

# The Role of University-Industry Linkage to Produce Graduates with Employable Skills: Analysis of Banking and Finance Graduates' Attributes from Educators and Industries Perspective

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## Abstract

The purpose of this study was to examine the role of university-industry collaboration in producing banking and finance graduates with employability skills from instructors and industries viewpoint. For this purpose, mixed research design called embedded design was employed. The sample of 76 industry employees and 73 instructors were selected using simple random sampling method, lottery system. Questionnaire was used as major data collection instrument and its reliability estimate coefficient was  $\alpha=0.81$ . Mean difference of responses from two independent groups (industry employees and instructors) was tested through non-directional independent sample (two-sample) t-test. The mean of instructors' responses on banking and finance graduates professional knowledge, skills and ethics was compared with the mean of industry employees' responses. Thus, no statistically significant mean difference was obtained. In conclusion, industry workers and instructors believe that banking and finance graduates have acquired demonstrable theoretical and practical knowledge, professional skills, and professional ethics. Finally, the researchers commended the need to develop competency models for each occupation or job group so as to define graduates' successful performance in a particular work setting via their demonstrable competencies.

**Keywords:** Employability skills, competency model, curriculum, university-industry collaboration, banking and finance, graduates

## 1. Introduction

These days quality curriculum development has become globalization-endorsed affair. This is due to the fact that curriculum should mirror the training needs of global economic market. Thus, the need to timely update curricula in order to address global economic demands and satisfy societal needs is doubt free. Otherwise, it could not answer global economic question for competent, professionally skilled and technologically minded trained man power. In this regard, Joseph (2016) found out that a mismatch between employer demands and job applicants' skills, suggesting that workforce training needs to be more closely aligned with the skills and competencies required for employment.

To produce well equipped and professionally skilled man power that could fit in 21<sup>st</sup> century world of work, quality of curriculum should get great emphasis of educators, authorities and stakeholders. A principal objective of a quality curriculum is, in a fair and inclusive manner, to enable students to acquire and develop the knowledge, skills and values, and the associated capabilities and competencies, to lead meaningful and productive lives (Stabback, 2016). As to Stabback, the key indicators of curriculum success include the quality of the learning achieved by students, and how effectively students use that learning for their personal, social, physical, cognitive, moral, psychological and emotional development.

Quality curriculum development passes through different subsequent steps that demand effective and efficient monitoring and control of each process. Accordingly, curriculum development is not a simple process which could be accomplished without collaboration of different stakeholders. Thus, curriculum development is a complex and iterative process with a great number of activities that involve many stakeholders (Predrag, Pere, Marton & Veselin, 2014). Predrag et al. have identified five phases of curriculum development (i.e. analysis, design, development, implementation, evaluation) activities that would lead to a more effective and efficient realization of a curriculum—based on different and significant role of industry.

Nowadays strong collaboration between university and industry in curriculum development process has become critical to produce well equipped graduates that could fit in the world of work. Accordingly, contemporary curriculum development processes increasingly involve public discussion and consultation with a wide range of stakeholders (Stabback, 2016). Stabback further claims that, more broadly, the curriculum is also understood as a political and social agreement that reflects a society's common vision while taking into account local, national and global needs and expectations.

According to Predrag et al. (2014), industry has been identified as a stakeholder that occupies one of the key positions, especially under such circumstances as high unemployment rate, inadequate structure of graduates'

knowledge and skills, focus on competitive advantage, and the trend of entrepreneurship and innovation in the economy. They further claim that inclusion of industry in the realization of activities in all phases of curriculum design creates possibilities for a more successful cooperation with the university.

Abundant scholars have echoed the need for collaboration between higher education institutions and industries. In this regard, Deborah (2011) depicts that higher education institutions will be in a position to make a significant impact in producing a highly skilled workforce if they are aware of these workforce trends and adjust curriculum and instruction accordingly. Despite high rates of unemployment, research indicates that employers are having a difficult time finding workers that have the knowledge and skills needed for available jobs (Ibid).

Empirical evidences have identified the mismatch between employer demands and job applicants' skills, suggesting that workforce training needs to be more closely aligned with the skills and competencies required for employment (Joseph, 2016). Accordingly, the gap between industry and academics has forced educational institutions to look more closely at aligning classroom teaching with workforce needs (Deborah, 2011). In this regard, curricula which combine classroom theory with practical application may be the appropriate response from higher education as tomorrow's workforce will not only need knowledge but will need experience in applying that knowledge (Fischer & Glenn, 2009 cited in Deborah, 2011).

Thus, to produce capacitated graduates that can possibly demonstrate professional attributes required by the world of work the need for strong collaboration between university (supplier of skilled labor force) and industry (employer/demander of skilled labor force) is crucial. Due to this fact the cooperation between the university and the industry is a growing trend, strategically important to the both partners (Baba, M.L., 2006 cited in Predrag et al., 2014). Likewise, Joseph (2016) found out that industry's contribution to development of curricula is essential for holistic education of students.

By now, Ethiopia has a strong stand to realize the vision of becoming a middle income earning country in 2025. To do so, a country has recognized the importance of university-industry (U-I) linkage and developed its guiding directive. In recognition of the potential benefits to be realized through increased collaboration between industry and Higher Education Institutions (HEIs), Ethiopian Ministry of Science and Technology has designed procedural directive for the linkage of education and training, research institutions and industries (MoST, 2013). Moreover, the need for collaboration between universities and industries is boldly underscored by the second Growth and Transformational Plan (GTP) of Ethiopia.

However, collaboration of these two key parties in curriculum development process is somewhat overlooked issue. In this regard, assessing the role of industry-collaboration in producing graduates equipped with employability skills and knowledge is found to be crucial. The study will be the entryway for the future researchers who are interested in establishing strong collaboration between university and industry through empirical evidences. Thus, this study was aimed at examining the role of university-industry collaboration in producing banking and finance graduates with employability skills from instructors and industries viewpoint.

## **2. Review of Related Literatures**

### **2.1 The Role of Industry in Curriculum Development**

Collaboration between academia and industry is increasingly a critical component of efficient national innovation systems (World Bank, 2013). World Bank also argues that the collaboration between universities and industries is critical for skills development (education and training), the generation, acquisition, and adoption of knowledge (innovation and technology transfer), and the promotion of entrepreneurship (start-ups and spin-offs). These arguments insisted the paramount importance of industry involvement in curriculum development process. Likewise, an industry partner's workforce investment lies in the proper alignment of career and technical education and academic instruction (HCRC, 2009).

As to HCRC (2009), the industry's invested interest is in influencing the school curricula in such a way that properly captures academic standards and current career-ready set of competencies of that particular industry. An industry partner can serve the following curriculum development functions: (1) help teachers keep the curriculum relevant to industry expectations, (2) help to identify experiential work-based learning and mentorship opportunities for students that are consistent with curriculum, (3) actively participate in steering committees to enhance curricula and student achievement, (4) provide in-kind matching for state and private grants to enhance curriculum, (5) conduct evaluation on curriculum and its delivery in order to properly assess and modify curriculum; evaluation also helps to maintain and sustain program projects over time, (6) strengthen career and college pathway by linking the integration of academic instruction and career and technical education to real jobs, and (7) provide guest lecturers to share their professional expertise with students and give credibility to the curriculum (HCRC, 2009).

Similarly, Joseph (2016) claims that the industry's contribution to development of curricula is essential for holistic education of students. He further contends that the forward-looking companies develop partnerships

with universities specifically aimed at modernizing teaching and learning; and for mutual and competitive advantage. Though there are different areas on which university and industry need to collaborate, teaching and learning process is the crucial one. In this regard, the collaboration of university and industry in teaching and training could be in one of the following aspects;

- Industry participation in academic planning and course design
- In-kind support by industry (donation of equipment, student scholarships, teaching grants)
- Placement of staff by industry to university as part-time professors, visiting professors, executives in residence
- Industry provision of on-the-job training opportunities (co-op programs, summer jobs) and of part-time work opportunities.
- Delivery of specialized courses by universities (continuing education, executive development, specialized customized programs)
- Participation of university professors in industry-led professional development activities, faculty consulting in industry, participation on company Boards and other industry-driven committees (Doutriaux J and M. Barker, 1995, p75-81 cited in Hiwote, 2014).

As World Bank (2013) indicates the education and training remains one of the key roles of universities, especially in lower income countries where the lack of skilled workers is a major bottleneck hindering the competitiveness and innovative capacity of firms. In light to this, the governments may seek to improve the quality of university graduates by fostering a stronger collaboration of universities with industry. Thus, a first step is to establish a consultative process whereby the voice of relevant business managers is considered in curriculum development, so that university programs better respond to industry needs (Ibid).

## 2.2 Benefits of University-Industry Cooperation in Curriculum Development Process

Cooperation between universities and industry is particularly emphasized in the curriculum development process, since it provides multiple benefits for both sides, as well as for the economy and society in general ( Predrag, Pere, Marton and Veselin, 2014). Predrag et al. further pointed out that the:

Benefits most frequently gained in this process are: improved relevance of learning outcomes, enhanced content of courses and subjects in relation to the needs of industry, intrinsic real life experiences through industrial attachment, immediate feedback on adequacy of the developed curriculum, development of new courses and adjustment of present ones, better trained graduates, eased selection and recruitment of graduates, etc (p.4114)

Similarly, the cooperation between the university and the industry is a growing trend, strategically important to the both partners. Universities and industry have different motivations, but mutual interest to collaborate as well (Baba, M.L., 2006 cited in Predrag et al., 2014). Their natural strategic interest is crucial not only for building a close cooperation which facilitates knowledge transfer from the university to the industry by means of mutual learning, but also the commercialization of knowledge (Ibid).

Tremendous empirical evidences have showed the benefits of university-industry collaboration in curriculum development process. For instance, a study by Predrag et al. (2014: 4113) found out that

Among benefits of cooperation for the university are: improved quality of educational programs, research collaboration, attraction of funding and better employment opportunities for graduates. Benefits for the industry include: better trained graduates, technology transfer, innovation to marketplace, solutions to industry problems, etc. Improved public image of both university and business entity may serve as an example of a mutual benefit.

On the other hand, research reports highlighted a mismatch between employer demands and job applicants' skills, suggesting that workforce training needs to be more closely aligned with the skills and competencies required for employment (Joseph, 2016). Changes in labor market skill requirements, especially due to the increased use of technology in the workplace, have pointed to the need for more postsecondary education and training (Khare, 2014). However, Predrag et al. (2014) found out lack of feedback between industry and universities in the development of students' competences associated with study programs.

According to Predrag et al. (2014), curriculum development is a complex and iterative process with a great number of activities that involve many stakeholders. As curriculum development processes are influenced both by local needs and by broader, transnational trends, a comprehensive international perspective on curriculum issues, trends and approaches is critical (Stabback, 2016). Stabback further suggests that the development of curriculum should follow a transparent and publicly known process and be well-managed in terms of focusing on the curriculum vision, conducting effective development activities, and adhering to timelines and budgets.

World Bank (2013) argues that:

Successful industry-university collaboration needs to support the missions and motivations of each partner. For universities, typical motivations to collaborate with industry include the

improvement of teaching, access to funding, reputation enhancement, and access to empirical data from industry. For firms, the motivations to collaborate with universities may include gaining access to complementary technological knowledge (including patents and tacit knowledge), tapping into a pool of skilled workers, providing training to existing or future employees, gaining access to the university's facilities and equipment, gaining access to public funding and incentives; to influence the overall teaching and research agenda of universities (Ibid, pp.4)

Both the business sector and higher education institutions make an important contribution to sustainable economic growth, employment and prosperity. They do so directly as employers and producers of goods and services, and through their role in promoting innovation and future capacity for growth, such as by developing a more skilled and knowledgeable workforce( Adrian et al., 2014).

### **2.3 Employability Skills as Measure of curriculum Effectiveness**

According to Khare (2014), employability skills are the skills, attributes and strengths that are needed for specific job roles. Khare further has defined the employability skills as the transferable skills needed by an individual to make them employable. As to Khare, along with good technical understanding and subject knowledge, employers often outline a set of skills that they want from an employee. Employability has been defined as a set of skills, knowledge and personal attributes that make an individual more likely to secure and be successful in their chosen occupation (David, 2007; Hirsch & Weber, 1999; John & Catherine, 2007 all cited in Sarker et al., 2010.)

UNESCO (1993) has underscored that the effectiveness of a training system, dependant on a well developed curriculum, must be measured by the extent to which: (1) it is able to attract the young generation into the occupation of the future and skills which employers need, (2) it is able to deliver not only technical contents (technical skills) but also help students to learn how to cope with new challenges (coping skills) and prepare them for lifelong learning, (3) it is able to provide people with the basic set of skills it takes to transfer from one job or area of work to another, once they have entered the workforce and (4) it offers open access to all without the constraints of entry requirements. Glover et al. (2002) cited in Crosling et al.(2009) also argue that the extension of partnerships between higher education and employers are essential to improve the employability of graduates.

According to David (2000) cited in Sarker, Davis & Tiropanis (2010), 21<sup>st</sup> century's curriculum should consider student employability seriously and include key skills (team working, communication skills, presentation skills, information technology, critical thinking etc) to promote student employability.

### **2.4 The Role of Industry Competency Model in Curriculum Development**

#### **2.4.1 What Do We Mean Competency?**

A competency is the capability to apply or use a set of related knowledge, skills, and abilities required to successfully perform "critical work functions" or tasks in a defined work setting (U.S. Department of Labor, Employment & Training Administration, 2015). According to United States' Employment and Training Administration (2015), competencies often serve as the basis for skill standards that specify the level of knowledge, skills, and abilities required for success in the workplace, as well as potential measurement criteria for assessing competency attainment.

#### **2.4.2 Competency Model and Its Role in Curriculum Development**

A competency model is a collection of competencies that together define successful performance in a particular work setting (U.S. Department of Labor, Employment & Training Administration, 2015). According to U.S. Department of Labor, Employment and Training Administration (2015), competency models are the foundation for important human resource functions—e.g., recruitment and hiring, training and development, and performance management---because they specify what is essential to select for or to train and develop. Competency models can be developed for specific jobs, job groups, organizations, occupations, or industries.

Industry competency models depict the common knowledge, skills, and abilities in an industry or industry sector. The resulting model forms the foundation on which career paths can be developed. The articulation of broad industry-wide knowledge and skill needs supports the development of a workforce that can perform successfully in a variety of cross-functional teams and make the transition from one job to another (U.S. Department of Labor, Employment & Training Administration, 2015).

Moreover, competency models serve as a bridge for information sharing between employers and the education system. By providing a common language for discussions of regional skill needs, competency models foster industry-education collaboration in developing curricula, planning and assessing career and technical education programs, and developing apprenticeship programs. Models are a resource for the planning, design, and delivery of educational and training opportunities that meet employers' needs (U.S. Department of Labor, Employment & Training Administration, 2015). It further claims that by providing a framework of the

knowledge, skills, and abilities required for satisfactory performance in an industry or occupation, competency models present education and train providers with an industry-validated resource.

According to U.S. Department of Labor, Employment and Training Administration (2015:11), competency models support curriculum development by:

- Identifying essential skill requirements within industries and occupations,
- Providing a business-oriented framework for developing teaching and learning objectives,
- Supplying content for enriching instructional materials,
- Providing a resource for instructional designers to tailor courses to specific student populations or industry needs,
- Reducing the development time of instructional materials, courses, and program curricula,
- Establishing common terminology for use by business and education communities to facilitate collaboration on technical education projects, and
- Highlighting gaps in current training offerings.

### **3. Method and Materials**

#### **3.1 Research Design**

The purpose of this study was to examine the role of university-industry collaboration in producing banking and finance graduates with employability skills from instructors and industries viewpoint. For this study purpose, mixed research design called embedded design was employed. This design was chosen because of the fact that quantitative data were first collected and then qualitative data were collected to play supportive role. In connection to this, Creswell (2012) stated that the purpose of the embedded design is to collect quantitative and qualitative data simultaneously or sequentially, but to have one form of data play a supportive role to the other form of data. According to him, the reason for collecting the second form of data is that it augments or supports the primary form of data.

#### **3.2 Sample and Sampling Method**

The sample of 76 industry employees working at Dire Dawa Administration and 73 Dire Dawa University Business and Economics College were involved in the study. These sample participants were selected using simple random sampling technique, particularly lottery system.

#### **3.3 Instruments**

Questionnaire was used as major data collection instrument. The questionnaire was five point Likert-scaled ranging from poor (1) to excellent (5). The validity of questionnaire was checked by two senior and well experienced educators of banking and finance department. The reliability of the questionnaire was analyzed using Cronbach alpha and its reliability estimate coefficient was  $\alpha=0.81$ . To validate quantitative results, interview was carried out to collect qualitative data from the bank and insurance top-managers.

#### **3.4 Method of Data Analysis**

The participants from industry and educators from Dire Dawa University College of Business and Economics were asked to rate professional attributes demonstrated by Banking and Finance graduates of Dire Dawa University. Accordingly, mean difference of responses from these two groups was tested through non-directional independent sample (two-sample) t-test. Independent sample t-test was calculated using SPSS 20 to see whether or not the mean responses of industry employees' regarding banking and finance graduates demonstrable knowledge, professional ethics and skills are significantly different from educators' mean responses. Moreover, qualitative data was analyzed thematically using narrative approach.

#### 4. Results and Discussion

Table 1: Independent sample t-test result of banking and finance graduates expected knowledge, skills and professional ethics ( $df=147$ )

|                               | Participants' of the study | N  | Mean | Std. Deviation | Std. Error Mean | t     | Sig.(2-tailed) |
|-------------------------------|----------------------------|----|------|----------------|-----------------|-------|----------------|
| Theoretical knowledge         | Industry Employees         | 76 | 3.92 | 1.186          | .136            | -.127 | .899           |
|                               | Instructors                | 73 | 3.95 | 1.141          | .134            |       |                |
| Practical knowledge           | Industry Employees         | 76 | 4.04 | 1.248          | .143            | -     | .249           |
|                               | Instructors                | 73 | 4.26 | 1.068          | .125            |       |                |
| Computer skill                | Industry Employees         | 76 | 4.32 | .983           | .113            | .176  | .860           |
|                               | Instructors                | 73 | 4.29 | .964           | .113            |       |                |
| Professional Ethics           | Industry Employees         | 76 | 4.64 | .725           | .083            | .350  | .727           |
|                               | Instructors                | 73 | 4.60 | .740           | .087            |       |                |
| Commitment                    | Industry Employees         | 76 | 4.61 | .784           | .090            | .125  | .901           |
|                               | Instructors                | 73 | 4.59 | .796           | .093            |       |                |
| Performing bank transaction   | Industry Employees         | 76 | 4.29 | .907           | .104            | .106  | .916           |
|                               | Instructors                | 73 | 4.27 | .886           | .104            |       |                |
| Bank reconciliation skill     | Industry Employees         | 76 | 4.32 | .955           | .110            | .352  | .726           |
|                               | Instructors                | 73 | 4.26 | .972           | .114            |       |                |
| Customer handling skill       | Industry Employees         | 76 | 4.68 | .677           | .078            | .241  | .810           |
|                               | Instructors                | 73 | 4.66 | .671           | .079            |       |                |
| Bank marketing skill          | Industry Employees         | 76 | 4.32 | .852           | .098            | .475  | .635           |
|                               | Instructors                | 73 | 4.25 | .925           | .108            |       |                |
| Preparing financial statement | Industry Employees         | 76 | 4.20 | .880           | .101            | .228  | .820           |
|                               | Instructors                | 73 | 4.16 | .882           | .103            |       |                |
| Financial statement analysis  | Industry Employees         | 76 | 4.08 | .906           | .104            | .071  | .944           |
|                               | Instructors                | 73 | 4.07 | .903           | .106            |       |                |
| Credit analysis skill         | Industry Employees         | 76 | 4.01 | .887           | .102            | .567  | .572           |
|                               | Instructors                | 73 | 3.93 | .871           | .102            |       |                |
| Claim settlement skill        | Industry Employees         | 76 | 4.11 | .888           | .102            | .433  | .665           |
|                               | Instructors                | 73 | 4.04 | .920           | .108            |       |                |
| Underwriting skill            | Industry Employees         | 76 | 4.03 | .938           | .108            | .628  | .531           |
|                               | Instructors                | 73 | 3.93 | .903           | .106            |       |                |
| Insurance marketing skill     | Industry Employees         | 76 | 3.97 | .952           | .109            | .363  | .717           |
|                               | Instructors                | 73 | 3.92 | .924           | .108            |       |                |
| Communication skill           | Industry Employees         | 76 | 4.55 | .790           | .091            | .141  | .888           |
|                               | Instructors                | 73 | 4.53 | .801           | .094            |       |                |
| Writing skill                 | Industry Employees         | 76 | 4.36 | 1.104          | .127            | -.006 | .996           |
|                               | Instructors                | 73 | 4.36 | .856           | .100            |       |                |
| Cooperativeness skill         | Industry Employees         | 76 | 4.50 | .902           | .103            | .230  | .818           |
|                               | Instructors                | 73 | 4.47 | .914           | .107            |       |                |

As depicted in the table 1, the mean of industry employees' responses for theoretical knowledge ( $M=3.92$ ) and practical knowledge ( $M=4.04$ ) of banking and finance graduates was not significantly different from the mean of educators' responses ( $M=3.95$  &  $4.26$ , respectively) at  $p=0.05$ . These results suggest that industry-university collaboration in curriculum development process will have great role in equipping graduates with theoretical and practical knowledge. In consonance with this finding, UNESCO (1993) insisted that modern technologies and ecological demands of the workplace require a skilled work-force with good higher order skills - contextual knowledge, reasoning, analytical and critical thinking skills etc. As UNESCO underlined, in most cases, technical know-how alone is no longer sufficient.

Likewise, the mean of industry workers' responses for computer skill ( $M=4.32$ ;  $t=0.176$ ), bank reconciliation skill ( $M=4.32$ ;  $t=0.352$ ), customer handling skill ( $M=4.68$ ;  $t=0.241$ ) and bank marketing skill ( $M=4.32$ ;  $t=0.475$ ) of banking and finance graduates was no statistically different from the mean responses of participant instructors ( $M= 4.29, 4.26, 4.66$  &  $4.25$ , respectively, see table 1). These findings suggest that industry workers and university educators have common view of banking and finance graduates professional skills. It is acknowledged that employers expect graduates to have experience of the workplace and to be work ready. Addressing these workforce issues effectively will require stronger links between employers and those

who prepare employees for work and careers (Khare, 2014). According to Khare, potential employees will be expected to have at least some of the skills, or the potential to acquire the skills needed to do specified jobs.

According to UNESCO (1993), employees must be more open for new developments, cope with new challenges, and be able to assume responsibility for what they do in their respective areas of work. These essential skills also include the ability to cope with changing challenges by learning new skills and becoming a lifelong learner including: (1) communication and cooperation skills, (2) application of learning techniques and cognitive work-related skills, (3) independent judgment and sense of responsibility, and (4) ability to cope with stress (UNESCO, 1993). In light to this, table 1 portrays that the mean of instructors' responses on graduates' professional ethics ( $M=4.60$ ,  $t=0.35$ ,  $p=0.727$ ), commitment ( $M=4.59$ ,  $t=0.125$ ,  $p=0.901$ ) and performing bank transaction ( $M=4.27$ ,  $t=0.106$ ,  $p=0.916$ ) was not significantly different from the mean responses of industry workers ( $M=4.64$ ,  $4.61$  &  $4.29$ , respectively). Thus, these results suggest that both industry employees and educators believe that banking and finance graduates have professional ethics, commitment to work and are capable of performing bank transactions.

Similarly, one interviewed top manager stated that:

[Employer] institutions...emphasize on the graduates' [professional] ethics, commitment, analytical skill, team work ability ..., and practice oriented knowledge...

As shown in table 1, the mean of instructors' responses on banking and finance graduates' ability of preparing financial statement ( $M=4.12$ ,  $t=0.228$  &  $p=0.820$ ) and financial statement analysis ( $M=4.07$ ,  $t=0.071$  &  $p=0.944$ ) was not significantly different from the mean responses of industry employees ( $M=4.20$  &  $4.08$ , respectively) at  $p=0.05$ . This finding foreshadows that instructors and industry employees (co-workers) believe that banking and insurance graduates of Dire Dawa University are able to prepare financial statements and to analyze them. Likewise, the mean of industry employees' responses on the graduates' credit analysis skill ( $M=4.01$ ,  $t=0.567$  &  $p=0.572$ ) and claim statement skill ( $M=4.11$ ,  $t=0.433$  &  $p=0.665$ ) was not significantly different from instructors' mean responses ( $M=3.93$  &  $4.04$ , respectively) at  $p=0.05$ . From this finding one can infer that industry employees and instructors have common viewpoint of banking and finance graduates' credit analysis and claim statement skills.

Table 1 displays that the mean of industry employees responses on banking and finance graduates underwriting skill ( $M=4.03$ ), insurance marketing skill ( $M=3.97$ ), communication skill ( $M=4.55$ ), writing skill ( $M=4.36$ ) and cooperativeness skill ( $M=4.50$ ) are not significantly different from instructors' mean responses ( $M=3.93$ ,  $3.92$ ,  $4.53$ ,  $4.36$  &  $4.47$ , respectively). These results suggest that both industry employees and instructors believe that banking and finance graduates have the required skills of underwriting, insurance marketing, communication, writing and cooperativeness. In connection to these findings, Joseph (2016) found out communication and interpersonal skills, problem solving skills, initiative, working under pressure, organizational skills, team working, adaptability, numeracy, valuing diversity and difference, and critical thinking as some exemplary employability skills graduates need to be equipped with. Similarly, UNESCO (1993) pointed out that the proficiency in and ability to cooperate and communicate with co-workers, to process new information and apply it to make decisions and take action on one's own initiative, are becoming ever more important.

Consistently, qualitative results from interviewees revealed that the top managers have underscored the importance of industry involvement in curriculum development and evaluation processes.

As one top manager said:

*The lecturer themselves should have practical knowledge,... should [incorporate] computerized courses ...to enhance the graduates' computer skills, ...[and]to improve their communication and marketing skill.*

On the other hand, another interviewee reported that:

*[The] financial institutions are working with university in the areas of practical attachment, students senior essay research, and other community service. They also participate in evaluating the students during their practical attachment period. But sometimes the students' come back with problem they have during the practical attachment after graduation. [However], since most of the financial data are confidential, financial institutions do not have willingness to let students exercise the details of the work place activity.*

## 5. Conclusion

Integrating employability skills and competency required for successful on-the-job performance of graduates needs strong collaboration between university and employers (industries) throughout curriculum development process. The mean of instructors' responses on banking and finance graduates professional knowledge, skills and ethics was compared with the mean of industry employees' responses. The results revealed that there were no statistically significant mean differences. In conclusion, industry workers and instructors believe that banking and finance graduates have acquired demonstrable theoretical and practical knowledge, professional skills, and

professional ethics. However, a thorough curriculum evaluation should be taken to ensure the quality of banking and finance curriculum to produce graduates equipped with skills and knowledge that prepare them to succeed in a knowledge-based economy. To this end, it is recommended that developing competency models for each occupation or job group is essential to define graduates' successful performance in a particular work setting via their demonstrable competencies.

## References

- Adrian, H., Markus, P., John, G. and Louise K. (2014). Measuring the Impact of University Business Cooperation: Final Report. [Online] Available: <http://europa.eu>
- Creswell, W. (2012). *Educational research: planning, conducting, and evaluating quantitative and qualitative research*, 4<sup>th</sup> ed., Pearson Education, Inc.
- Crosling, G., Heagney M, & Thomas L. (2009). Improving student retention in higher education. *Australian Universities Review*, 51(2), 9-18.
- Deborah R. (2011). Partnering industry and education for curricular enhancement: A response for greater educational achievement. *Online Journal of Workforce Education and Development*, V(2), 1-15
- HCRC. (2009). Industry partners play a major role in curriculum alignment. [Online] Available: [www.california.educatorsnetwork.com](http://www.california.educatorsnetwork.com)
- Hiwote Molla.(2014). *University industry linkage in terms of research: the case of Addis Ababa University*. [Unpublished master thesis], Addis Ababa University
- Joseph W. (2016). The role of industry in curriculum development.[Online]Available: [archive.knust.edu.gh/downloads/77/77229.pdf](http://archive.knust.edu.gh/downloads/77/77229.pdf)
- Khare, M. (2014). Employability and higher education in India: the missing links. *Higher Education for the Future*, 1(1), 39-62.
- MoST.(2013). Procedural directive for the linkage of education and training, research institutions and industry. The Federal Democratic Republic of Ethiopia, Addis Ababa.
- Predrag M., Pere T., Marton S. and Veselin P.(2014). Curriculum development process redesign based on university-industry cooperation.[Online]Available: <https://www.researchgate.net/publication/272294503>
- Sarker, F., Davis, H., & Tiropanis, T. ( 2010.) A review of higher education challenges and data infrastructure responses.[Online]Available: <http://eprints.soton.ac.uk/id/eprint/271695>
- Stabback, P.(2016). What makes a quality curriculum? In-progress reflection no.2 on current and critical issues in curriculum and learning. [Online]Available: [www.ibe.unesco.org](http://www.ibe.unesco.org)
- UNESCO. (1993). International workshop on curriculum development in technical and vocational education: Final report. [Online] Available: [www.unesco.org/education/pdf/23\\_85.pdf](http://www.unesco.org/education/pdf/23_85.pdf)
- U.S. Department of Labor, Employment & Training Administration. (2015). Competency model development and use- a technical assistance guide. [Online]Available: <http://www.careeronestop.org/CompetencyModel/>
- World Bank. (2013). Promoting university-industry collaboration in developing countries: policy brief: <http://innovationpolicyplatform.org>