Skills and Knowledge Assessment Study for the Jua Kali Sector in Kakamega Town: Towards Implementing Recognition of Prior Learning (RPL) in MMUST-TVET Institute

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Abstract

The Kenya National Qualification Authority (KNQA) defines Recognition of Prior Learning (RPL) as the process used to identify, assess, and certify a candidate's knowledge, skills, and competencies acquired in non-formal or informal learning, such as work or life experiences, against prescribed standards or learning outcomes. Despite the launch of RPL by KNQA in 2021, its implementation in Kenya, especially Western region, has generally been slow. This study was therefore conducted to: i) To identify key non-formal and informal economy-driving industries with uncertified skilled workers in, ii) To determine the level of need for RPL by Jua Kali workers; iii) To identify the possible RPL processes and nomenclature suitable to MMUST in relation to CBET and, iv) To identify the level of awareness on RPL among stakeholders. The study was done through questionnaires. The first was a needs assessment study targeting eleven 'Jua Kali' sectors in Kakamega town. These were Mechanical, Electrical, Welding, Masonry, Plumbing, Hotel Services, Carpentry, Textile/Dressmaking, Berber Services, and Hair and beauty services Sectors. The study involved 157 workers spread across the eleven sectors. The study found that 77.7% of the respondents have no certification to prove their competency in the work that they do. A majority (88%) of the respondents would like their skills and knowledge gained informally to be assessed and certified by a recognized institution. Also, out of these, 80.6% reported that their institutions have never been involved in the RPL process and 58.3% reported that their institutions have enough trained personnel to implement RPL. Findings also indicate that there is high level of RPL need among the workers at 88%. While reviewing literature from the KNQA, the study found a well laid down policy and guidelines for RPL implementation suitable for MMUST TVET Institute. It further exposes the low awareness on RPL among stakeholders. The study concludes by emphasizing the need to create effective awareness among RPL possible candidates, implementors and policy makers The study recommends aggressive and effective awareness creation among the 'Jua-Kali' traders in the twelve non-formal and informal trade areas as well as among the key stakeholders. Establishing an RPL centre in MMUST TVET Institute was deemed highly necessary to accommodate the 88.5% 'Jua-Kali' traders in Kakamega town, who are willing to have their skills and knowledge assessed and certified.

Key words: ***RPL, Jua Kali sector, skills assessment***

Introduction

This study assessed the knowledge and implementation of RPL and the skills and skill areas in the Jua Kali sector in Kakamega town. In line with Agenda number 4 of manufacturing, the President of Kenya HE Uhuru Kenyatta issued a presidential directive on 1st June 2021 for recognition of 'Jua Kali' skills (Nation Media Group, 2021). Other than boosting the Kenyan manufacturing sector, this directive has a direct impact on the education sector as it emphasizes Recognition of Prior Learning (RPL). The Continental Educational Strategy for Africa 2016- 2025 strategic objective 4, Agenda 2063 Aspiration 1 and Sustainable Development Goal number 4 all emphasize on quality education for the development of Africa's human and social capital.

Cognisant of the fact that RPL is used internationally as a tool for Life - Long Learning (LLL), access to higher education and credit towards a qualification and a key to building human capital and being innovative and competitive in a globalized, fast-changing world, the Kenyan government through KNQA Act number 22 of 2012 Section 4(C) mandated KNQA to develop a system of competence, life-long learning, and attainment of a national qualification. KNQA has mandated any university accredited in accordance with the Universities Act (No. 42 of 2012) to offer RPL services to clients/students.

The KNQA developed Prior Learning Assessment and Recognition (PLAR) or RPL policy and guidelines. These guidelines specify the roles of all stakeholders on implementation of RPL. It also details the funding of RPL. The guidelines and policy gives a leeway for every accredited learning institution to formulate institutional policy on RPL for cost-effective and proper implementation.

Statement of the Problem

Despite high expectations from RPL, Kenya is still experiencing a slow implementation, and difficulty in upscaling from project-based implementation to establishing a sustainable national RPL system that is accessible to all. Moreover, there is low RPL awareness among the entire RPL stakeholder ecosystem including Government, scholars, practitioners, industry, and potential candidates. This has resulted in low acceptance of RPL thus not only hindering the development of human capital but also causing its under-utilization.

Sessional Paper number 1 of 2019 singles out the challenge of Quality, relevance and inclusivity as major ailment to education system. Though setting up new institutions for RPL may not be essential, the capacity of existing institutions need to be strengthened. This can be achieved by setting up exclusive RPL units within these institutes, employing additional professionals, and using ICT to implement and monitor RPL systems. Masinde Muliro University of Science and Technology (MMUST) TVET Institute, recently being registered and accredited, is well suited to offer RPL services to the invisible skilled non-certified labour force within MMUST and Western Kenya.

Research Objectives

1. To identify key non-formal and informal economy-driving industries with uncertified skilled workers in Kakamega town.
2. To determine the level of need for RPL by Jua Kali workers in Kakamega town.
3. To identify the possible RPL processes and nomenclature suitable to MMUST in relation to Competency-Based Education and Training (CBET).
4. To identify the level of awareness on RPL among stakeholders.

Literature Review

RPL originated from the United States of America where war veterans were encouraged to resume their education (Harris & Saddington, 1995). Recognizing that these people already had experience and knowledge in a range of skills, American education authorities decided to develop short tests to assess aptitude and skills for credit of some kind. As a small academic industry, Andresen, Boud & Cohen, (1995) reported that by 1993, 1700 universities and colleges in the USA offered assessment and accreditation of prior learning and may have been doing so for over twenty years. This trend was quickly followed by countries like United Kingdom, Canada, Australia, Denmark and Germany (Velciu, 2014; Andersen & Aagaard, 2013)). In Africa, countries like South Africa and Tanzania have taken a lead on RPL (ILO, 2014).

In a study conducted by Hewson (2008), it was found that RPL has its own limitations. The study involved 100 VET teachers and educational experts and sought to determine the quality of assessment and learning within RPL. A major concern by the VET teachers and educational experts was that RPL does not allow for close and meaningful long-lasting relationship between the assessor and the RPL candidates thereby denying opportunities for formative assessments which are vital in the educational sector. This exposed the confusions and concerns regarding the reliability and consistency of assessment judgements, the nature of evidence requirements and evidence collection methods, and the quality of the learning experience for the candidate that holds practitioners back from implementing more RPL.

An ILO study on RPL states that its outcomes were generally positive for workers: they gained self-esteem, improved employability and, in most cases, it was either part of, or led to, further education and training. The study also mentions that it was sometimes undertaken to address specific challenges faced by various industries, for example, overall decline in business or quality-related issues, with objectives being met in all cases (Dyson & Keating, 2005).

Research Methodology

Study Area

The study was carried out in Kakamega town, Kenya. The town is sitting on an approximate area of 273.2 km2 and is located at a latitude of 0° 17' 3.19" N and a longitude of 34° 45' 8.24" E.

Sample Size

The Yamane formula (1967) was used to determine the sample size. A confidence level of 95% and P value was assumed at .5.

$$n = \frac{N}{1 + N(e)^2}$$

Where n is the sample size, N is the population size, and e is the level of precision. With a population of 700 for the 'Jua Kali' artisans, the sample size was determined at 157 people and 36 for 112 TVET trainers.

Sampling Techniques

Random sampling was done. The respondents were approached with the questionnaires where they were guided to answer the questions where necessary. Literate respondents were however left to answer the questions on their own.

The sampling error was minimized by determining the job rank of the respondents to get a clear picture of the respondents and their ability to answer certain questions.

Data Collection Method and Tool

The study employed the use of two structured questionnaires which were prepared based on the study objectives. The first structured questionnaire was appropriate for this study because it allowed the practical gathering of data that was easy to analyse. Section A of the questionnaire focused on the needs assessment and biodata of the Jua Kali workers. Section B was exclusively for the employers where their willingness to support their employees for assessment and certification was determined.

The second questionnaire allowed for the gathering of data on the implementation of RPL in various learning institutions and policymakers.

Validity

Validity is the extent to which an instrument measures what it is supposed to measure (Mugenda & Mugenda, 2008). Before data collection, the questionnaire was prepared in consultation with experts in the TVET sector to help in the validation. The comments and recommendations from the experts were used to improve the questionnaire.

Reliability

Reliability is the consistency with which an instrument measures what it is supposed to measure (Mugenda & Mugenda, 2008). In this study, the reliability of the questionnaire was ensured using a baseline survey with randomly selected 15 sub-ordinate staff in MMUST. These were more appropriate as they represent various Jua Kali trade areas in Kakamega Town. The reliability coefficient was estimated using Cronbach Alpha Scale to be 0.756α. The questionnaire was considered reliable after attaining the alpha coefficient above the threshold (0.70α) for acceptable reliability (Cronbach, 1975).

Data Collection Procedure

The data was collected manually using printed questionnaires. A total of 11 Jua Kali trade areas were targeted. These were Mechanical, Electrical, Welding, Masonry, Plumbing, Hotel Services, Carpentry, Textile/Dressmaking, Berber Services, and Hair and beauty services Sectors. A total of 157 respondents spread across the Jua Kali sectors were targeted. The respondents who could not answer the questions on their own were guided.

The second stage of data collection targeted the learning institutions and the Kakamega County TVET Directorate. Print hard copy and link-filled questionnaires were used. The questions in the print questionnaire were converted to link-filled questionnaires for convenience, and ease of filling by the target institution workers.

Data Analysis and Presentation

The raw data obtained were organized systematically through coding into Statistical Package for Social Sciences (SPSS) Version 25 to enhance analysis. Percentage and

frequency were used to describe the data and study population meaningfully. The analysed findings are presented using texts, images and tables.

Findings

The bio-data of the respondents was meant to inform the need for establishing the RPL centre in MMUST. The respondents in this age bracket are therefore most likely to enrol for the RPL assessment.

Many of the Jua Kali workers in Kakamega town assessed were aged between 21 - 30 years at 55% followed by 31-40 years at 26%. The lowest were aged below 20 years at 3% (Figure 1). This indicates that most of the Jua Kali workers are youth who are still needy of certificates. The majority were male at 74% while the female were 26% (Figure 2). This could indicate that the Jua Kali sector is dominated mostly by the male.
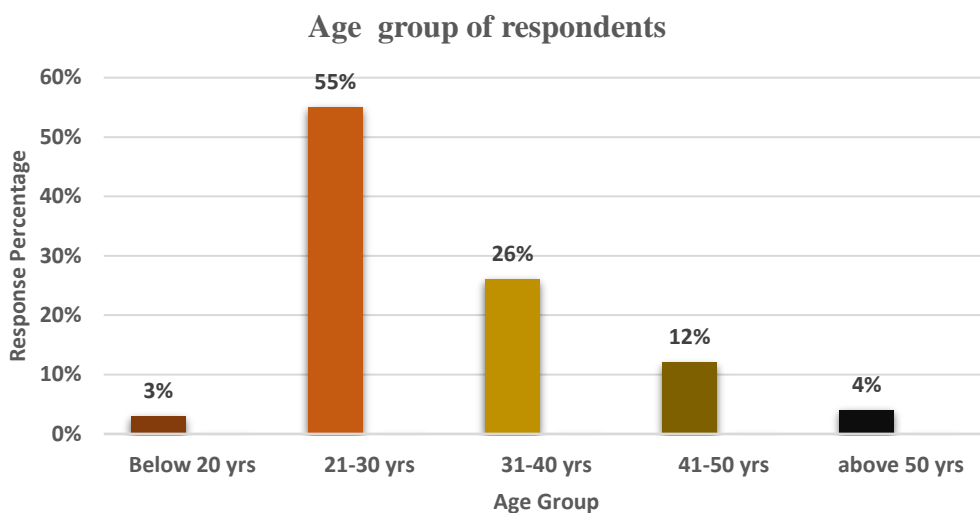
Age group of respondents

Figure 1: Age Group
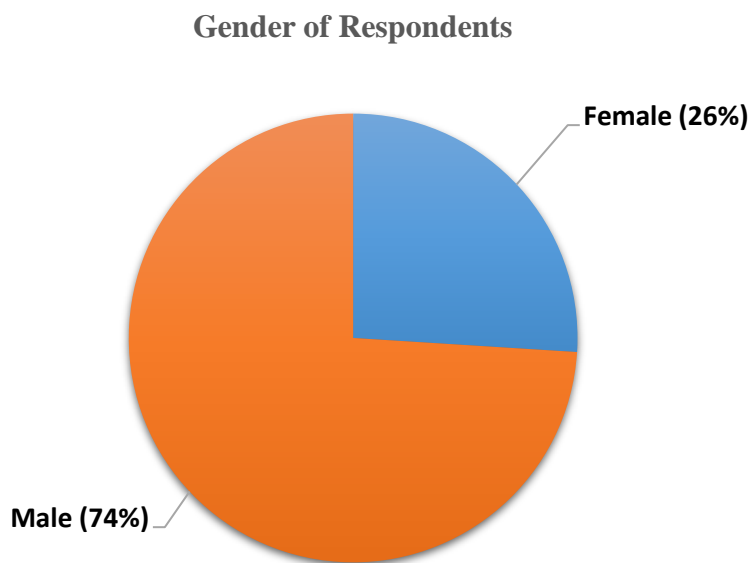
Gender of Respondents

Figure 2: Gender

Business Ownership

The data on business ownership was needed as the business owners or employers form an integral part of the key stakeholders. They are the consumers of skills and knowledge to be certified through RPL and therefore their opinion on RPL must be taken into consideration.

The respondents were asked about their position in the business. A majority at 66% were found to be employees, and another 22% were supervisors (Figure 2). The employers were 12%. This indicates that most of the skilled Jua Kali workers are employees.

Rank of Respondents
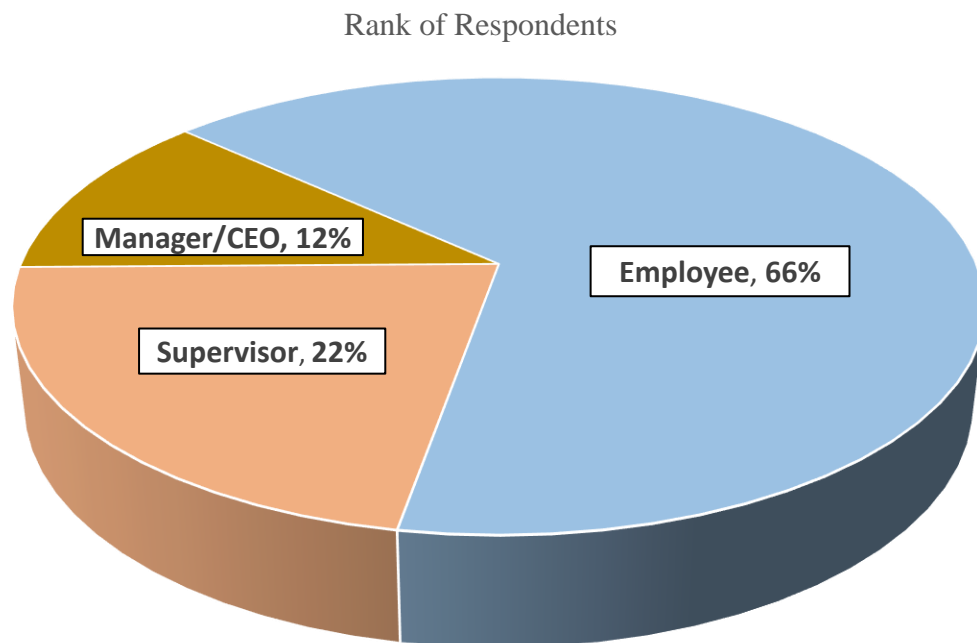
Figure 3: Respondents Ownership and Rank

Relevant Training and Certification for the Job

The majority (51.6%) of the respondents had been trained by their colleagues at work but have no recognized certificate to prove that they have been trained. Other 16.6% are still being trained by their colleagues at work place. Only 22.3% of the respondents have a certificate as evidence in their work (Table 1). This clearly indicates that most of the Jua kali workers in Kakamega town received their skills and knowledge for their work from their workplace.

Table 1
Relevant Training and Certification

Do you have Relevant Training and Certification for your current Job?	Frequency	Percent	Valid Percent	Cumulative Percent
No. I am still being trained by my colleagues at the workplace No. I am still undergoing training in a formal institution	26	16.6	16.6	16.6
No. I am still undergoing training in a formal institution	3	1.9	1.9	18.5
Yes. I have been trained by my colleagues at work place but I have no certificate	81	51.6	51.6	70.1
Yes. I have gone through formal training and I have a certificate	35	22.3	22.3	92.4
Yes. I have gone through formal training but I never completed	12	7.6	7.6	100
Total	**157**	**100.0**	**100.0**	

Knowledge and Awareness on RPL

This was meant to determine the level of awareness on RPL among the 'Jua Kali' workers. This was meant to determine the level of awareness on RPL among the 'Jua Kali' workers. This would then inform the level of education or awareness creation that is needed before implementing RPL in MMUST TVET Institute.

There is low awareness on RPL by the Jua Kali workers. This is indicated by the fact that 93% have never heard of RPL. (Figure 4)
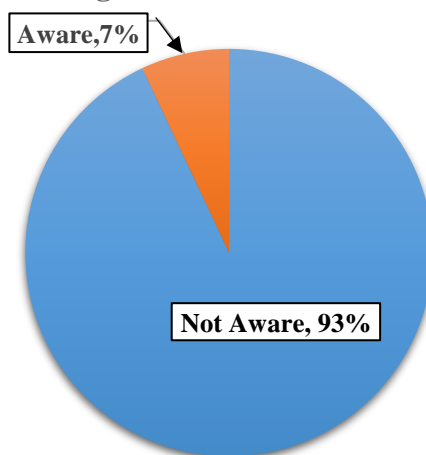

Figure 4: Percentage Knowledge and Awareness on RPL

Acceptance to be Assessed and Certified

Acceptance by the 'Jua Kali' artisans to be assessed will be key to the success of RPL process.

The respondents were asked if they are willing to be assessed and given a government recognized certificate, relevant to the skills and competencies they possess. A majority (88%) were willing to be assessed and certified while 12% were not willing (Figure 5). This fact indicates that there is high level of need for RPL by the uncertified skilled Jua Kali workers in Kakamega town. This would rightly justify the creation of an RPL centre in MMUST.
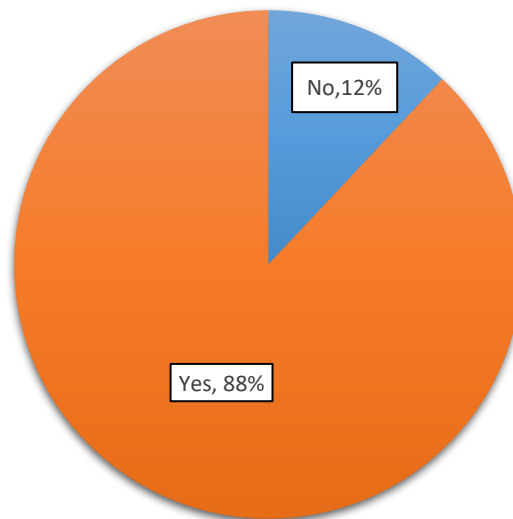
Assessment acceptance

Figure 5: Willingness to be Assessed and Certified

Implementation of RPL by Learning Institutions

The study sought to find out whether learning institutions or RPL implementors were already in the process on skills and knowledge assessment and certification. This was meant to determine the level of awareness and thereby implementation of RPL.

The respondents from the learning institutions were asked whether their institutions were involved in implementing Recognition of Prior Learning. This was meant to identify the level of implementation of RPL. While most of the respondents (80.6%) against 19.4% acknowledged that their institutions have never been involved in RPL (Fig.6). This indicates that most learning institution were yet to begin implementing Recognition of Prior Learning.

Has your institution Ever been involved in Recognition of Prior Learning Proces? (36 respondents)
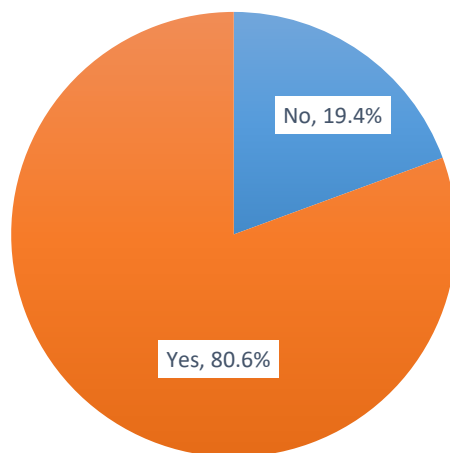

Figure 6: Involvement of Institution in RPL Implementation

A majority (58.3%) stated that they have enough trained staff to implement RPL. A further 30.6% stated that their institutions do not have enough trained staff to implement RPL while 11.1% were unaware if they had enough trained staff to implement RPL (Figure 7). The minority (19.4%) who responded to have been implementing RPL stated so because of credit transfers during admission. This indicates that there is low implementation of RPL and more efforts should be made for full and effective implementation.

Does your institution have enough trained personnel to understand/implement RPL? (36 respondents)
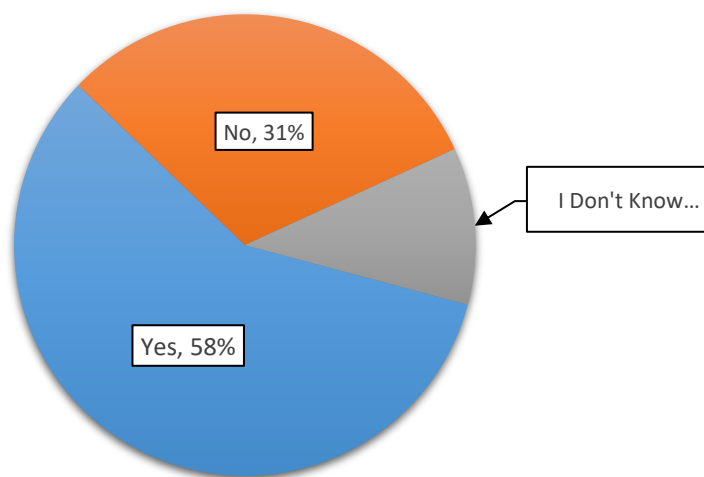

Figure 7: Presence Enough trained personnel to implement RPL

Conclusion

The study identified 12 key formal and non-formal sectors of the 'Jua-Kali' trade areas that drive the economic activities in Kakamega town. These 'Jua-Kali' trade areas include; Mechanical, Electrical, Welding, Masonry, Plumbing, Hotel Services, Carpentry, Textile/Dressmaking, Berber Services, and Hair and beauty services sectors and are key to the economy of the country at large. Despite the low

knowledge on by the potential RPL candidates (at 93%), the study proved that there was a high level of need for RPL among the 'Jua-Kali' workers (at 88%); It also proved that with aggressive awareness programs on RPL, more potential candidates will be willing to be assessed and certified.

The study found that KNQA has already established guidelines and policies on RPL. MMUST TVET Institute, therefore, can formulate an RPL institutional policy (processes and nomenclature) based on the KNQA guidelines and policy.

Most of the learning institutions are aware of RPL yet they have not formulated institutional policies guiding its implementation. The results also proved that the implementation of RPL by the various stakeholders was still low. This would justify the creation of an RPL centre at Masinde Muliro University of Science and Technology TVET Institute.

Recommendations

The research recommends the following:

i) Improvements on the key 'Jua-Kali' trade areas should be done to boost the confidence and skills of the workers. This should be done through certification of skills and knowledge gained at work.
ii) More awareness should be created on RPL among the stakeholders. This would boost the level of confidence on RPL and make it more acceptable to the industry.
iii) Institutional policies guiding implementation of RPL should be formulated in line with the KNQA RPL policies and guidelines. MMUST TVET Institute in particular, should formulate the RPL institutional policy in preparation of implementing RPL.
iv) An RPL centre should be established at MMUST TVET Institute as there are many potential candidates within Kakamega town who are willing to enrol in the program.

Acknowledgement

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