Assessing the Achievements of the Re-Alignment of an Industry Educatiocal Based System in Society

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Abstract: Educational systems in their various forms, do save a greater purpose in any society. Education is positioned as an equalizer of society transcending its purposes in all sectors and its broader presence does pose a greater risk of its sustainability to the benefit of humanity. The study took to explore intricacies of the re-alignment of the educational system to an industry with a view to sustain its core usefulness. The re-alignment of the education system is re-envisioning an industry driven education system at higher education. The study objectively did establish the preparedness at policy level the re-alignment of an industrial based education system from both industry and educational sectors. An exploratory study design was undertaken involving a qualitative approach with a sample size of 6 participants from both the industry and education sectors.

A key finding revealed that there is existence of a sectoral position and understanding for the coexistence of the two sectors with much of the contextual information relating to an outstanding widening opposites of the two than proportional to each other.

It is recommended that the two sectors operationalize the re-envisioned industrial based education at higher education by overcoming wars that have been outstanding and standing on its way. A twined system of a re-envisioned industry and education sector should be the frontier of the education policy.

Keywords: Industry; Education; Re-Envisioning; Re-Alignment.

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I. INTRODUCTION

Educational systems in their various forms, do save a greater purpose in any society. Education is positioned as an equalizer of society transcending its purposes in all sectors and in its broader presence does pose a greater risk of its sustainability to the benefit of humanity. The risk from the education sector as Patrizia and Giuseppe (2017) allude arise when graduates are unemployed which becomes a cost to an economy as production growth is restricted. The risk that arise as part of an educational crisis affecting most of this sector globally which is closely linked to unmatched needs of learners to those of the labor market or industry sector.

The 2022 Zambia Annual Labour Force Survey Report (2023) indicated that the unemployed labor force stood at 31% which included most graduates from higher learning institutions around Zambia. A number of critical issues arise understanding the intricacies of re-aligning an educational system to the industry sector with a view to sustaining its

core usefulness. The re-alignment of the education system is to re-envision an industry educational driven sector at higher education.

Higher education is a level of learning at post-secondary of an education system which leads a learner to earning a diploma, certificate, degree and postgraduate qualification in most societies. The Zambia qualification Authority (ZAQA) provides description of levels of education qualifications indicating what forms of qualification one would obtain (ZAQA,2016). It has not been that long when the government in 2019 enacted the Higher Education Policy to exist independently or distinct in order to effectively review and strengthen the performance of education in the higher education sector.

The higher education policy (Act No. 23 of 2021) in its effort to streamlining Higher Education, has been building on what did not work in the previous policies and creating what will work. This has also been similar to The National

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Industrial Policy (2018) approach, showing what worked and did not, a reflection of recreating what will work targeting on making policies responsive to the community's demands to reducing unemployment among unemployed graduates.

> The Higher Education Sector

In Zambia the education sector has undergone policy reviews since 1964. The government pays particular attention to the sector of education owing to the fact that society evolves and so is demands from the population to improve the education system (Zambia Policy Review, 2016). The education sector has had to fulfill educational needs at all levels of education such as primary, lower secondary, upper secondary, technical, vocational and entrepreneurship and higher education. The improvements in education are aimed to achieving the Zambia 2030 vision of becoming a prosperous middle income country. Therefore, the critical issue about education is, 'at what point does it matter to society?' It is at a point were graduates at tertiary or higher education level fit-in their skills into an industry sector translated to contributing to a developing country in various productive sectors. In turn the growth in various productive sectors of a country will have impact on improving human development conditions.

Helix Models of innovations in re-aligning the education and industry sectors

The Helix Models are founded on the premise that systems or processes of any nature of society such as the ecosystem can only succeed when they work intertwined or twisted together (König, Suwala and Delargy, 2020). The systems in operations we see in our society have always succeeded not as a result of one entity or person but a frontier of forces behind them. Therefore, the Helix models have been adopted in society such as Germany for use in their educational systems for alignment with relevant sectors. (Etzkowitz, and Leydesdorff, 1995).

The basis of the Helix Models when adopted in a sector are assumed as fused approaches for better outcomes. The Helix Models were earlier adopted to combine three helices referred to as Triple Helix. The Triple Helix represents three helices, the first is academia (education), second, Industry (economy) and third, the Government (public sector subsystems). The Government in the Model is the dominant Helix that acts like an umbrella to the two others for providing an enabling environment for all to thrive. The Triple Helix operate based on knowledge and innovation that has a force to organize, educate and integrate society's sustainability. According to the Model, when these three helices are in operation, they are quite complex as (Lewontin, 2001) allude that they have to get fitted in one direction and need to operate based on interlocked forces to succeed. The models relate to how the education sector, industry and government may forge a collaborative form of operation to achieve alignment and success of work.

There have been further additions to the helices which now count up to five, the fourth being called the quadruple and the filth, Quintuple Model. These models have influence that require renewing sectoral processes to embrace models that bring about change. These are regarded as relevant models to approaches needed for re-alignment of the education and Industry sectors with a level of understanding the nature of the engagements within the processes taking place.

> Study Objective

To assess achievements of re-alignment of an industry educational based system sector of society

II. METHODOLOGY

> Design method

An exploratory study design was undertaken involving a qualitative approach and secondary data review. The sample size was 6 which involved exploratory study of key Informants representing both the industry and higher education sectors. The key informants had vast experience in either fields and limiting the number to 6 was guided by information saturation which needed few key Informants to supplement secondary data obtained from Policy documents, journals and websites. The choice for selecting key Informants was purposive sampling and a snow ball ensured as those interviewed later directed the Researchers to others with key knowledge to the study.

The data analysis was done by creating themes from gathered information obtained through face to face or telephone interviews and document reviews. The consideration of ethics was involved in the process of the study, by informing participants that they were to be part of the data collection of the study and informed them that the use of the information was purely for sharing knowledge. The participants were told that they had the right to decline if they were uncomfortable. The study also assured participants that confidentiality was going to be held by not disclosing their names in the study.

III. DISCUSSION OF RESULTS

Policy Emphasis on Aligning Education and Industry to Evolving Societal Needs

There was a general consensus among respondents that policy statements do emphasize the need for alignment between education and industry. They affirmed alignment of the two sectors, 2013 and 2024 (revised) Higher Education Act and Industrial Policy Act of 2018 and 2024 (revised) in Zambia, which underscores the importance of graduates possessing industry-relevant knowledge and skills. Another respondent highlighted the potential benefits of this alignment in addressing societal needs, particularly criticizing the current educational system for its limited impact, especially in earlier stages of education when they said,

The approach can help to impact and understand society's needs. Most educational skills acquired say from primary to secondary education end up with little impact in society. Therefore, re-alignment of the approach would be so beneficial.

need for fund allocation in that regard.

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https://doi.org/10.38124/ijisrt/25apr1971 lack of long-term, strategic coordination between the two sectors. The Higher Education policy of 2013 refer to the

Karyanto, et al ,2023, allude to the need to align higher education needs to that of the ever changing industry as a pivotal concern. The curricula tailored to the needs of the industry will show the readiness of higher learning institutions to meet industry demands. However, one respondent expressed **uncertainty** due to not having had the opportunity to review the relevant policy statements. Their response suggested a possible gap in communication or awareness of such policies among stakeholders. The issue of engaging stakeholders is critical as they form part a channel to identify needs of the industry when designing training programmes. Among the respondents, one was well versed in higher education matters, and indicated that the Higher Education Policy in Zambia was a comprehensive document, when they said,

The Policy does put emphasis of the need to engage critical stakeholders such as those from the industry at programme design level of curricula in higher learning institutions and if this is overlooked then the impact will not be achieved for aligned industry skills to training programmes.

However, Cleary and Van Noy 2014 asserts that, the issue of aligning education needs and Industry to non-actors in the process may seem non-complex which not the case in reality is. The process to engage stakeholders may require to involve quite a number of them to lead the process to aligning educational needs to the job market or industry. Therefore, as Nhleko, and van der Westhuizen, (2021) indicate that curriculum redesign is a critical tool for higher education to adopt in responding to the needs of society or industry

➤ Collaboration between Education and Industry in Labour and Employment procedures

Among respondents, the responses reflected mixed perspectives on whether education and industry had collaborated effectively regarding labour and employment. A part of respondents affirmed that collaboration existed, pointing out sectors such as Medical education where practice-based training directly equipped graduates for employment. Gaus N et al, (2020) allude that the fields of education that seemed aligned to the industry could be as a result of market dynamics demand nature or the rise in demand of that skill on the market. However, both responses acknowledged that collaborations remained superficial and require further development, particularly in providing students with clearer pathways for sustainable employment.

Another respondent indicated the need to engaging mechanism in form of generated data to reflect reality. Tracer studies of former graduates as indicated by a respondent were needed in order to understand obtaining matters at job market level or industry and others affirmed the usefulness of such (Cuadra, Aure, Gonzaga, 2019).

However, another respondent doubted the presence of collaboration and highlighted inadequate budgeting for such initiatives. They said it was to be noted that the education system does not align with employment trends, implying a

Commitment to Collaboration in the Education and Industry Sector

To show their commitment in collaboration by the two sectors, respondents suggested several actions. A continuing financial support for training centers and providing space for student industrial attachments were seen as key steps. Additionally, formal agreements between higher learning institutions and industry are recommended to foster deeper alignment. This is emphasized in both policy documents for the need to establish financing models to foster the process of alignment (Clause 9.4: Funding for Technical Education, Higher Education Policy 2013 and Clause 10.4, Funding and Resource Allocation, Industrial Policy, 2024)

One respondent also emphasized the importance of maintaining databases to track employed graduates, including those working abroad such as Nurses, Teachers and Medical Doctors. This approach could provide both sectors with vital data to guide long-term planning and improving the alignment of educational outcomes with Labour Market demands. Ruge, Tokede and Tivendale (2019) stress that contemporary Higher Education would have to trend with intermutually education approaches with emphasis on curriculum design of programs that are aligned to the industry foregoing the traditional ones set on desired disciplines linking to the industry. The traditional curricula are designed in a way that they set study programmes and the Industry would have to select what was relevant from them, however, the contemporary's focus on aligned curricula to the Industry has to remain relevant allowing both to plan in collaboration.

A number of responses from study respondents, indicated ranging views regarding the readiness of the two sectors to aligning their policies to meet societal needs. The **Private sector involvement** in financing skills training centers was seen as a positive sign, along with the presence of **good policy statements** that suggested a theoretical commitment to collaboration. The **willingness of Industries** to host students for practical experiences such as learning tours and attachments was another indicator of alignment and commitment. There was a gap in funding expressed and sources of funds as Musonda (2022) indicate that the State alone wouldn't manage to fund the educational sectors in the case of Zambia but involvement of the private sector society would be ideal.

However, one respondent felt that there were **no clear indicators** of readiness from the two sectors to re-align, pointing to a gap between policy and practical implementation. This highlights the need for more visible and tangible signs of alignment beyond policy rhetoric. The policies highlight the need for practical implementation as indicated in Clause 1.1 (Revised Higher Education Policy, 2024): "Establish a steering committee consisting of key stakeholders from both the industrial and educational sectors to oversee the alignment of educational programs with

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industry needs." As Kangwa, and Nyirenda (2021) review that a **Steering Committees and Task Forces** comprising stakeholders from the education and industry sectors had been established to draft and oversee policies that align education with industry needs and not much had been seen to have worked effectively.

> Setbacks in Aligning Education and Industry

Certain respondents did identify several key setbacks hindering the alignment of education and industry sectors. One major issue pointed out was the **misalignment of curricula** with industry trends, which prevent students from acquiring the skills needed for the modern workforce. Another major barrier was the **lack of an integrated planning framework** and weak interpectoral collaboration. Additionally, the general **lack of seriousness** from stakeholders and a failure to identify education needs in relation to Labour requirements further exacerbated the problem. Although Normand (2020) allude that development of assessment metrics are to be established to practically identify effectiveness of the alignment process of education and industry that now seem to be un-aligned.

IV. CONCLUSION

The two sectors, Education and Industry have differing perspectives to suggests that both struggle with systemic challenges that go beyond surface-level collaboration and require more coordinated efforts to address the need for realigning the sectors. As one respondents Participant indicated that most Higher Education institution seem not to see the need for a Quality assurance assessment of most of training programmers which such a change would help the institutions to improve.

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