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# The Function of University-Industry Linkages in the Implementation of Undergraduate Field-Based Learning in Higher Learning Institutions in Ethiopia

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## Abstract

The purpose of this study was to review the function of UIL in implementing FBL in HEIs in Ethiopia. A total of twenty studies which were published between 2020 and 2021 were analyzed to examine the function of UIL in implementing FBL in Ethiopian EHEIs. The resources were collected through online and offline means. The results of the study revealed that the UIL, in the implementation of FBL, was not properly practiced vis-à-vis the UIL implementation guidelines. Even though, there are major enabling conditions for the UIL to implement FBL such as availability of policies on the UIL; UIL implementation guidelines developed by the HELIs, MoU made between Universities and industries; commitment and to offer logistics by the universities for the FBL, universities didn't play a leading role in facilitating the implementation of the FBL. It also reveals that the major challenges in the implementation of FBL were: inability of the two parties to translate the MoU into practice; shortage of industries. Therefore, although UIL is crucial to implementing FBL, UIL, is not implanted as stipulated in the implementation guidelines, and thus, the function of the UIL in the implementation of the FBL was below the expected standard. Thus, it is suggested that the two parties should renew and strengthen their partnership for the mutual benefit. In this regard, universities should play a leading role as the UIL primarily provides students with first-hand learning and employment opportunities.

## Keywords

Field-Based Learning, Higher Education Institutions, University-Industry Linkages, Internships, Recruiting

## 1. Introduction

Universities have long been known as centers of knowledge creation, creativity, and technological advancement. A shared integration of university and industry will promote the growth of the communities in which both operate, according to experience through field-based learning (FBL) (Barnett, 2011). For instance, integrated research and education helps maintain the flow of human resources from universities that contributes to an educated, trained industrial workforce. University graduates and faculties should also involve in many technology-based, start-up companies (Henderson, 2018).

Furthermore, fruitful university-industry linkages (UILs) help local firms to import, modify, and diffuse technology (Schiller, 2008; Radrigues, 2009). University-industry collaboration can also expand the relevance of research outcome in public institutions, foster the commercialization of public R&D outcomes, and increase the mobility of labor between public and private sectors (AbebeAssefa, 2016). In a similar way, firms' interaction with universities may grant access to specialized knowledge and the opportunity to conduct high-quality research (Hussler, 2010; Laursen, 2004), thereby creating new possibilities for innovation development (Cohen, 2002; Barnett, 2011).

According to Radrigues (2009), universities' value as key creators and discriminators of scientific knowledge demonstrates their substantial development. In this context, Ahmed and Jumani (2013) suggest that establishing direct relationships between universities and industries as well as expanding functions, can help universities increase their innovation capacity in a knowledge-based society. Furthermore, these expanded functions increase universities' innovation capacities in a knowledge-based society by establishing direct links between universities and industries (World Bank, 2003; Adeoti, 2009; Khan, 2013; AbebeAssefa, 2016), similarly Guimon (2013). This assumption was also highlighted that universities and industries must interact not only to create common gals but also to employ knowledge for development.

### 1.1. Current Practice in Ethiopian Public Universities and Industries

Ethiopia has recognized the significance of university-industry cooperation and created its own set of guidelines (Joseph, 2016; MoSHE, 2013), also added that MoSHE has designed procedural directive for the linkage of education and training, research institutions and industries. Moreover, Banbul and Sintayehu, (2017), argue that, collaboration between universities and industries is the significant part of the field-based learning implementation process that is often ignored. However, one of the most popular ways of UI linking is field-based learning. This could be realized by the placement of students in industries during their studies to gain practical experience. Many Ethiopian universities do this, but it necessitates higher institutional capacity and commitment in order to gain full benefits.

UIL can be implemented in a variety of forms, including internships, internships, and cooperative agreements. Internships are programs that enable graduates to advance their careers by allowing them to learn through realistic and meaningful experiences at different internship locations (Khan, 2013; Ahmed & Jumani, 2013; Barnett, 2011). As a result, through course work, these formal interactions entail the realistic implementation of previously studied theory.

Internships are tailored to students' long-term goals and encourage them to investigate careers that require additional training, certification, or on the job experience (Raesfeld, 2012). Extern-ship, on the other hand, is the method of transferring university academic personnel to specific industries for career development activities. Furthermore, innovations can be passed through various cooperative arrangements with industries. In this regard, the integration of Ethiopian public universities and industries through FBL strategy is a serious issue that needs to be investigated not only for the nation's development but also for the enhancement of long-term peace and stability by reducing unemployment. According to Merrill (2015), a field-based inquiry-focused course model established for the delivery of an undergraduate field of study has a considerable impact on students skills and attitudes.

### 1.2. Statement of the Problem

In the global sphere, a number of studies have been conducted in the area of the function of UILs in the implementation of field-based learning in higher institutions. For instance, a study carried out by (Marotta, 2007) on human capital and UILs role in fostering firm innovation. Furthermore, Saint (2004) in his research entitled "higher education in Ethiopia: the vision and its challenges in Africa" reported that educators, officials, and stakeholders should place a high emphasis on field-based learning implementation, in order to generate well-equipped and professionally trained manpower that can operate in the 21st century workforce (AAU, 2012) can be evident.

However, Banbul and Sintayehu (2017) in their study found that UIL was still in its infancy in Ethiopian public universities, with small areas dominated by student internships stage of development in public universities with limited areas, dominated by students' internship. In a similar way, a study carried out by Gashahun (2020) on "UIL practice in Ethiopia", indicates that student internship programs and sponsoring research works are the two major areas where the institute is collaborating with the industries and thus, the institute/university has to reform its incentive mechanism for researchers.

Overall, the above studies highlighted importance of the role of UILs in the implementation of field-based learning (FBL) in higher learning institutions but all didn't focus on the specific issues of the role of UILs in implementing FBL in higher education institutions (HEIs) in Ethiopian. To this end, researchers disclosed that much attention in FBL implementation is becoming serious problem in Ethiopian higher education system. Most of the previous studies do not take into account the role of UILs in the implementation of FBL in higher institutions

and these issues were not explicitly addressed in the studies in the field in Ethiopian context (Saint, 2004).

Therefore, this study is more elaborated in terms of its depth. In addition, this study differs from other related studies in terms of its breadth. As indicated in the literature, no such all-encompassing studies that assess the role of UILs in the implementation FBL in Ethiopian higher institutions. Accordingly, while several studies have been conducted with a prospect, challenges, and (content gaps) focused on higher education (area gaps). Hence, currently, we felt this problem is worth investigating and the analysis tried to fill in the gaps in both theory and practice by examining the role of UIL implementation of FBL in higher learning institutions in Ethiopia. Furthermore, it paves a way for further research to investigate the issue more in depth. Accordingly, the study is intentional with the following aim in line with four guiding basic research questions.

### 1.3. Basic Research Questions

1) To what extent is the university-industry linkages (UIL) practiced in implementing FBL in HEIs in Ethiopia?

2) What opportunities are in place to effectively implement field-based learning (FBL) in HEIs in Ethiopia?

3) What are the challenges that unconstructively affect to effectively implement field-based learning (FBL) in HEIs in Ethiopia?

4) What should be done to strengthen the UIL so as to effectively implement field-based learning (FBL) in HEIs in Ethiopia?

### 1.4. Review of Related Literature

It is expected that Universities will produce employable graduates by implementing skill-based education and facilitating teaching and learning strategies to improve the development of employability (Schulz, 2015) "stated, there is evidence of gaps between the perspectives of students, graduates, employers and higher education personnel in how to approach the overall higher education experience for heightened employability" (Merrill, 2015). Consistently, Barry (2010) also emphasized that the challenges of navigating an increasingly complex world of work have been prefaced, such as the link between self-development, understanding the characteristics of work, authentic delivery and industry experience.

Fraser (2019) found that Knowledge of how well higher education providers are preparing learners for the world of work is becoming increasingly important at all program levels, and this is by no means more evident than with vocational education. Similarly, a significant research conducted by Encarta Dictionary (2009) shows that the effectiveness of the provision of skills in higher education has been demonstrated. Its main conclusions have been that employers value mostly those skills that can only be easily developed in the workplace and that there has been no significant link between enhanced University skills and increased job opportunities.

Moreover, from the studies mentioned above, it can be understood that skill development is crucial to improving personal experience and to enhancing one's long-term existence. Therefore, education providers such as technical and vocational training and higher education institutions need to focus on skies-based curriculum implementation. Furthermore, the following sub topics may provide detail understanding of aforementioned thought.

### 1.5. Current Practice of FBL in Higher Education Institutions

The literature on field-based education programs for undergraduates is plentiful, but amazingly discouraging in answering the most important question of all, "What variation does it make in the lives of students?". Fundamentally, FBL differs from instruction that simply occurs in the field in two distinctive ways (Kozar & Marcketti, 2008). First, FBL is learner-centred, where students make discoveries by engaging in a learning experience. Second, it is inductive, where students employ the logic and reasoning of their discipline.

Depending on learning outcomes, an FBL experience could also be inquiry or project-based. At its core, FBL is essentially "learning by doing." Along with engaging in experiences first-hand, field-based learning should also involve personal reflection (Nicholson, 2011). In this regard, Jarvis (2010) cites the work of John Dewey, when she points out that experience itself is not enough: "Field experiences are most likely to be academically and intellectually valid if they are carefully planned and monitored, structured to serve specific learning goals, and preceded by orientation and preparation. Students also need ongoing opportunities to reflect actively and critically on what they are learning from the field experience and to assess the results" (p. 167).

## 2. Methods

In this paper, content analysis approach was utilized. As Leedy and Ormrod (2001), define it, "A detailed and systematic examination of the contents of a particular body of materials for the purpose of identifying patterns, themes, or biases." A total of twenty studies on Ethiopian curriculum issues published during the years 2020-2021, were reviewed. These include 14 journal articles, 3 government anon-governmental organization reports, and 2 policy issues on UIL and 1 proceeding paper.

The data were accessed online through Google Scholar, Google, and ProQuest dissertation and thesis were searched by using different combinations of the words "Ethiopia" "stakeholders" "curriculum" "education" and also, a general search was performed on Google to access reports of international organizations that are pertinent/relevant to Ethiopian education stakeholders. The collected data were placed into four themes including the function of UIL in implementing field-based learning, Factors affecting the effective relationship between Universities and Industries, Factors strengthening University-Industry partnership, and Potential collaboration opportunities.

Both primary and secondary sources have been used to collect the necessary data. Primary data sources were obtained from printed materials, while secondary sources were accessed online via Google scholar, Google, and were searched using different combinations of the terms Education, FBL and general searches were conducted on Google to access reports from the international organization.

### 2.1. Sample and Sampling Techniques

The samples were drown by collecting 70 related literature's and after intensive reading and refining 20 articles and documents that are more suitable for the current study in particular, those on higher education-industry linkage or FBL were selected and categorized according to their aim and purpose for analysis.

### 2.2. Document Analysis

Upon reviewing the reports and articles, the researchers generated four themes, and data were grouped thematically. Accordingly, the four themes include: Viz, the role and practice of UIL in implementing FBL, opportunities to effectively implement FBL, challenges affecting the effective implementation of FBL, and strengthening the UIL to effectively implement FBL in EHEIs.

## 3. Results and Discussions

### 3.1. Practice of Implementing FBL in HEIs in Ethiopia

This global perspective will give us a lesson on field-based learning implementation practices in Ethiopia. The next subject under this category was, the role of UIL to Produce Graduates with employable Skills studies of Banking and Finance Graduates' Attributes from the Educators and Industries Perspective (Shewakena, 2017). This study dealt with the role of university-industry partnership in production of banking and finance graduates with employability skills from an educational and industrial point of view. Finally, the researchers concluded that the integration of employability skills and competencies needed for the successful on-the-job performance of graduates requires strong collaboration between universities and employers throughout the curriculum implementation process.

The reviews in this category reveal that to improve students' learning engagement for better results and make them meaningfully attentive in their learning, teachers in the Ethiopian Higher Educational Institutions shall be capacitated in a way they create conducive learning environments and meaningfully apply effective instructional strategies like field-based learning tasks, problem solving tasks, independent project works, peer-based academic discourses, and debates (Gedifew & Bitew, 2017).

The papers also identified that in addition to education inputs, students' learning becomes meaningful and productive when the instructional situation is friendly, supportive and service-oriented and supported by field-based learning. Researches also show that teaching staff exhibiting servant behaviors set high

standards for students' learning, create smooth interactions and encourage academic and civic excellence among students they serve by facilitating conducive environment in linking students learning with industries practical experience (Conner, 2016).

One of the reviewed article which was conducted by Guya, Moges, Temesgen, Adem (2019) suggested that there were communication gaps and misconceptions between the university and industry, highlighting the importance of discourse and mutually beneficial interactions. Students lack basic knowledge, skill, and attitudes for working in industries, according to industry reports, which demands for curriculum change and the formulation of standards for effective student practical experience in industries.

It is also reported that only 15% of firms paid the extern/interns, while 70% of industries had suitable working space for students. Students should have good time management skills, analytical skills to address industry challenges, and written and oral communication skills, initiatives, teamwork, critical thinking, and interpersonal skills are also mentioned as crucial aspects for good UIL (Gedifew & Bitew, 2017). In this regard, EEDRM (Ethiopian Education Development Road Map, 2018) document noted that, "Students learn not only in classrooms rather, they are made to learn from their peers, the work place (field-based) through placement and projects.

Similarly, assessment is not restricted to "classroom paper based". Furthermore, according to ESDP V (Education Sector Development Program 2015/16-2019/2020), One of the goals for higher education is: "to produce competent graduates who have appropriate knowledge, skills and attitudes in diverse fields of study" however, this objective was not applied as intended by the government because of some uncontrolled constraints form the industry side and practical and genuine Implementation of the FBL activities from the side of both the instructors and universities need more emphasis.

Therefore, according to the studies and official documents such as Ethiopian education and training policy, Ethiopian education development road map, and ESDP V reviewed emphasis that universities, instructors, and industries have to pay due attention to FBL to realize the intended program in relation to Ethiopian higher education institutions. To this end, the major enabling conditions (considered as opportunities) for the UIL to implement FBL were availability of policies on the UIL; UIL implementation guidelines developed by the HELIs, memorandum of understandings (MoU) made between Universities and industries; commitment and budget allocation, including logistics (vehicles, dormitories, incentives for the students and instructors, etc.,) by the universities for the FBL in the form of, for e.g., internships, extern-ships, apprenticeships, practicum; recruiting graduates from the trainees by the industries; and demand by the staff and students for the FBL.

### 3.2. Opportunities to Effectively Implement FBL in HEIs in Ethiopia

This category is the fourth category of this review. In this category, attempts

have been made to explore the opportunities to effectively implement field-based learning in HEIs in Ethiopia in Implementing field-based learning in public Higher Learning Institutions in Ethiopia. FDRE (2019), noted that, universities play an important role as leaders in teaching and learning, in education, research and technology. In this regard Nega (2017), also reported that, in teaching activities, universities provide the professional training for high-level jobs, as well as the education necessary for the development of the personality. This implies that universities have to plan and implement field-based learning to produce skilled and knowledgeable graduate for the world of work.

Similarly, Dill, D., & Van, F. (2010); Banbul & Sintayehu (2017) argue that the role of the universities is very important to all sectors from social as well legal point of view. They also Reported that, universities can help in providing the new knowledge and skills needed to meet the challenges of sustainable development in a community, in raising public awareness and providing preconditions for informed decision-making, responsible behavior and consumer choice through their students engagement in the field-based learning strategy.

According to Nega (2017), universities are considered to have been regarded as key institutions in processes of social change and development. Hence, the most important role universities have been assigned is the production of highly skilled manpower and research output to meet perceived targets.

Accordingly, Higher Education Proclamation No. 650/2009 of Ethiopia, established systems that, help universities to realize these systems which include the following sub-systems including Universities and National Laboratories, the financial support networks, the research & technology Parks/Incubators, the National Innovation Park-System, Businesses Enterprises and the National Quality System (NQS) need to work in line with more emphasis to enhance an opportunity for the collaboration of FBL implementation and to enhance opportunity for the job market for graduates, as these are the key players involved in the actual work of technology transfer, diffusion, and research.

Furthermore, these studies recommended that the ministry of science and technology has to establish its own research institutes and science and technology support centers as deemed necessary, especially in strategic areas that requires FBL attention. On the basis of the above assumptions, we may conclude that universities play an important role in both the private and public sectors in three main areas: 1) contributing to fundamental research, 2) incorporating established knowledge, 3) education and training in terms of FBL.

On the other hand, the centralized education system, weak leadership, large number of students, low numbers of eligible faculty members, insufficient research and teaching facilities, and financial difficulties, explains why the majority of universities remained inefficient on their expected duties and responsibilities (Shewakena & Belay, 2017).

It can also be argued that the Furthermore, the establishment of FBL, supporting the establishment and management of science parks and technology incubators for technology transfer, private sector active participation in curricu-

lum development which encompasses the integration of the FBL with academic community, and government agencies, establishing organizations and the growth of academic linkage programs are all contribute to the interaction of both universities and industries and help to realize the goal of connecting students to the real work world. As a result, the current study will help countries like Ethiopia, where there are a large number of university graduates in each year and the need to connect universities and industries is critical for improving UIL through FBL and lowering unemployment.

### 3.3. Challenges Affecting Effective Implement of Field-Based Learning in HEIs in Ethiopia

The second category of this study dealt with challenges that affect Effective Implement of FBL in HEIs in Ethiopia. The successful relationship between the university and industry depends on the healthy relationship of universities and industries. However, the composition of this series of studies categorized under this sub-topic can be described as determinants of the universities and industries linkage that may hide the implementation of the FBL (Barry, 2010). In this regard, Vidican (2009), summarized the importance of linking higher education institutions to different industries for sustainable development in a given country, and the need for link between universities and industries in different areas. However, this argument is unpractical in Ethiopian context which needs more attention from the university side.

To accommodate graduates create conducive environment for job opportunity as well as reduce unemployability in the nation, the need for business engagement steps that are wider than commercialization and reflect real cooperation, joint research, contract research and consultancy (Schulz, 2015). Consistently, Getahun (2016) further explored the important role of small business involvement programs that are broader than marketing and require active collaboration, i.e., joint research and consulting.

However, Ornstein (2018) found that factors influencing university-industry knowledge sharing practices are characterized as individual factors such as willingness, organizational factors and technological factors (availability of up-to-date ICT infrastructure, availability and updated knowledge sharing website) that have major impact on knowledge sharing practices as well as students FBL (Adem, 2013).

Studies show that FBL and national university ranking exercises have become common approaches in the Ethiopian HE system (World Bank, 2003). In this regard, Ethiopian education and training policy, the newly established Ethiopian education development road-map 2018-2030, the Ethiopian higher education proclamation 1152/2009 supports the students field-based learning and practical involvement in the linkage of university-industry to realize the betterment of students future life but establishing different strategies such as ESDP and other strategies. Nevertheless, to put this argument into practice universities need to exercise and involve their students in FBL by establishing strong linkage between

themselves and industries.

Nevertheless, the impacts of FBL approaches on the institutional academic culture are not distinctly recognized. As a result, there have been fewer practices in the implementation of FBL experiences of undergraduate students in Ethiopia, and the institutional practices and conditions that foster student success is minimal (UNESCO, 2012).

To summarize, the major challenges in the implementation of FBL were: inability of the two parties (the universities and industries) to translate the MoU into practice; imbalanced benefits between the two parties (in favor of universities); large no of trainees to be deployed; shortage of industries; shortage of time; COVID-19; and political instability in the country. The various strategies employed to establish and maintain the UIL were signing of MoU; organizing consultative workshops; efforts to raise funds to conduct researches on common issues and the like.

### 3.4. Strengthening the UIL to Effectively Implement FBL in HEIs in Ethiopia

The third category encompasses six articles out of the twenty based on their theme of strengthening the UIL to effectively implement FBL in HEIs in Ethiopia are listed as follows: "Higher Education Development for Ethiopia: Pursuing the Vision (WORLD BANK, 2003)," "Historical Analysis of the Challenges and Opportunities of Higher Education in Ethiopia" UNESCO (United Nations Educational, Scientific and Cultural Organization, 2012); "Ethiopia's Industrial policy progress and present expectations of FBL. Ethiopian Research granting counsels political economy" (Hinchliffe & Jolly, 2010); "Ethiopia's productive potential and economic growth" (Gashahun, 2020), and "Ethiopia's higher education public-private divide: problems and policy consequences" (Nega. 2017); are articles that were dealing with strengthening the UIL to effectively implement FBL. The above studies have paid more attention to economic growth and to the importance of higher education institutions in order to improve and foster FBL in Ethiopian.

This implies that, in order to strengthen the UIL to effectively implement FBL in HEIs in Ethiopia, promoting FBL and practical skills among staff and students will be vital (Conner, 2016). Accordingly, many of institutions reported that employing industry professionals as adjunct faculty, engaging guest speakers to provide business and entrepreneurial advice, and offering student attachments to facilitate their future career. Enhanced graduate employability as a result of improved FBL, skills development and internships as well as increased job satisfaction among academic staff were noted as positive externalities from promoting linkages with the productive sector.

In addition, EEDRM (2018), noted that universities have to promote UILs by encouraging higher industry leaders to teach part of the course so that students can get real work experience from the guest lectures. The document further disclosed the example stating that, "In Malaysia in addition to FBL, there are varie-

ties of cooperation between universities and stakeholders". One example is that leaders of industries are made to cover certain part of a course which will help them to share their practical knowledge and also help them know the preparedness of the students which they will employ them in the future.

This implies that, universities have to pay due attention to pave the way to link their students with industries to realize FBL and in the meantime achieve their intended goal. Accordingly, the above studies directly demonstrate that there is a strong need for FBL which can foster practical skills and knowledge experience to alleviate unemployability and facilitate opportunities for employment in the country in general and to enhance sustainable self-reliance for the individual citizen in particular. To this end, implementation processes and outcomes of the current Ethiopian industrial policy have to be compatible with this issues. More precisely, the need for policies to be framed to address constraints across the value chain as well as horizontal linkages of higher education students with industries is vital.

Furthermore, the central point of the above studies was to connect productivity with the labor market through the implementation of FBL. However, it ignores the function of UIL in boosting the economy and enhancing productive human capital. The next study under this category was "the Public-Private Divide in Ethiopian Higher Education: Issues and Policy Implications" (Saint, 2004), this study gives more emphasis to the current issues on the public-private divide in the Ethiopian higher education landscape and their policy implications.

The findings of the article revealed that private higher education providers are playing a significant role in addressing the unmet social demand for higher education through increasing access and thereby creating the way FBL will be developed to create employment opportunities. The essence of the article was great in that it indicates the way private higher institutions can play a vital role in producing graduates for the job market. Nevertheless, what is so important here is not only producing the labor but connecting and linking with industries could play a vital role for the betterment of the country's economy in general and for reduction of unemployment in particular.

Therefore, both the public and private higher education institutions need to exercise field-based learning by practicing a strong linkage with industries to realize the achievement of country development goals. The other study in this category was, "what makes industry-university collaboration succeed". A systematic review of the literature Robert' (Hinchliffe & Jolly, 2010), this study explores more or less university-industry collaborations (UICs) that it has received increased attention in FBL. Furthermore, the review findings revealed that, the collaboration between both the universities and industries needs the commitment of the leaders to put FBL in to practice and to realize the intended goals of their respective organizations and to enhance the economic development of the entire country in general and for the individual graduates in particular.

## 4. Conclusion

The study revealed that the University-Industry Linkage (UIL), in the implementation of FBL, was not properly practiced vis-à-vis the UIL implementation guidelines. Even though, there are major enabling conditions for the UIL to implement FBL such as availability of policies on the UIL; UIL implementation guidelines developed by the HELIs, MoU made between Universities and industries; commitment and to offer logistics by the universities for the FBL, universities didn't play a leading role in facilitating the implementation of the FBL. The results also reveal that the major challenges in the implementation of FBL were: inability of the two parties to translate the MoU into practice; shortage of industries. Therefore, although UIL is crucial to implementing FBL, UIL, is not implanted as stipulated in the implementation guidelines, and thus, the function of the UIL in the implementation of the FBL was below the expected standard. Thus, it is suggested that the two parties should renew and strengthen their partnership for the mutual benefit. In this regard, universities should play a leading role as the UIL primarily provides students with first-hand learning and employment opportunities.

## Recommendations

1) The University-Industry Linkage (UIL), in the implementation of FBL, should be properly practiced vis-à-vis the UIL implementation guidelines.

2) Availability of policies on the UIL; UIL implementation guidelines developed by the HELIs, MoU made in between Universities and industries; commitment and to offer logistics by the universities for the FBL need to be utilized.

3) Universities should play a leading role in facilitating the implementation of the FBL.

4) The major challenges in the implementation of FBL were: inability of the two parties to translate the MoU into practice; shortage of number of industries. Therefore, although UIL is crucial to implementing FBL, UIL, is not implanted as stipulated in the implementation guidelines so far, and thus, the function of the UIL in the implementation of the FBL was below the expected standard. Thus, it is suggested that the two parties should renew and strengthen their partnership for the mutual benefit. In this regard, universities should play a leading role as the UIL primarily provides students with first-hand learning and employment opportunities.

## Conflicts of Interest

The author declares no conflicts of interest regarding the publication of this paper.

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