EMBEDDING WORK-INTEGRATED LEARNING IN UNDERGRADUATE COLLEGE-LEVEL CURRICULUM TO ENHANCE EMPLOYABILITY SKILLS AMONG STUDENTS

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Abstract. *Work-integrated learning (WIL) is a prominent educational phenomenon that has brought about numerous positive changes in the field of higher education globally. The corporate sector and the governments in the world are seeking 'work-ready' graduates. WIL as an umbrella term includes a variety of strategies and approaches that incorporate theory with the practice of work within a purposefully designed curriculum. WIL makes meaningful, relevant connections to work throughout the curriculum in higher educational contexts which are intricately interwoven with employability skills and enhance these skill sets. Some of the pedagogical approaches adopted in WIL are Practice-based learning, Professional practices, Problem-based learning, Experiential learning, Workplace learning, and Practice-based education. A study adopting an exploratory mixed-method was conducted in Middle East College, Oman including an in-depth survey and interviews with faculty members, graduates, alumni and students at the undergraduate level to determine the efficacy of the contents of the curriculum enhancing Employability Skills of the students. Findings indicate that the curriculum enriched with WIL develops (a) General employability skills and respective requirements of a workplace, (b) Effective communication with colleagues across diverse roles, (c) Attitudes toward working effectively and competently, (d) Enhance academic knowledge and develop transferable skills, (e) Develop an understanding of ethical practices, (f) Build a professional identity and (g) Increase digital literacy skills. Students' WIL experiences were taken into account in designing and implementing curricula related to WIL which are in line with enhancement of employability among students. The results of this research are valuable for practitioners in higher level educational contexts to integrate WIL and employability skills to contribute to global enhancement of these two flourishing phenomena.*

Key words: *Work-integrated Learning, Employability Skills, Higher Education*

1. INTRODUCTION

Higher educational contexts are emphasizing deeper and more profound engagement with work-integrated learning (WIL) for various stakeholder reasons. It is clear that graduates' employability skills are intricately interwoven with WIL which makes a strong contribution towards educating and preparing work-ready graduates which the industry is

demanding. Many theorists argue that the major function of higher educational contexts is to prepare an environment where students can utilize their body of knowledge to move toward becoming successful logical thinkers, logical persuaders, and problem-solvers based on the capacity to think critically and logically. To achieve the goal of preparing work-ready graduates, higher education is required (a) to improve graduate attributes and employability skills through a more profound understanding of the various work environments as well as providing real (authentic) workplace experiences (b) to expand and improve students' networks in industry to enhance their professional background and profile (c) to refine each graduates' preparation of CV (Curriculum Vitae), interview techniques the students need, as well as electronic profiles, and (d) to create student hubs cross-institutionally (both online and face-to-face) through which students would be able to share their concerns, worries, anxieties, and skills they need to move toward professional workforce.

2. WORK-INTEGRATED LEARNING (WIL)

In this competitive world, the global work market requires its employees to not only have exceptional knowledge and skills but also be dynamic and innovative and contribute to the work environment (Doolan et al. 2019). Preparing such potential employees has been entrusted to the teachers who have a significant impact on the young minds, the students. Work-integrated Learning within national and international university contexts deals with the extension of acquired knowledge and the creation of capacities needed to engage in and be an effective professional practitioner. It emphasizes the fact that active learners should be engaged and prepared to enable them to integrate those experiences in practice in higher education contexts and engage them in professional practice with reflective and critical mindsets (Billett 2011).

According to Stirling et al., (2016) Universities and higher education contexts are increasingly focusing on the quality of teaching and learning and situations for students to experience various learning contexts. WIL which is well-designed is of great benefit to the students, the academic contexts, the higher institutions, the employers, and the communities through which students come up with new ideas and innovations for industry, community organizations, and government. Opportunities for WIL cover various disciplinary areas, from business and vocational training to the social sciences and humanities, environmental, applied sciences, health, and physical sciences. Educational cooperation and partnerships between the workplace and higher academic institutions increase and boost the integration of theory and practice within and between workplace and academic environments as well as fostering students' personal and professional growth and experience. It requires (a) systemic training, (b) structured work experience, and (c) institutional partnerships.

3. KEY DIMENSIONS OF WIL

Work Integrated Learning, is an umbrella term for a range of approaches and strategies that integrate theory with the practice of work within a purposefully designed curriculum (Patrick et al. 2008). It has been observed that integrating learning in the curriculum along with workplace experience provides an opportunity for students to combine theory and practice in a real-world work environment (Cooper, Orrell and

Bowden 2010). A close collaboration between academic circles and the corporate world can help in the development and delivery of the learning material (Winberg et al. 2022). This not only leads to an in-depth knowledge of the learners but also enhances work-related capabilities. The sharing of modern knowledge, like that of the technology-augmented approach helps students to "quickly contextualize the study content within the functional environment of the workplace and develop field-specific and self-regulated learning competences" can be inspiring to collaborators (Kusmin et al., 2018). Figure 1 clearly describes the basic dimensions of WIL.

Fig. 1 Key Dimensions of WIL (Stirling et al. 2016)

3.1. Employability Skills

In a competitive workforce, having the proper technical skills and qualifications will not guarantee an individual a job, rather it is mainly their interpersonal skills and employability skills that help them find the appropriate job. Undoubtedly, it is precisely communication skills that employers feel applicants are mainly lacking. Employability can be described as a set of achievements, skills, and personal attributes which lay the foundation for graduates to get employment and be successful in future occupations which will undoubtedly benefit themselves, the workforce, the economy, and the community (Yorke 2004). Employability skills refer to the values, personal attributes, and skills which are required to be acquired by graduates regardless of their field of study or specialization (Smith & Bath 2006). 'Work-ready' skills can be described as essential skills, generic skills, transferable skills, enterprise skills, soft skills and 21st century skills

(Gill 2018). Smith and Bath (2006) emphasize that these attributes include a mixture of qualities like problem-solving, critical thinking, intellectual curiosity, independent and logical thought, communication skills, information management skills, creativity and imagination, intellectual rigor, ethical practice, and integrity and tolerance.

4. METHODOLOGY AND RESULTS

Higher Educational Institutions (HEIs) across the world realise the importance of preparing their graduates to be work-ready. A study was conducted at Middle East College, Muscat (HEI in Oman), to determine the efficacy of the curriculum taught at the undergraduate level to different engineering streams. Students studying three English modules: English for Special Purpose (ESP), English for Engineering and Communication Skills (CS) were identified for this study. A mixed approach was adopted that included an in-depth survey and interviews with faculty members, graduates, alumni, and students at undergraduate level. The number of students currently enrolled in various specializations and who took the online survey was 93. These were students who studied two English modules, ESP in the first Semester and CS in semesters five, six, or seven, depending upon their choice (Naqvi, 2018). Around six faculty members engaged in teaching these modules and 12 alumni were interviewed.

4.1 Modules Identified for the Study

There were two English modules that are offered to the students in the first semester of their specialization: (i) English for Special Purpose and (ii) English for Engineering. English for Special Purpose is offered to students who have either opted for a BSc (H) or Bachelor in Computer Science (Naqvi and Mathew, 2010) and a Bachelor in Electronics and Communication, and Electronics and Instrumentation. English for Engineering is offered to students whose specializations are either Bachelor in Mechanical Engineering, Civil Engineering or Quantity Surveying and Construction Management.   The other module – Communication Skills is a higher level English module offered to the post diploma students who have already studied either of the first two modules in their first semester. Each of these modules has three assessments, one of them being group work and the rest are individual assignments.

4.1.1 Results of the Survey

The first three questions of the survey tested the knowledge of the students about Employability Skills and Work Integrated Learning and their interrelationship. It was encouraging to see that the students were aware of what are the Employability Skills required to get a job in the future. Most of them knew about the Learning Outcomes of the assessments of the modules being taught to them and how these would help them in procuring jobs in their respective fields of specialization. One of the important questions asked in the survey was whether the curriculum helped the students to develop their employability skills.

The curriculum of the module helps to develop my Employability Skills.

93 respondents

- Strongly Disagree
- Disagree
- Neutral
- Agree
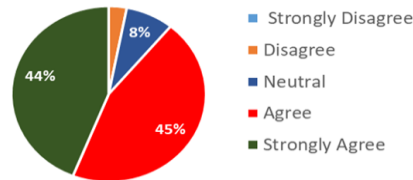- Strongly Agree

8%

44%

45%

Fig. 2 Curriculum and Employability Skills

According to the responses received, we see that around 53% of the students either agreed or strongly agreed that the curriculum being taught to them was helping them to develop skills that would prepare them for getting jobs in the future.

In the group assignment, students must undertake live case studies, conduct surveys, and present their findings in a written report and present it orally. The nature of the assessments differs according to the level and the requirement of the module. Individual Assignments test the students' writing skills besides problem solving techniques.

The Assessments in this module helped me to develop:

93 respondents

- Team Working Skills
- Communication Skills
- Presentation Skills
- Time Management Skills
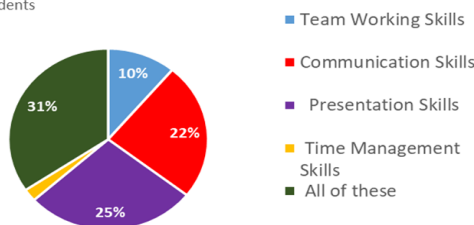- All of these

10%

31%

22%

25%

Fig. 3 Skills developed through Assessments

There was a question in the survey about the skills developed through the assessments majority of the students were of the view that more than one skill were developed. As shown in Figure 3, students felt that the assessments helped to develop skills like working in a team, communication skills, presentation skills and time management skills. Such responses reiterated that the curriculum for these modules was well designed and catered to the needs of the students to make them work-ready.

4.1.2 Results of the Structured Interview

For the personal interviews, six senior faculty members from the Centre for Foundation Studies at Middle East College who are engaged in teaching the three targeted modules were chosen. Similar questions were also asked from 12 Alumni students. Since these students had already graduated from the college the interviews

were conducted online. Of the different Interview questions, the following two got similar responses from both the teachers and the students: (i) Which of the assignments in English for Special Purpose, English for Engineering and Communication Skills help in preparing for the future? (ii) What are the benefits of such assessments?

Both the teachers and the students answered that group assignments are very helpful. It teaches the students to first present their plan in the form of a Proposal; it develops their Research skills as they had to refer to research articles and conduct surveys; it developed their writing skills as they have to prepare a written Report and finally it taught them to do oral presentations. For the second question the answers where that such assessments helped to develop: Time Management Skill, Team-working Skill, Leadership Qualities, Research Skills, Presentation Skills, Communication Skills, and Problem-Solving Skills.

4.1.3 Findings

The modules offered by Middle East College in Oman have been very successful in integrating the employability skills in their curriculum. The curriculum is well enriched within WIL which helps to develop: general employability skills that are required in a workplace; effective communication skills which will help in dealing with colleagues across diverse roles; attitudes toward working effectively and competently by learning time management; academic knowledge and transferable skills through research; a professional identity and increased digital literacy skills. The results of this research also provided valuable insight on how the integration of WIL and employability skills contribute to the all-round development of the students which in turn enhance their chances of performing well in their workplace. Furthermore, attributes such as sociability, logical thinking, self-evaluation, information-seeking, self-evaluation are highlighted within higher education contexts (Kniazian, Khromchenko and Sushchenko 2021) "There is a strong link between student satisfaction of their program and the availability of WIL opportunities. The more opportunities a student has to participate in a practice based learning setting, the more likely they are to feel content with their post-secondary experience" (ABACUSDATA 2016). Students who are having WIL experiences always feel more confident and better equipped to enter the job market and succeed in their careers. Since WIL reduces the gap between theoretical learning and expectations at the workplace students are more likely to transition into the workforce with greater ease.

5. BENEFITS OF WIL

One of the most important benefits of WIL according to students was that it provides a hands down experience of a professional and real-world environment. The teachers felt that they were successful in being contributors to the community and developing relationships with external organisations. Some other benefits of WIL were: it helps in developing relationships with industry, Increases the confidence level and communication skills of the students, provides access to resources both at the industry level and in the community, increases the involvement of the community, provides teachers with

opportunities to experiment with their teaching styles and train potential employees, etc. some other benefits for the students are the development of interpersonal relations, writing skills, punctuality, leadership qualities, putting theory into practice, awareness of workplace culture, meeting workplace expectations; opportunities to develop a range of personal attributes, coping in a rapidly changing world of work, career strategies, etc. (Govender and Wait 2017).

6. RECOMMENDATIONS

One of the suggestions related to WIL programme given by the students was that the structure of the curriculum should be more defined, and the Learning Outcomes should be communicated to them, (though the Learning Outcomes are already being communicated to the students through the Module Information Guides). Another suggestion was to increase the involvement of the stakeholders, especially employees from the corporate sectors, the potential employers. The College staff should consult with the industry partners, know their viewpoints to make WIL more relevant to the needs of the present world. Frequent feedback should be taken from the alumni and the suggested changes should be implemented. Teachers should ask the students about their future plans and career aspirations and accordingly expose them to the networks. Teachers were of the view that the students should also keep themselves abreast with the requirements of the industry and the job market. They should also build a network of contacts who can guide them about their future careers.

7. CONCLUSION

Researchers must collaborate at the global level to make others understand how 'academic study and work experience can enhance graduate employability, contribute to a skilled and competent workforce, meet industry requirements, and achieve economic development goals (Reddan, 2016). This process will require rigorous research for a systematic and substantiable curriculum for enhancing employability. From the above study we see that the curriculum of the three modules helped develop some key important skills: Team-working Skills which teaches the students to work with individuals of diverse backgrounds, to take and share insights, to accept and provide feedback; to interact with internal and external contacts; Problem-solving Skills helped to increase confidence and to be prepared to handle any uncertainties and they also gained experience of a real work environment. These skills are valuable for a potential future career within established companies (Winborg and Hagg 2022). Embedding the work integrated learning the curriculum not only helps the students to develop their soft skills but also boost their employment prospects. The students also become aware of the global challenges and can provide solutions to real problems. University / college education is not only about earning a degree but preparing oneself for employment in this big wide world.

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