Review on Strategies for Bridging the Employability Skill Gap in Higher Education

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Abstract: Is it difficult to recognize, apprehend and evaluate the employability of a person. Employability is the ability of a man or woman to gain and maintain the work which he attained due to his/her capabilities. It is the competence of person to shift within the market work force and understand the capacity that is available in them. The key objective of the study is to identify the strategies or approaches to bridge the employability skill gap in higher education. The paper also highlighted the benefits of bridging the employability gap in Indian economy. The paper is based on the conceptual study. And the data has been collected from the secondary sources of information.

Index terms: College student, Bridging the employability skill gap, Higher education, Strategies or approaches

INTRODUCTION

The current business environment focuses on development of strategic skills and work experience by giving importance to higher education for employability. Practice is the present day need for the development of the employees or the college graduates because practice will enhance their employability skills. Participation in the training process and obtaining the feedback from the stakeholders are helpful for the future skill development. Analyses current skill capability, need and review of skill development policies[8], the challenges faced regarding skill development and solution for the same[3]. The study also indicates the relationship between employment, education, and skill development. The researcher used random survey method for data collection and has taken the 100 samples from the students who have taken STAR training from different NSDC (National Skill Development Coordination Board) partnersin Lucknow. Data analysis was done through using simple weighted average and percentage method for the study.

A. Employability gap

Skill gap is the gap between employee’s ability and employers expectations of an organization. Competency gap is the big issue that is faced by the both employees and employers in today’s environment. This gap occurs due to the initiation of new technologies and digitalization. The gap can also indicate a need for changing the recruitment methodologies, establish a career development platform, packages to encourage worker engagement. Working towards lowering talent gap can cause expert improvement, growth possibilities of merchandising for the involved employee, increase productiveness and will increase worker retention. Working towards reducing the competency gap can lead to the professional development, increase the productivity, increase the chance of promotion and increase the employee retention.

The paper has emphasized that the lack of mismatched values and effective communication between employers and higher education institutions that can be identified as a gap, is found in students employability profiles[18]. The paper investigates and evaluates the value of student and employer engagement in the discipline of environmental science. The study has done survey with the questionnaire method. The sample of study has been taken from the undergraduate and post graduate students studying environmental science (ES) at university of Southampton. There were the total of sixty students who completed the questionnaire. The study also has distributed the 200 questionnaires to the employers in the field of environmental science. The study has suggested that both the employers and higher education institutions should establish effective routes of communication to facilitate the effective work placement.

B. Need for bridging the employability skill gap

One of the main reasons of bridging the employability gap is lack of skilled and trained manpower. In order to control the unemployment it is necessary to provide the training and skill development program to both educated and uneducated groups. Bridging the employability skill gap through the various training and skill development programs and initiatives could make India a sa global hub for skilled manpower. According to the report published in BW People.in, skill gap is the difference between skills that employers want and skills their workforce offer. In today’s fast moving world, employability skill gap is the main problem faced by the both employees and employers. This is because of adoption of digitalization and evolution of technologies. Reducing the skill gap can lead to professional enhancement, boosts efficiency, increase the chances of promotion and increases the employee retention.

II. LITERATURE REVIEW

Identified the gap between university and industry gap in India and the study presented an approach to bridge it [14]. The paper presented two-sided analysis of the situation. The first side included Industry analysis and the second side included University analysis. To do analysis for the Industry side, data has been collected among 14 experts from 8 large-sized manufacturing companies in India. The study has done qualitative data collection using semi-structured interviews and analyzing the transcripts. The structured interviews also included data collection using professionals and explored about...
their methodological, social and personal competencies. The findings of the study said that the social and technical competencies matched but the gap has occurred regarding the methodological competency which is based on real application problems. The study proposed a learning factory model to bridge the gap. It is expected that the learning factory model will help the graduate to be ready for the job.

The study analyzed to find the gap between industry and higher education of electronic graduates. The main objective of the study is to find the gap between required competencies of the employed electronic engineers and acquired knowledge in the higher education. The study examined the gap in two aspects, acquired and required competencies that is needed by the employers as well as higher education. The study is based on the exploratory and descriptive qualitative research. Qualitative semi structured interviews have been used to collect the data from the respondents. Number of the respondents were 10 lecturers, 13 employers, 12 employed electronic graduates and 11 unemployed electronic graduates. Findings of the study showed that the mismatch between required and acquired competencies. Employers are dissatisfied regarding the knowledge of the engineers. Only some of engineers were well equipped. Interviews from the lecturers indicated that engineering graduates lack in soft skills. The study also indicated that employers were more concerned in the area of soft skills.

Said that academia – industry relationship is the interactive and collaborative system that requires the active and collaborative participants of all stakeholders[23]. The study examines the issues and barriers of industry and academia interaction. Moreover, the paper identifies potential areas where academia – industry interaction would be collaborative and effective. The study also presented the integrated model of academia - industry interface that described the different types of collaboration and interaction among the stakeholders in Indian scenario. The paper concluded that new range of technologies that are required to make India as the global power house in research and innovation and the need to make a cooperative knowledge creation and exchange between industry and universities to meet the future challenges. Presented the conceptual model of university – industry collaboration that described the effect of organization factors. The objective of the study was to explore the organizational factors that consists of leadership, trust, conflict, commitment and communication on the success of collaboration between university and industry in Malaysia. The paper also considered the process of university – industry collaboration that affects the organizational factors. The results of the study can increase the knowledge of academia - industry professionals toward organizational factors in the process of collaboration.

III. OBJECTIVES OF THE STUDY

To review the strategies or approaches for the bridging the employability skill gap.

To know the benefits of bridging the employability skill gap in the Indian economy.

IV METHODOLOGY

The paper has review the strategies to close the employability skill gap in higher education and highlighted the benefits of closing the gap in Indian economy. The paper is based on the conceptual study and the data has been gathered from the secondary sources of information like different published papers, internet sources and newspapers.

IV. STRATEGIES OR APPROACHES TO BRIDGE THE GAP

A. University – Industry collaborative approach

The fundamental challenge of academia – industry collaborative approach is to make use of skills, knowledge and technique of every organization. Each company must understand how to reduce the skill gap and how to make best use of knowledge of their employees, and universities need to industrial environment. One of the key challenges in academia – industry collaboration is the shortage of contextual understanding with other industrial partners. Addresses current trends and critical issues that affects academia- industry partnership in India with special reference to National Education Policy (NPE) 1968, National Education Policy (NEP) 1986, Programme of Action (POA) 1992. The paper says that there is a great need for academy – industry collaboration. It has been rather limited in India in the past likely due to variations in values and attitudes, lack of appreciation of abilities, and the absence of economic and financial compulsions. Studied the relationship between formal and informal university technology transfer and their significance for innovation performance of the firms. The analysis of the study is based on the more than 2000 German manufacturing firms. The study analysis revealed the use of both technologies (formal and informal) are mostly matched. The empirical of the study has proven the use of informal technology transfer increases the marginal return of formal technology transfer.
The study has suggested that every firm should maintain the close informal relationships with universities to understand the entire capability of formal technology transfer. Described the gap between university – industry collaboration[11]. The paper suggested a designerly approach to overcome from the gap. The designerly approach is combined with three dimensions that are strategic, tactics and operational. It described the three corresponding mechanism: facilitate strategic understanding, facilitate tactical co-creation and facilitate operational ideation. One of the main challenges of the study is the lack of contextual understanding in the organization. Knowledge, skills and techniques are currently limited in an organization. The university – industry collaboration approach helps to bridge this gap. The paper has done the case study from 20 years of experience at the company to analyze the university – industry collaboration. Moreover the study has taken 10 interviews with the stakeholders. The paper has concluded that the designerly approach is useful to strengthened university – industry collaboration which has proven to be successful.

Fig. 1 Illustration of innovation aspects. Source: Johanna wallin et al. (2014)

B. Skill-based education:

Core skill set required by the industry like interpersonal skills, problem solving skills, decision making skills, innovation and creative thinking have high demand. Skill-based education is somewhat missing in all the higher education areas in India. Every education institution need to shift their focus from theoretical knowledge to the skill based education with practical and dynamic methods. Universities should also try to focus on behavioral aspects like leadership skills, communication skills, and attitude that will play the major role in the success of a person, asserted that skill-based learning has become a necessity for employability[17]. Individuals can produce the better result through skill-based learning. The main aim of the paper is to provide the information about skill-based learning and its challenges. Moreover, the paper also provides the information about issues in the absence of learning-based skills. Employers always want a set of skills from an employee like Problem solving, Team working, Self-management, Literacy and numeracy relevant to the position. Knowledge of the business, ICT knowledge, Good communication and interpersonal skill[19]. While ability to use own initiatives is needed, the individual needs to follow instructions and Leadership skills where necessary. These skills can be learned through the education system and workforce development systems. The purpose of the paper is to identify the factors affecting employability skill. The present study has with the secondary sources. The paper concluded that the critical gap in the competency set, particularly soft skill, is needed for the job. This gap can be bridged by the learning, training and on the job experience. Highlighted four critical skills that are essential for the success[15]. These four skills are the technical skill, business skill, relationship management skill and domain skill. For most of graduates, college education does not necessarily translate into a job. Only three out of ten graduates are considered employable. This is because of lack of employability skills. If graduates are capable to equip themselves with these employability competencies, they will have plethora of opportunities for good career growth in the services sector.

C. Project based learning:

Project based learning (PBL) is the class room approach where the college graduates actively explore real problems and challenges. Project based learning helps the graduates to develop their skill for living in the high technological and knowledge based society also promotes the lifelong learning. Skill learned through project-based learning (PBL) are highly attractive to the employers as it includes learnings to handle interpersonal conflict, ability to work well with others, make thoughtful decision and solve the problem[5]. The study has presented project based learning to recognize the relevant soft skill acquired for the project work. The study aims to find out how the project based learning is useful and equipped the students with the related soft skills in the 21st century workplace environment. The study has used survey questionnaire method to gather the data. The questionnaire consisted five components like Team work, problem solving, project management, interpersonal skill and communication skill. The data has collected from 29 second year students who were undertaking the workplace communication course.

The paper concluded that project-based learning facilitates the growth of learners in acquiring the aforementioned skills. Said the project based learning is a new approach teaching and learning that is based on the underlying concept, paradigm and principles[16]. The project based learning can create opportunities for college students to alter themselves in according with their academic needs and appropriately put together themselves for the ever changing global environment. The study examined the effects of project-based learning strategy on students’ self-directed learning skills in a system-based education course offered in the educational technology department of Arak University in Iran. The study has taken the sample from 78 students in the field of educational technology. These students were enrolled in system based education. The study has formed two groups, the experimental group and the control group. They used project based learning strategy for experimental group and conventional teaching strategy for control group. The self-directed learning readiness scale (SDLRS) was administrated three times i.e. pretest, post-test one, and post-test two. The study has utilized the two way ANOVA test to reveal that students who were taught through the project based learning strategy performed expressively better in terms of self-directed learning skills than the students who were taught through conventional teaching strategy.
The purpose of this study is to investigate the effects of the Project-Based Learning (PBL) approach on college students[9]. The study has consisted two randomly chosen groups to take the sample from the student who enrolled in the Science Teaching Course in a Primary School Education Department of a State University in Turkey. The total of 66 samples has collected from the preservice primary school graduates. 33 samples have taken from the treatment group which was instructed through project based learning method. 33 samples have taken from control group using the traditional teaching method. The results revealed that students in the treatment group produced better performance on the Post- self-efficacy belief scale and the Post- Science and Technology Teaching Achievement Test. They have stated positive opinion about the use of the Project-Based Learning method.

D. Work based learning (Learning through internships and live projects):

Internship equips the students to adjust to the needs of the business once they actually join the industry. It will not give the assurance to get the permanent job but such opportunities helps the students to increase their confidence by being present in the workplace. Organizations can take the form of internships or part-time projects. So the students can work and learn through the practical knowledge about how the industry operates and expose students to the current realities of the workplace. According to the center for research on college work force transition, Internship is the short term opportunity for the college graduates to work for an organization where they learn through the real world task. Internships are coordinated with the university coursework that helps to gain the knowledge from overall experience[24]. Internship helps the students being hired by the small businesses. The main objective of the paper is to recognize the different models of work-based learning and provide the information about how the work-based learning will bring the change in the workplace[4]. The paper presented the different models of work based learning which is designed to meet the specific need of college student and employers. The paper also shows the various contribution of work based learning in higher education that brings the change in the culture and organization by improving the performance of the students. The purpose of the research paper is to present the work based learning method and how it develops the intellectual capital of organizations. The paper has said that the traditional forms of learning are not suited in higher education for the development of the students. To meet this requirements, individuals and organizations should develop their work-based learning capabilities. This will help to recognize the concept of work based learning and practices.

E. Technology enabled learning – Technological advancement is consistently changing the course of learning and therefore it is important for our learning methods to evolve and be aligned with the technology. Individuals use technology to experiment with new ways of carrying out their tasks and in doing so they learn more about their jobs. Stated that Information technology has effect in nature of work, in the learning process and to accomplish the organizational task. The present study examined the usage and impact of technology enabled job learning. The data has taken from the 308 end-users. The study evaluated the relationships between system use and technology enabled job learning. Technology enabled job learning was conceptualized in the basis of benefit of computer application on individual to perform their job better. System use was conceptualized in basis of work integration, decision support and customer knowledge. The findings of the study showed that the greater understanding of system use and its impact on organization through technology-enabled job learning.

F. Up-skilling the faculty:

Apart from focusing only on curriculum structure for the students, it is important to focus on the faculties and provide them a right training. Many faculties who do not have industrial experience it will be useful if they regularly do the small projects with the collaboration of industrial experts. This will help to ensure that the faculty is in line with the current industrial trends. The study stresses training needs for the faculty in the terms of innovative technology to increase their capability to face the demand of labor market. The objective of the study to find out training needs of faculties in university to achieve the good quality in the terms of innovation technology[1]. The study has used descriptive and analytic research design to present the literature. The data collection has taken by the questionnaire method to examine the faculty members need. Questionnaire was developed in four areas like scientific research, promoting quality assurance, teaching and community service.

The study followed the descriptive-analytic design in presenting the literature. The sample has gathered data from the 135 university faculties from the Saudi universities. The study has been done the analysis using SPSS. The result of the study revealed that faculty members of the universities need to be trained in the terms of technology innovations. Examined current practices of faculty training and development universities of Punjab (Pakistan)[2]. The purpose of the study was to analyze the current practices of faculty training and development. The samples have been taken from the HoDs (Head of the department), teachers and HRM (Human resource management). The data has collected through the questionnaire method (teachers and HoDs) and interview method (HRM experts). The results of the study indicates that training program helps more to improve the teachers’ skills and attitudes in old universities as compared to the new universities. Stated if the faculties go to the pre service training according to the conception of lifelong training and renew themselves so they can give the good training to the future generation[13]. The study analyzed university faculty members views on the effectiveness of TTP (teachers training program). The study has used the qualitative research method in phenomenological pattern. The samples have been taken from the 7 faculty members through in-depth interview method. The data has been analyzed by the content analysis approach. The study concluded that teachers training program is not sufficient to insufficient to develop the self-improvement of the faculties. The study also concluded that faculties ignore the need to upskill life-long learning competencies in the current programs.
VI. BENEFITS OF BRIDGING THE EMPLOYABILITY SKILL GAP IN INDIAN ECONOMY

In today’s economy which is predominantly driven by knowledge, quality talent and advanced skills have become the most critical competitive advantage for organizations. As India moves progressively towards becoming a ‘knowledge economy’, it is focusing on advancement of skills relevant to the emerging economic environment. Both the Central and State Governments are trying multiple approaches to skill the workforce to meet the demands of the job market. However there is still scope for a lot of amendments in the system. Industry majors are also taking revolutionary steps to upgrade and re-skill their employees. But this situation is unsustainable because it wrecks productivity. Employers’ creating their employees is not a viable model. The Ministry of Skills Development and Entrepreneurship (MSDE), through its Skill India programme is trying to align the three core aspects – industry, job seekers and the academia. The focus should be on creating a long term plan of creating a skilled talent pool. The skilling ecosystem in India has witnessed some great policy reforms which will create a stable platform for all stakeholders. Said that Skill can be related to the work performed by the people[20]. If a unit of work is performed by an unskilled person, the actual output would not match the expected output. Thus, skills and competencies play an important role in a person’s life. The projection of the skills and competencies helps him to achieve the employability status. The person has to sustain his employability by the process of continuous enhancement of his skills by way of various trainings and workshops. So, skills are essential for the development of a person and the country’s economy. This paper deals with the study of the current skill gap scenario prevailing in India and various schemes and programs propelled by the Government of India to bridge the gap. The paper also discusses the National Policy on Skill Development and Entrepreneurship 2015.

To bridge the skill gap, Government of India has taken several initiatives like Setting up institutional capacity: NSDC and Sector Skill Councils. Launching various schemes for skill development Increasing the vocational training institution network. Identifying potential employment demand industries. All these schemes focus on skill development and employment generation, based on their own vision and objectives. There is a strong need to bring the demand and supply into the same system and match them to get the best results. According to BW Education, Numerous corporates, education institutes, and social entrepreneurs have shown keen interest to align with NSDC for setting up skilling projects or hiring skilled workers at all levels. Over the years, many NSDC partners have launched large-scale training programmes, with a mandate to train a hundred thousand youth in 10 years.

VII. DISCUSSION

Soft skill like classroom discussion, questioning, presentation skill, brain storming, teamwork and role play or simulation are the essential for the teaching – learning activities. In general terms, the development of soft skills requires various teaching approaches and strategies by the lecturers that are entirely student – based or student – centered. It should be based on active teaching - learning and students should actively participate in the activities of learning. Appropriate strategies and methods include learning by cooperative learning, questioning, e-learning and problem-based learning. The study focuses on challenges faced and solutions implemented by the higher education institutions in Africa[22]. The study goals is to explore the higher education institutions that offering the agriculture education and training in their curriculum(AET) that helps to make the change behavior and improve the quality of the education. The study has been conducted with the help of qualitative analysis to analyze the data. The result of the study focuses on the two main themes such as challenges and solution. The challenge is accessing the higher education and lack of preparation at primary and secondary level of school.

And solution is to restructure the leadership and offer more training to the faculties. According to the report of The Hindu, currently, technical education is important in many areas for the development of the country. They enhance industrial productivity, create skilled manpower and develop the quality of life. It will help to increase the better talent in the job market of engineering graduates.

VIII. CONCLUSION

Skilling programs and education system in India work separately. This will lead the employability gap and unemployment among the youngsters. So the organizations need to create a bridge that will help to connect the two parallel streams using existing technologies. So the education institutions should focus on to expand the students skill set by encouraging them. Moreover, Graduate students should take up skill programs that will make them fit for the job and it will also help to assess their capabilities and enhance their skills over time. Said that the development of employability skills based on the interaction between educational institution and industry[21]. The present paper is a review paper in nature. It is an attempt to express the views of researchers on employer’s perspectives regarding employability skills, employability skills, employability skills gap and bridging the employability skills gap. It will help the society to facilitate more thinking on bridging the employability gap[25].

REFERENCE

2. Dr. Abida Nasreen, Munawar S. Mirza (2012), Faculty Training and Development in the Public Sector Universities of Punjab, International Journal of Business and Social Science Vol. 3 No. 3; February 2012


14. Lennart Buth et.al.(2017), Bridging the qualification gap between academia and industry in India, © 2017 The Authors. Published by Elsevier B.V. This is an open access article under the CC BY-NC-ND license (http://creativecommons.org/licenses/by-nc-nd/4.0). Peer review under responsibility of the scientific committee of the 7th Conference on Learning Factories.


