wilson, J.H. (2007). Required internship programs in marketing: benefits, challenges and determinants of fit. *Marketing Education Review*, 17(2), 45-52. DOI: 10.1080/10528008.2007.11489003
- Hardin-Ramanan, S., Ballasoupramanien, L., Gopee, S., Rowtho, V., & Charoux, O. (2017). *Towards graduate work readiness in Mauritius: a multi-stakeholder approach*. Ebène, Mauritius: MRC report.
- Hardin-Ramanan, S., Gopee, S., Rowtho, V., & Charoux, O. (2020). Graduate work-readiness in Mauritius: a multi-stakeholder approach. *Journal of Teaching and Learning for Graduate Employability*, 11(1), 93-109.

- ILO (2016). *World employment social outlook. Trends for Youth 2016*.
- ILO (2019). *Poor working conditions are main global employment challenge*.
- ILO (2022). *Recovery in youth employment is still lagging, says ILO*.
- Inceoglu, I., Selenko, E., McDowall, A., & Schlachter, S. (2019). (How) Do work placements work? Scrutinizing the quantitative evidence for a theory-driven future research agenda. *Journal of Vocational Behaviour*, 110, 317-337. doi.org/10.1016/j.jvb.2018.09.002
- Knight, J., & Motala-Timol, S. (2022). Mauritius as a developing educational hub. *International Journal of Educational Development*, 93, 102646. doi.org/10.1016/j.ijedudev.2022.102646
- Legal Service India (2023, February 8). *Putting a full stop to unpaid internship*. Retrieved from: <https://www.legalserviceindia.com/legal/article-6208-putting-a-full-stop-to-unpaid-internship.html>
- Ministry of Foreign Affairs, Regional Integration & International Trade (2019). *Voluntary national review report of Mauritius*. Port-Louis, Republic of Mauritius: MFARIIT.
- Ministry of Labour, Industrial Relations, Employment & Training (2015). *Enhancing the employability of job seekers*. Report of the Director of Audit. Mauritius.
- Moody's Analytics (2023). *Mauritius economic indicators*.
- Ndyali, L. (2016). Higher education system and jobless graduates in Tanzania. *Journal of Education and Practice*, 7(4), 116-121.
- OECD (2023). *Youth unemployment rate (indicator)*. doi: 10.1787/c3634df7-en
- Statistics Mauritius (2021). *Labour force, employment and unemployment*.
- Statistics Mauritius (2022a). *Population and vital statistics, January-June 2022*.
- Statistics Mauritius (2022b). *Labour force, employment and unemployment*.
- Teng, W., Ma, C., Pahlevansharif, S. & Turner, J.J. (2019). Graduate readiness for the employment market of the 4th industrial revolution. The development of soft employability skills. *Education & Training*, 61(5), 590-604. DOI 10.1108/ET-07-2018-0154
- UN (2018). *World youth report. Youth and the 2030 agenda for sustainable development*.
- UN (2023, February 9). *Making the SDGs a reality*. Retrieved from: <https://sdgs.un.org/>
- United Nations (2020). *World youth report. Youth social entrepreneurship and the 2030 agenda*.
- UoM (2023, February 9). University of Mauritius web-site. Retrieved from: <https://www.uom.ac.mu/>
- Volpe, M. (2017). Assessment of internship effectiveness in South Italy universities. *Education & Training*, 59 (7/8), 797-810. DOI 10.1108/ET-08-2016-0136
- World Bank (2019). *Mauritius: earnings mobility and inequality of opportunity in the labor market in four charts*.
- World Bank (2023a). *Unemployment, youth total (% of total labour force, ages 15-24) (modeled ILO estimate) – Mauritius*.
- World Bank (2023b). *School enrollment, tertiary (% gross) – Mauritius*.