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EMPLOYABILITY SKILLS DEVELOPMENT (ESD)

MODULE: AN ASSESSMENT

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In Partial Fulfillment

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DOCTOR OF PHILOSOPHY IN

ADMINISTRATION AND SUPERVISION

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APPROVAL SHEET

This dissertation entitled, "EMPLOYABILITY SKILLS DEVELOPMENT (ESD) MODULE: AN ASSESSMENT," prepared and submitted by MICHAEL ANGELO DUCA PERERA, in partial fulfillment of the requirements for the degree, DOCTOR OF PHILOSOPHY IN ADMINISTRATION AND SUPERVISION, is hereby endorsed for acceptance and approval for final oral defense.

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ABSTRACT

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(ESD) MODULE: AN ASSESSMENT

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This study focused on the assessment of the Employability Skills Development (ESD) Module of the National University of Science and Technology, Sultanate of Oman which prepares and equips graduates for employment. The population of the study was composed of 235 engineering students of the National University of Science and Technology, Sultanate of Oman. The descriptive research design was used in the study with a questionnaire as the data gathering instrument. Simple random sampling was employed. The data were analyzed and quantified through frequencies, percentages, and means. The null hypotheses were tested through the t test. The following are the findings of the study: the extent of awareness of the contents of the ESD module by the engineering

students is much aware; the extent of knowledge of the components of the ESD module by the engineering students is very knowledgeable; and the degree of importance of the components of the ESD module by the engineering students is very important. All the stated hypotheses are accepted. Drawn from the findings are the conclusions as follows: the extent of awareness of the engineering students on the contents of the ESD Module which is much aware is attributed to their desire to be equipped with the necessary employability skills; the extent of knowledge of the engineering students on the components of the ESD Module which is very knowledgeable is due to their being sensible that these will prepare them for employment in the future; and the degree of importance of the components of the ESD Module which was perceived by the engineering students as very important is attributed to their desire to be fully equipped to face the challenges in their future career.

Keywords: *career readiness, job search techniques, module assessment, engineering graduates, employment*

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Chapter 1

THE PROBLEM

Background of the Study

Graduate employability skills are said to be the most vital and essential elements which recruiters require from students who have finished and obtained a degree as they enter the challenging world of work. It has been observed that present-day higher education institutions constantly collaborate with various industries to identify the required skill sets by fresh graduates in preparation for the demands of the highly challenging labour market. It is interesting to know that higher education institutions enhance their curriculum by integrating job search techniques and employability skills in order to spread awareness on the importance of honing these skills to be better equipped for future job opportunities (Lowden, 2011).

Graduates are assumed and presumed by recruiters to demonstrate proficiency and high level of skills such as leadership, communication, problem-solving, teamwork, and decision-making commonly referred to as employability skills. Colleges and universities have incorporated within their curriculum these said

skills to ensure that graduates are fully prepared and geared up in facing the challenges of job hunt after graduation.

In the past, employability skills were not quite emphasized in academic institutions. While some graduates see the importance of such skills in obtaining and maintaining a job, there are others who are totally left oblivious and clueless on the significance of employability skills in creating and establishing a positive impression as a potential job applicant. Lately, higher education institutions were open on the idea of integrating employability skills in their curriculum which gives graduates a great advantage over other candidates who have not acquired and obtained employment skills through proper formal education. Steven and Fallows (1998) believe that, if graduates are not equipped with the required skills that prepare them for the world of employment, the link from education to employment is not given much emphasis.

To further the professional growth and development of students, the College of Engineering of the National University of Science and Technology introduced the module on employability skills in 2003 that would prepare students for employment and assist them in acquiring the necessary self-marketing and self-presentation skills that would enable them to progress and succeed in their chosen career path later (Perera, et al., 2018).

The Employability Skills Development module at the College of Engineering of the National University of Science and Technology is designed to equip fresh graduates with various job search skills and techniques that are required by modern-day employers. This module is aimed at honing the required skills of college of engineering graduates when applying, getting accepted, and continuing in their chosen company by way of understanding and internalizing job research and career advancement skills and competencies. Furthermore, the Employment Skills Development module gives emphasis to the mastery of these fresh graduates' skills along self-marketing and self-presentation through the building of an impressive curriculum vitae or CV with an accompanying cover letter and elevator speech commonly known as personal commercial. Moreover, they execute presentations and simulate job interviews and play the interviewer-interviewee roles. The said module also serves as an avenue for fresh graduates to possess and develop certain technical know-hows and competencies so as to be global and worldwide engineers.

Additionally, the Employability Skills Development module emphasized on professional work ethics and practices through critical thinking and reflection which are of high standards. Besides, the module facilitates fresh graduates to plan their career

pathway by analyzing and evaluating key employers in the Sultanate of Oman and the Gulf Cooperating Council or the GCC region where the development of competencies for engineers is mapped with the United Kingdom Standard of Professional Engineering Competencies (UK SPEC). This is performed so as for skills and competencies to be met and benchmarked with global standards. This is implemented so fresh graduates will be able to comprehend the importance of various continued professional development activities which are required for them to be successful in their chosen engineering careers. Fresh graduates are able to recognize the blending of technical skills and soft skills that are required to enable them to establish an identity for themselves in the engineering industry when their competencies are mapped with the UK SPEC. This enables them to prepare certain plans of action for progress and advancement in their respective careers. Moreover, competency mapping encourages graduates to be aware of certain standards of commitment and competence as required by chartered engineers. It emphasizes their statuses with the Engineering Council and reinforces their roles as professional engineers in utilizing various analytical techniques and approaches when developing creative and innovative engineering solutions to glitches and problems with the use of latest, sophisticated, and state-of-the-

art techniques. In doing so, leads them also to consider certain socio-economic factors when performing their engineering and technical responsibilities. Furthermore, engineering graduates need to have a full understanding on the purpose and need to carry out their roles with excellent interpersonal skills and implement certain ethical measures in enabling systems to be more convenient for the society (UK SPEC, 2013).

This study is undertaken to evaluate the role of the employability skills development module in preparing graduates for employment in the Sultanate of Oman. Also, the university would like to analyze whether the syllabus covered by the said module was beneficial in enhancing the employability and job search skills of fresh graduates.

This dissertation intends to study the role and impact of the syllabus in preparing engineering graduates' knowledge, skills, and attitudes that are required for self-marketing and presentation. Additionally, this study purports to identify the level of career preparedness and evaluate the extent of usefulness of the said Employability Skills Development module among fresh graduates of the College of Engineering of the National University of Science and Technology in the Sultanate of Oman. Hence, the researcher looks

forward to identifying the role of the module in preparing fresh graduates for employment.

The components of this study include the following: self-assessment, job search, and self-marketing tools.

The study would benefit the researcher himself especially when receiving feedback on the effectiveness of the module. It would further promote the usefulness of the module so that fresh graduates can explore every area of the module syllabus and utilize it for enhancing their employability and job search skills. In addition, it would encourage tutors to continue providing fresh graduates a deeper understanding and experience of getting prepared on the challenges and opportunities of the job market. Furthermore, it would profit the College of Engineering, in particular, especially when enhancing the Employability Skills Development module by incorporating relevant topics and information that are contextualized to the demands of the current job market, and in general, the National University of Science and Technology, where the focus of strategic planning is also towards graduates' employment as well as partnerships with industry employers need to be effective, continuous, and just. Finally, this study will be significant for the Ministry of Higher Education, Research, and Innovation (MOHERI) which can be a benchmarking

gauge for other higher education institutions (HEI), should the aim to produce graduates who are employable in various sectors of the Sultanate of Oman, be considered and prioritized.

Philosophical/Theoretical and Conceptual Framework of the Study

This study is anchored on the following philosophies:

In Constructivism in Education, it is not enough to simply know the theory of constructivist learning. Educators must also know how to implement it in their classrooms. Their goal is to create a welcoming environment that promotes active engagement in learning. In the theory of constructivist learning, instructors act as facilitators. They must promote collaboration and adjust their lessons based on the prior level of understanding of the class. Once they identify students' existing knowledge, instructors must work to grow the understanding in those areas.

There are four key areas that are crucial to the success of a constructivist classroom: 1) The instructor takes on the role of a facilitator instead of a director, 2) There are equal authority and responsibility between the students and the instructor, 3) Learning occurs in small groups, and 4) Knowledge is shared between both the students and the instructor. These four areas must be addressed in order for the constructivist classroom to be successful. As one

can see, it differs greatly from the traditional classroom. Constructivist classrooms are more student-centered and the learning revolves around their interests and questions. Teachers guide learning by implementing group activities, creating collaborative dialogue, and facilitating interactive experiences. Students build on their prior knowledge and construct new understanding based on the lessons taught. Dialogue and negotiation are also key components to successful learning (Ornstein, et al., 2015).

Existentialism in education is a teaching and learning philosophy that focuses on the student's freedom and agency to choose their future. Existentialist educators believe there is no god or higher power guiding their students. According to existentialist, a good education emphasizes individuality. The first step in any education then is to understand ourselves. Making existential methods in the classroom requires a balance in which both teachers and learners as human beings preserve its identity.

Existential themes permeate our society, supporting the notion that no matter how many ways we try to hide, there is no running from what it means to be human. Existentialism is a philosophy theory that people are free agents who have control over their choices and actions. Existentialists believe that society should

not restrict an individual's life or actions and that these restrictions inhibit free will and the development of that person's potential (Ornstein et al., 2015).

Progressivists believe that individuality, progress and change are fundamental to one's education. Believing that people learn best from what they consider most relevant to their lives, progressivists center their curricula on the needs, experiences, interest, and abilities of students. Progressivists like romantics, believe that education should focus on the whole student, rather than on the content or the teacher. They emphasize on group activity and group problem solving so that the students learn through cooperative learning strategies. It is antiauthoritarian, experimental and visionary, and aims to develop problem-solving ability. This educational philosophy stresses that students should test ideas by active experimentation. Learning is rooted in the questions of learners that arise through experiencing the world. Progressivism was developed by John Dewey's pedagogic theory, being based on Pragmatism. Experience represented the core concept of this philosophy. Some American schools also follow this philosophy (Ornstein, et al., 2015).

From these philosophies, the following concept is drawn:

The concept of employability skills can also be considered as career and employability skills; workplace basics or workplace know-how skills (Hollenbeck, 1994). It may sometimes denote generic skills (UWA, 1996) which focus on three components, namely: self-assessment, job search techniques, and self-marketing tools.

Self-assessment

In this current study, one of the components is self-assessment. The aim is to comprehend whether students, after completing the module, have got a deeper understanding and awareness into how to appraise themselves on workplace values and personality traits that they should demonstrate upon entry to the workplace. Thus, if students are equipped and knowledgeable to assess themselves appropriately, they would initiate further steps to enhance work-related skills and explore for opportunities to enhance these skills. The researcher has discovered support for this in the Precision Consultancy's report on Graduate Employability Skills (August 2007) prepared for the Business, Industry and Higher Education Collaboration Council, Western Australia, which states that students are required to take responsibility for reviewing or assessing their own employability skills and addressing gaps then pursue appropriate ways to present relevant information about their

skills to potential employers. Further, Jackson (2013) declares that self-assessment is a step closer to independence in learning and hence, enhances students' ability to achieve the process of preparedness for employment. Moreover, he adds that incorporating self-assessment in the curriculum is advantageous because it guides students to cultivate appropriate and accepted behaviors in the workplace.

One's learning can be improved through self-reflection which is according to David Kolb's Experiential Cycle. This permits the learner to think of the pieces of his learning experience in an organized manner and thus encouraging him to make necessary changes and adjustments. Wingrove and Turner (2014) believe that self-reflection is a power-enabler for graduates as they prepare for professional practice in futures unknown. In a study conducted by Helyer (2015) on reflective practice in work-based learning, she observed that being reflective enables workforce to create plans that will hone their skills and strategically transform themselves for the better. She states that in the dynamic job market vis-à-vis the ever-changing technological world, a modern-day employee is required to be flexible and enthusiastic to continuously learn for career success and advancement. This constant self-development is possible with certain reflection and self-assessment skills. Underscoring the same

notion, Cottrell (2015) declares that active reflection of learning aids better forward looking and planning for the future.

Likewise in another study, Creasey (2015) identified 54% of students responded positively in support of employability and professional development skills, particularly highlighting confidence in being equipped for interviews and comprehending necessities of engineering chartership.

Job search techniques

The next component is job search techniques. A remarkable survey was done on various job search techniques which pointed out the perceptions on job-search self-efficacy which are important in the process of job searching. Furthermore, personal advisors portray a significant role when developing job seekers' self-efficacy and that it can help in hurdling barriers to successful job search (Green et al., 2011). Moreover, according to the study conducted by Sagen et al. (1999), employers give favor and high regard to job-seekers with specific job search techniques depending on the credentials sought. All job search techniques revealed interaction effects, favoring or limiting graduates with the specific characteristics such as appropriate specialization and higher ability. Direct contact with industry employers as well as early initiation of

job search contributed explicitly to initial employment from bachelor level.

Self-marketing tools

Self-marketing is considered personal branding as it uses certain tools to produce an image of oneself. Candidates grab the opportunity to effectively and efficiently communicate their skills and competencies to prospective employers when in recruitment situations (Marketing-school.org., 2012).

Manai (2011), investigated the use of self-marketing tool box among students taking up business. The tool box is made up of self-evaluation, use of social media, and strategy building in the course of pursuing a career. It was observed that the students appreciated the tool box and used it as basis for self-marketing. They were also receptive to improving the tool box for better utilization in the future. This intensifies the fact that teaching employability skills certainly proved beneficial among students and facilitate their grasp and knowledge of the requirements of the current competitive job market.

One more study emphasized the value of self-marketing tools even among educators. The study described self-marketing tools as channels for educators to showcase their credentials through various tools such as personal commercial, CV, self-assessment

exercise and portfolio, as well as systematically plan for their future career growth. This strengthens the training of engineering fresh graduates in this current study in order to have an impressive self-marketing mix whether it be in writing a professional CV, preparing one's self for commonly asked interview questions, giving fresh graduates supplemental confidence and enhanced self-esteem, and served as inspiration to do a smart job search (Batra et al., 2009).

The cited philosophies and concepts served as framework of the study and guided the researcher in the formation of the questionnaire.

Paradigm of the Study

The figure presents the interplay of the Input – Process – Output of the study.

The input is on the Employability Skills Development (ESD) Module: An Assessment.

The process involves the descriptive research design, descriptive survey method, administration of the questionnaire, statistical treatment of data and analysis and interpretation of data.

The output is on the proposed measures to address the least mastered component of the module.

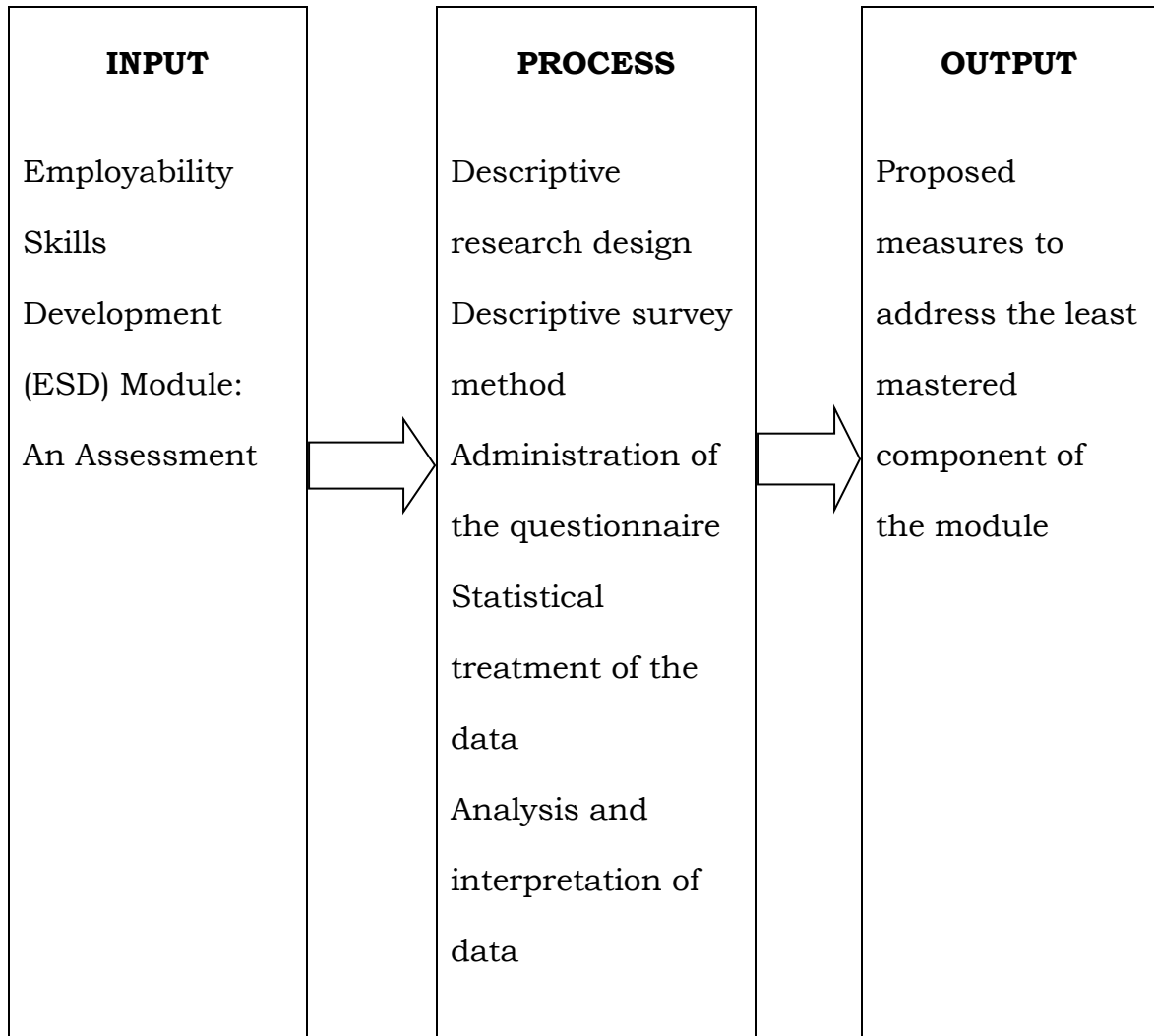


Figure 1. Paradigm of the Study

Statement of the Problem

This study aimed to assess the Employability Skills Development (ESD) Module used in the National University of Science and Technology in the Sultanate of Oman.

Specifically, it sought answers for the following questions:

1. What is the extent of awareness of male and female Engineering students on the contents of the ESD module?
2. What is the extent of knowledge of the male and female Engineering students on the components of the ESD module?
3. What is the degree of importance of the components of the ESD module as perceived by the male and female Engineering students?

Research Hypotheses

The following null hypotheses were tested:

1. There is no significant difference between the extent of awareness of the male and female Engineering students on the contents of the ESD module.
2. There is no significant difference between the extent of knowledge of the male and female Engineering students on the components of the ESD module.
3. There is no significant difference between the perceptions of the male and female Engineering students on the degree of importance of the components of the ESD module.

Chapter 2

RESEARCH DESIGN AND METHODOLOGY

This chapter focuses on the research design, locale and population of the study, data gathering instrument, reliability and validity of the instrument, data gathering procedure and statistical treatment of the data and ethical considerations.

Research Design

The research design used in this study was descriptive as the obtained results were presented as inferred from the analysis.

The research design was descriptive since it involved the assessment of the Employability Skills Development (ESD) module of a university.

According to Calmorin (2016), this type of research is suitable whenever the subjects vary among themselves and one is interested to know the extent to which different conditions and situations are obtained among the subjects. The word survey signifies the gathering of data regarding the present conditions. A survey is useful in providing the value of facts and focusing attention on the most important things to be reported.

Descriptive survey method was used to collect information from the respondents about their opinions, behavior, or knowledge.

The data aimed to know the extent to which different conditions can be obtained among the respondents. A written questionnaire was the primary source of information which was analyzed statistically.

Locale and Population of the Study

The students of College of Engineering of the National University of Science and Technology in the Sultanate of Oman, which is the locale of the study, composed the population of the study.

The sample size covered both male and female from different engineering specializations. The data was collected using simple random sampling method.

The population was categorized according to the moderate variable of gender.

Table 1

Population of the Study According to Gender (N = 235)

Gender	Total
Male	158
Female	77
Total	235

Data Gathering Instrument

A questionnaire consisting of 45 items was developed by the researcher to collect data. The questionnaire has three parts, namely: Part I – Extent of awareness on the contents of the ESD module; Part II – Extent of knowledge on the components of the ESD module; and, Part III – Degree of importance of the components of the ESD module.

The indicators were taken from the ESD module.

Reliability and Validity of the Instrument

The items in the questionnaire were taken from the ESD module. The ESD module was designed and developed in close discussion with partners in Glasgow Caledonian University (GCU), Scotland-UK, stakeholders, and industry partners in the Sultanate of Oman. The module was mapped against British standards through the UK SPEC, also known as UK Standard for Professional Engineering Competence. Moreover, it was charted with a set of Graduate Attributes with GCU. Besides, it was mapped with UN Sustainable Development Goals and Oman Vision 2040 which is the Sultanate of Oman's gateway to overcome challenges, keep pace with regional and global changes, generate and seize opportunities that foster economic competitiveness and social well-being, stimulate growth, and build confidence in all economic, social, and

developmental relations nationwide while achieving national priorities especially on labour market and employment (ISFU, 2022).

The ESD module is a result of collective efforts by many present staff who are experts in soft skills training and various fields of professional development. Students taking up the Bachelor of Engineering (BEng) stream register the said module in Level 3 and 4 in accordance to their study plan which was approved by MOHERI or Ministry of Higher Education, Research, and Innovation, which is the highest governing and overseeing body for HEIs in the Sultanate of Oman. Students graduating with BEng Honours degrees are awarded a certificate of completion by GCU of Scotland, UK which is a strongly collaborated international university of the National University of Science and Technology, Sultanate of Oman. Having said such, the developed questionnaire is deemed valid and reliable

Data Gathering Procedure

The researcher sought approval from the Dean as well as from the Chair of the Ethics and Biosafety Committee of the College of Engineering of the National University of Science and Technology to conduct this study among its engineering students through the request of the Director of the ETEEAP of Baguio Central University. Upon green signal from the dean and chair of the said committee, the researcher sent out a mail to the Head of the Admissions and

Registration Department requesting for the release of list of students who have completed the Employability Skills Development module for the 2020 Spring Semester. The researcher then sent out the questionnaire via Google Forms to all these students and retrieved the responses from the latter after a certain period of time. Upon obtaining a 100% retrieval rate from all these students, the researcher started tabulating the responses. Then the results were analyzed and finally, the researcher wrote the report.

Statistical Treatment of Data

The collected data was carefully tabulated, organized, analyzed, and interpreted and finally quantified through frequencies, percentages, and means.

The null hypotheses were tested through the t-test, with the formula:

$$t_{\text{-comp}} = \frac{X_1 - X_2}{\sqrt{\frac{\sum X_1^2 + \sum X_2^2}{N_1 + N_2 - 2} \left[\frac{1}{N_1} + \frac{1}{N_2} \right]}}$$

Where:

x_1 = sum of weighted mean of first group

x_2 = sum of weighted mean of second group

N_1 = total respondents of first group

N_2 = total respondents of second group

Infinity was observed as basis for degrees of freedom for more than 120 df .05 level of significance, hence, 1.960 is used. (N. M. Downie and R. W. Heath, 1984).

For convenience of analysis and interpretation, a five-point scale was used to determine the perceptions of the respondents. The ranges of scores with their corresponding descriptive equivalents are presented below:

For Problem 1 on the extent of awareness of male and female Engineering students on the contents of the ESD module, the following scale was used:

Score / Scale	Statistical Limit	Descriptive Equivalent	Symbol
5	4.21 – 5.00	Very Much Aware	VMA
4	3.41 – 4.20	Much Aware	MuA
3	2.61 – 3.40	Moderately Aware	MoA

2	1.81 – 2.60	Slightly Aware	SA
1	1.00 – 1.80	Least Aware	LA

For Problem 2 on the extent of knowledge of male and female Engineering students on the components of the ESD module, the following scale was used:

Score / Scale	Statistical Limit	Descriptive Equivalent	Symbol
5	4.21 – 5.00	Very Much Knowledgeable	VMK
4	3.41 – 4.20	Very Knowledgeable	VK
3	2.61 – 3.40	Moderately Knowledgeable	MK
2	1.81 – 2.60	Slightly Knowledgeable	SK
1	1.00 – 1.80	Least Knowledgeable	LK

For Problem 3 on the degree of importance of the components of the ESD module as perceived by the male and female Engineering students, the following scale was used:

Score / Scale	Statistical Limit	Descriptive Equivalent	Symbol
5	4.21 – 5.00	Very Much Important	VMI
4	3.41 – 4.20	Very Important	VI
3	2.61 – 3.40	Moderately Important	MI
2	1.81 – 2.60	Slightly Important	SI

1	1.00 – 1.80	Least Important	LI
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Ethical Considerations

This dissertation is submitted in partial fulfillment of the requirements for the degree, Doctor of Philosophy in Administration and Supervision at the Baguio Central University, Baguio City, Philippines.

I declare that this dissertation is based on my original work except for quotations and citations which have been appropriately acknowledged.

Chapter 3

RESULTS AND DISCUSSION

This chapter presents the data gathered through the questionnaire and the analysis and interpretation of these data.

Extent of Awareness of Male Engineering Students on the Contents of the ESD Module

The extent of awareness of male engineering students on the contents of the ESD Module is shown through their scores as presented in Table 2.

The male engineering students are in the much aware level of the contents of the ESD module as indicated by an average weighted mean of 4.11.

The male engineering students were tested on their awareness of the contents of the ESD module. The ESD module is said to hone students' skill to enter, stay in, and progress in the workplace through the mastery of various job search and career enhancement skills (Perera, et al., 2018).

Table 2

Extent of Awareness of Male Engineering Students on the Contents
of the ESD Module

n = 158

Contents	Scores					TWP	WM	DE	R
	VMA 5	MuA 4	MoA 3	SA 2	LA 1				
1. Engineering skills and competencies	60 (300)	65 (260)	28 (84)	3 (6)	2 (2)	652	4.13	MuA	9
2. Career pathway planning and goal setting	61 (305)	64 (256)	28 (84)	3 (6)	2 (2)	653	4.13	MuA	9
3. Recruitment and selection	52 (260)	64 (256)	35 (105)	5 (10)	2 (2)	633	4.01	MuA	12
4. Labour market	51 (255)	52 (208)	45 (135)	8 (16)	2 (2)	616	3.90	MuA	14
5. Conventional and infographic CV	73 (365)	56 (224)	23 (69)	3 (6)	3 (3)	667	4.22	VMA	4
6. Cover letter	82 (410)	52 (208)	18 (54)	3 (6)	3 (3)	681	4.31	VMA	1
7. Personal commercial	57 (285)	66 (264)	26 (78)	7 (14)	2 (2)	643	4.07	MuA	11
8. Employability with UN SDGs and 4IR skills	42 (210)	55 (220)	52 (156)	5 (10)	4 (4)	600	3.80	MuA	15
9. Leadership styles	62 (310)	64 (256)	26 (78)	4 (8)	2 (2)	654	4.14	MuA	7
10. Online job applications	60 (300)	66 (264)	25 (75)	6 (12)	1 (1)	652	4.13	MuA	9
11. Creating LinkedIn profile	80 (400)	42 (168)	31 (93)	2 (4)	3 (3)	668	4.23	VMA	2.5
12. Professional work environment & ethics	70 (350)	60 (240)	24 (72)	3 (6)	1 (1)	669	4.23	VMA	2.5
13. Chartered engineer application	54 (270)	58 (232)	38 (114)	3 (6)	5 (5)	627	3.97	MuA	13
14. Interview questions	74 (370)	46 (184)	31 (93)	5 (10)	2 (2)	659	4.17	MuA	6
15. Interview portfolio	73 (365)	53 (212)	28 (84)	0 (0)	4 (4)	665	4.21	VMA	5
Average Weighted Mean (AWM)							4.11	MuA	

Legend:

Score / Scale	Statistical Limit	Descriptive Equivalent	Symbol
5	4.21 – 5.00	Very Much Aware	VMA
4	3.41 – 4.20	Much Aware	MuA
3	2.61 – 3.40	Moderately Aware	MoA
2	1.81 – 2.60	Slightly Aware	SA
1	1.00 – 1.80	Least Aware	LA

They topped the content on “Cover Letter” of the ESD module with a weighted mean of 4.31 interpreted as very much aware. This implies that the male engineering students are very much aware of this content as it is what employers refer first before going through the CV. It is learned that cover letter is a snapshot of who the candidate is and how he can project himself to the employer summarizing himself in one page through his qualifications, skills, achievements, and training which is an introduction to one’s CV (Perera, et al., 2018).

Cover letter is considered a priority by graduates because it is said to be the perfect way to set oneself apart and help sell one’s application, not to mention convince a recruiter that he is the right person for the role (Cheary, 2022).

On the other hand, the least ranked content of the male engineering students is “Employability with UN SDGs and 4IR Skills” with a weighted mean of 3.80 interpreted as much aware.

This requires the male engineering students to be responsive as regards relation of UN Sustainable Development Goals to employment. It further requires them to be conscious on the prerequisite of Fourth Industrial Revolution Skills in present-day workplaces because according to Gregersen-Hermans (2021), institutions need to introduce UN Sustainable Development Goals in the curriculum so their graduates can contribute in solving common global challenges at a systematic level which addresses Education for Sustainable Development and Internationalization of the Curriculum. Graduates play important roles too when employed while keeping in mind these global issues that need to be addressed and resolved. This is also true for 4IR or Industry 4.0 skills. Being aware and equipped with these generic soft skills or 21st century skills such as communication, creativity, collaboration, critical thinking with problem solving as well as hard skills which include programming skills and IT, enable graduates to be well-rounded and flexible in decision-making and problem-solving, according to Chaka (2020).

Moreover, this finding is corroborated with the constructivism philosophy in education which aims to create a welcoming environment that promotes active engagement in learning through collaboration. This is a gauge for the success of a

constructivist classroom, hence the need to integrate and employ UN Sustainable Development Goals and 4IR skills in lessons taught in class (Ornstein, et al., 2015).

Extent of Awareness of Female Engineering Students on the Contents of the ESD Module

The extent of awareness of female engineering students on the contents of the ESD Module is shown through their scores as presented in Table 3.

The female engineering students are in the much aware level of the contents of the ESD module as indicated by the average weighted mean of 4.01.

Table 3

Extent of Awareness of Female Engineering Students on the Contents of the ESD Module

n = 77

Contents	Scores					TWP	WM	DE	R
	VMA 5	MuA 4	MoA 3	SA 2	LA 1				
1. Engineering skills and competencies	30 (150)	31 (124)	9 (27)	3 (6)	4 (4)	311	4.04	MuA	8
2. Career pathway planning and goal setting	26 (130)	29 (116)	18 (54)	2 (4)	2 (2)	306	3.97	MuA	10
3. Recruitment and selection	15 (75)	32 (128)	20 (60)	7 (14)	3 (3)	280	3.64	MuA	15
4. Labour market	18 (90)	27 (108)	24 (72)	4 (8)	4 (4)	282	3.66	MuA	14
5. Conventional and infographic CV	39 (195)	22 (88)	13 (39)	1 (2)	2 (2)	326	4.23	VMA	2
6. Cover letter	44 (220)	26 (104)	3 (9)	1 (2)	3 (3)	338	4.39	VMA	1
7. Personal commercial	33 (165)	23 (92)	16 (48)	2 (4)	3 (3)	312	4.05	MuA	6.5
8. Employability with UN SDGs and 4IR skills	19 (95)	32 (128)	17 (51)	7 (14)	2 (2)	290	3.77	MuA	13
9. Leadership styles	31 (155)	33 (132)	8 (24)	3 (6)	2 (2)	319	4.14	MuA	5
10. Online job applications	29 (145)	21 (84)	17 (51)	8 (16)	2 (2)	298	3.87	MuA	11
11. Creating LinkedIn profile	45 (225)	14 (56)	7 (21)	9 (18)	2 (2)	322	4.18	MuA	4
12. Professional work environment & ethics	39 (195)	25 (100)	6 (18)	5 (10)	2 (2)	325	4.22	VMA	3
13. Chartered engineer application	22 (110)	36 (144)	10 (30)	4 (8)	5 (5)	297	3.86	MuA	12
14. Interview questions	31 (155)	29 (116)	9 (27)	4 (8)	4 (4)	310	4.03	MuA	9
15. Interview portfolio	35 (175)	22 (88)	12 (36)	5 (10)	3 (3)	312	4.05	MuA	6.5
Average Weighted Mean (AWM)							4.01	MuA	

Legend:

Score / Scale	Statistical Limit	Descriptive Equivalent	Symbol
5	4.21 – 5.00	Very Much Aware	VMA
4	3.41 – 4.20	Much Aware	MuA
3	2.61 – 3.40	Moderately Aware	MoA
2	1.81 – 2.60	Slightly Aware	SA
1	1.00 – 1.80	Least Aware	LA

The top ranked content of the ESD module by the female engineering students is the “Cover Letter” with a weighted mean of 4.39 interpreted as very much aware. Similarly with the male engineering students, the female engineering students believe that the cover letter puts one’s CV into focus and it is a preliminary introduction of oneself to the prospective employer. This is corroborated by Perera, et al (2018). Majority of the students conveyed that they were certain that they had learned to write impressive cover letters which would add value to their CVs and therefore result in an interview call.

Cover letter is encouraged to be prioritized by fresh graduates because it is the chance to tell employers what skills and competencies one has and why the candidate wants to work specifically for the chosen company (Graduate Recruitment Bureau, 2022). Moreover, there are certain rules one has to keep in mind

when accompanying it with CV which employers are very keen of. One of which is to write only those information that can be backed by CV. HR specialists definitely look for discrepancies or any mistakes that show a lack of attention to detail which is a skill most job-seekers ignore. Also, remember that anything written in the cover letter can be brought up during the graduate interviews. So, it is encouraged that well-written information on cover letters are supported with clear and fitting examples accompanied with pieces of evidence. Finally, always be honest but convincing about what the candidate knows or the skills and competencies one has that are assets and requisites to the company.

On the contrary, the female engineering students ranked least in the “Recruitment and Selection” content of the ESD module as revealed by a weighted mean of 3.64 interpreted as much aware. This is a clear manifestation that the female engineering students are least aware in terms of various sources of recruitment as well as the processes involved as regards job recruitment. This can somehow be attributed to the culture and nature of Middle Eastern women, where ladies ought not work and should only stay home and attend to the household and domestic needs of the family. However, due to contemporary empowerment of women, they are encouraged

to explore various employment opportunities and likewise be able to be change agents of the society as men (UN SDG, 2015).

The average weighted mean of the female engineering students on the contents of the ESD module is 4.01 interpreted as much aware. This implies that this group of students are mindful on the benefits and impact of taking up and studying the ESD module which enable them to obtain a variety of skills such as personal and intellectual attributes which graduate recruiters prefer over specialized subject knowledge. Oral communication, teamwork, self-management, problem-solving, and leadership are all important according to Warn and Tranter (2001).

Summary and Comparison on the Extent of Awareness of Engineering Students on the Contents of the ESD Module

The summary and comparison on the extent of awareness of engineering students on the contents of the ESD Module is shown through their scores as presented in Table 4.

The engineering students are much aware of the contents of the ESD module as indicated by the average weighted mean of 4.08.

Table 4

Summary and Comparison on the Extent of Awareness of Engineering Students on the Contents of the ESD Module

$n_1 = 158$ male, $n_2 = 77$ female

Indicators	Extent of Awareness						Rank
	Male		Female		Combined		
	WM	DE	WM	DE	WM	DE	
1. Engineering skills and competencies	4.13	MuA	4.04	MuA	4.10	MuA	8
2. Career pathway planning and goal setting	4.13	MuA	3.97	MuA	4.08	MuA	9
3. Recruitment and selection	4.01	MuA	3.64	MuA	3.89	MuA	13
4. Labour market	3.90	MuA	3.66	MuA	3.82	MuA	14
5. Conventional and infographic CV	4.22	VMA	4.23	VMA	4.23	VMA	2.5
6. Cover letter	4.31	VMA	4.39	VMA	4.34	VMA	1
7. Personal commercial	4.07	MuA	4.05	MuA	4.06	MuA	10
8. Employability with UN SDGs and 4IR skills	3.80	MuA	3.77	MuA	3.79	MuA	15
9. Leadership styles	4.14	MuA	4.14	MuA	4.14	MuA	6
10. Online job applications	4.13	MuA	3.87	MuA	4.04	MuA	11
11. Creating LinkedIn profile	4.23	VMA	4.18	MuA	4.21	VMA	4
12. Professional work environment & ethics	4.23	VMA	4.22	VMA	4.23	VMA	2.5
13. Chartered engineer application	3.97	MuA	3.86	MuA	3.93	MuA	12
14. Interview questions	4.17	MuA	4.03	MuA	4.12	MuA	7
15. Interview portfolio	4.21	VMA	4.05	MuA	4.16	MuA	5
Average Weighted Mean	4.11	MuA	4.01	MuA	4.08	MuA	

$t_{-comp} = 0.526$

$t_{value(0.05), 233, df} = 1.960$

Result: Not Significant

Decision: Accept H_0

The engineering students are to be aware of the contents of the ESD module as these help them master the skills required for employment to various sectors and industries after graduation.

The extent of awareness of the contents of the ESD module by the engineering students indicates that they are mindful and

conscious on the contents of the ESD module which enable them to master the necessary employability skills and be equipped when faced with challenges on job hunting and employment searching.

The top ranked content of the ESD module that is categorized as very much aware is the “Cover Letter” with a combined weighted mean of 4.34.

The engineering students topped this content because they unanimously believe that the initial step to job searching is the preparation of a sharp and impressive cover letter that introduces the CV and which initially catches the attention of employers.

This notion is likewise supported by Graduate Recruitment Bureau (2022), which was mentioned in the discussion of the earlier table.

The least ranked content of the ESD module is “Employability with UN SDGs and 4IR Skills” with a combined weighted mean of 3.79 interpreted as much aware.

This proves that students are not quite keen on the relation of UN Sustainable Development Goals to employment nor are they conscious on the prerequisite of Fourth Industrial Revolution Skills in the workplace. It is imperative for fresh graduates to comprehend the need and apply the importance of UN Sustainable Development Goals and Fourth Industrial Revolution Skills to employment

because it is what further equips them to face issues and solve problems and challenges with resilience and flexibility.

This content on the ESD module was put in place in order to keep engineering students aware on the Fourth Industrial Revolution Skills which are commonly known as 4IR skills as well as the Sustainable Development Goals and targets set by UN considering that the Sultanate of Oman is a member-nation of the said international organization. Moreover, these are essential skills which employers nowadays require considering the revolutionization of employment in this technological and advanced era. As mentioned by Chaka (2020), these are the current workplace skills employers require from modern-day graduate job-seekers.

The combined average weighted mean of the engineering students on the extent of awareness on the contents of the ESD module is 4.01 interpreted as much aware. This implies that both the male and female engineering students are able to comprehend each and every content of the ESD module with certain level of awareness and that they are able to apply it and make it manifest after graduation in search for jobs that best suit their interests and qualifications.

This finding is corroborated with the progressivism philosophy in education which asserts that progress and change are

fundamental to one's education. Students especially of today believe that they learn best from what they consider most relevant in their lives. Curricula of academic institutions should be centered on what students benefit on life after education. The ESD module therefore focuses on the needs, interests, and abilities of the students and thus, prepare them to the challenging world of employment (Ornstein, et al., 2015).

It is observed that the contents on "Conventional and Infographic CV" as well as "Professional Work Environment & Ethics" ranked next with the similar weighted mean of 4.23 interpreted as very much aware.

A difference of .11 is noted between the contents of "Online Job Applications" at a weighted average of 4.04 and "Chartered Engineer Application" at a weighted average of 3.93 both interpreted as much aware. This implies that since Chartered Engineering applications are done online, it is inferred that graduates should have the knack and knowledge in searching and applying online, hence the low rankings and interpretations of the said ESD module contents.

In summary, the engineering students are much aware of the contents of the ESD module as indicated by the combined average weighted mean of 4.08.

Null hypothesis number one (1) which states that there is no significant difference between the level of awareness of the male and female engineering students on the contents of the ESD module is accepted as revealed by the computed t value of 0.526 which is less than the table value of 1.960 at 5% level of significance.

Extent of Knowledge of Male Engineering Students on the Components of the ESD Module

The extent of knowledge of male engineering students on the components of the ESD Module is shown through their scores as presented in Table 5.

The male engineering students are in the very knowledgeable level of the components of the ESD module as indicated by the average weighted mean of 4.12.

Table 5

Extent of Knowledge of Male Engineering Students on the Components of the ESD Module

n = 158

Components	Scores					TWP	WM	DE	R
	VMK 5	VK 4	MK 3	SK 2	LK 1				
1. Engineering skills and competencies	72 (360)	58 (232)	24 (72)	1 (2)	3 (3)	669	4.23	VMK	3
2. Career pathway planning and goal setting	61 (305)	64 (256)	29 (87)	3 (6)	1 (1)	655	4.15	VK	9
3. Recruitment and selection	54 (270)	63 (252)	35 (105)	4 (8)	2 (2)	637	4.03	VK	12.5
4. Labour market	52 (260)	48 (192)	52 (156)	5 (10)	1 (1)	619	3.92	VK	14
5. Conventional and infographic CV	72 (360)	52 (208)	28 (84)	4 (8)	2 (2)	662	4.19	VK	7
6. Cover letter	74 (370)	52 (208)	27 (81)	3 (6)	2 (2)	667	4.22	VMK	5
7. Personal commercial	71 (355)	48 (192)	31 (93)	6 (12)	2 (2)	654	4.14	VK	10
8. Employability with UN SDGs and 4IR skills	42 (210)	61 (244)	42 (126)	8 (16)	5 (5)	601	3.80	VK	15
9. Leadership styles	77 (385)	51 (204)	25 (75)	2 (4)	3 (3)	671	4.25	VMK	1
10. Online job applications	66 (330)	50 (200)	32 (96)	8 (16)	2 (2)	644	4.08	VK	11
11. Creating LinkedIn profile	78 (390)	44 (176)	25 (75)	7 (14)	4 (4)	659	4.17	VK	8
12. Professional work environment & ethics	65 (325)	66 (264)	21 (63)	5 (10)	1 (1)	663	4.20	VK	6
13. Chartered engineer application	58 (290)	58 (232)	32 (96)	8 (16)	2 (2)	636	4.03	VK	12.5
14. Interview questions	77 (385)	51 (204)	22 (66)	5 (10)	3 (3)	668	4.23	VMK	3
15. Interview portfolio	77 (385)	52 (208)	22 (66)	3 (9)	4 (4)	669	4.23	VMK	3
Average Weighted Mean (AWM)							4.12	VK	

Legend:

Score / Scale	Statistical Limit	Descriptive Equivalent	Symbol
5	4.21 – 5.00	Very Much Knowledgeable	VMK
4	3.41 – 4.20	Very Knowledgeable	VK
3	2.61 – 3.40	Moderately Knowledgeable	MK
2	1.81 – 2.60	Slightly Knowledgeable	SK
1	1.00 – 1.80	Least Knowledgeable	LK

The male engineering students were tested on their knowledge of the components of the ESD module. The ESD module emphasizes that fresh graduates should understand the importance of acquiring the necessary knowledge and competencies in order to be global engineers (Perera, et al., 2018).

They topped the component on “Leadership Styles” of the ESD module with a weighted mean of 4.25. This denotes that the male engineering students are extremely knowledgeable of this component as men can lead and manage any organization. While the Sultanate of Oman is characterized by various engineering industries and sectors, it is of observation that men lead majority of these companies and sectors (Thomas, 2020).

According to a study lifted from Sage Journal, the stereotype of leadership is for males and that female leaders who behave in masculine ways are considered overly assertive, viewed negatively, and experience career backlash (Carli, 2010) thus the role of leadership is always linked to more competence in men since time immemorial.

On the one hand, the least ranked component of the male engineering students is “Employability with UN SDGs and 4IR Skills” with a weighted mean of 3.80 interpreted as very knowledgeable.

This again encourages the male engineering students to give priority and focus along UN Sustainable Development Goals vis-à-vis employment. In doing so enables them to be aware on the needs and demands of Fourth Industrial Revolution Skills in modern-day workplaces (Renjen, 2018) so that once they are hired, they could stay in and progress in their areas of employment through the mastery of these Industry 4.0 skills which include job search and career enhancement skills.

A strong need to be aware of UN Sustainable Development Goals and 4IR skills is encouraged because as was discussed earlier, according to Gregersen-Hermans (2021), educational institutions need to integrate UN Sustainable Development Goals in the

curriculum in order for their graduates to contribute in solving common global challenges at a systematic level which addresses Education for Sustainable Development and Internationalization of the Curriculum. Moreover, graduates perform significant roles as well when employed while bearing in mind these global issues that need to be addressed and eventually resolved. This likewise applies for 4IR or Industry 4.0 skills according to Chaka (2020). Being aware and equipped with these generic soft skills or 21st century skills such as communication, creativity, collaboration, critical thinking with problem solving as well as hard skills which include programming skills and IT, enable graduates to be well-rounded and flexible in decision-making and problem-solving.

Extent of Knowledge of Female Engineering Students on the Components of the ESD Module

The extent of knowledge of female engineering students on the components of the ESD Module is shown through their scores as presented in Table 6.

The female engineering students are in the very knowledgeable level of the components of the ESD module as indicated by the average weighted mean of 4.11.

The foremost component of the ESD module by the female engineering students is the “Cover Letter” with a weighted mean of 4.34 interpreted as very much knowledgeable. It is observed that the female engineering students are able to draft winning and eye-catching cover letters which adds positive impressions to their CVs and have greater chances of being interviewed for the job. According to MacLellan (2021), women carefully consider word choices when writing cover letter of CV which is a common practice for them.

Since writing cover letters is a skill which every job-seeker should be able to acquire, it is believed that this is the first step to a bright future. The existentialism philosophy of education supports this notion since it emphasizes on students’ freedom and agency to choose their future.

Table 6

Extent of Knowledge of Female Engineering Students on the Components of the ESD Module

n = 77

Components	Scores					TWP	WM	DE	R
	VMK 5	VK 4	MK 3	SK 2	LK 1				
1. Engineering skills and competencies	37 (185)	23 (92)	11 (33)	3 (6)	3 (3)	319	4.14	VK	10
2. Career pathway planning and goal setting	36 (180)	22 (88)	13 (39)	3 (6)	3 (3)	316	4.10	VK	11
3. Recruitment and selection	27 (135)	25 (100)	16 (48)	9 (18)	0 (0)	301	3.91	VK	13
4. Labour market	18 (90)	36 (144)	15 (45)	6 (12)	2 (2)	293	3.81	VK	14
5. Conventional and infographic CV	36 (180)	30 (120)	9 (27)	0 (0)	2 (2)	329	4.27	VMK	2
6. Cover letter	41 (205)	25 (100)	8 (24)	2 (4)	1 (1)	334	4.34	VMK	1
7. Personal commercial	37 (185)	23 (92)	11 (33)	5 (10)	1 (1)	321	4.17	VK	7.5
8. Employability with UN SDGs and 4IR skills	21 (105)	28 (112)	15 (45)	12 (24)	1 (1)	287	3.73	VK	15
9. Leadership styles	33 (165)	29 (116)	11 (33)	3 (6)	1 (1)	321	4.17	VK	7.5
10. Online job applications	40 (200)	21 (84)	9 (27)	6 (12)	1 (1)	324	4.21	VMK	5
11. Creating LinkedIn profile	38 (190)	24 (96)	6 (18)	7 (14)	2 (2)	320	4.16	VK	9
12. Professional work environment & ethics	40 (200)	23 (92)	7 (21)	6 (12)	1 (1)	326	4.23	VMK	3.5
13. Chartered engineer application	29 (145)	29 (116)	13 (39)	5 (10)	1 (1)	311	4.04	VK	12
14. Interview questions	41 (205)	22 (88)	8 (24)	3 (6)	3 (3)	326	4.23	VMK	3.5
15. Interview portfolio	38 (190)	26 (140)	7 (21)	2 (4)	4 (4)	323	4.19	VK	6
Average Weighted Mean (AWM)							4.11	VK	

Legend:

Score / Scale	Statistical Limit	Descriptive Equivalent	Symbol
5	4.21 – 5.00	Very Much Knowledgeable	VMK
4	3.41 – 4.20	Very Knowledgeable	VK
3	2.61 – 3.40	Moderately Knowledgeable	MK
2	1.81 – 2.60	Slightly Knowledgeable	SK
1	1.00 – 1.80	Least Knowledgeable	LK

Furthermore, it is believed that a good education that emphasizes on individuality is determined by its ability to direct its graduates to employment. It is therefore encouraged that institutions prepare a robust curriculum which focuses on students' career knowledge, skills, and behavior that produces employable graduates. (Ornstein et al., 2015).

On the contrary, the least ranked component of the female engineering students is "Employability with UN SDGs and 4IR Skills" with a weighted mean of 3.73 interpreted as very knowledgeable. Comparably with the male engineering students, this also encourages the female engineering students to prioritize and give due focus along UN Sustainable Development Goals with respect to employment. This will enable them to be sensitive to the

needs and demands of Fourth Industrial Revolution Skills in present-day workplaces (Renjen, 2018) so that once they are hired, they could stay in and progress in their areas of employment through the mastery of these Fourth Industrial Revolution Skills including career enhancement and job search skills.

Again, awareness of UN Sustainable Development Goals and 4IR skills is encouraged among female engineering students because, just like the male engineering students who least ranked this component, it encourages the female engineering students to give significance and emphasis along UN Sustainable Development Goals concerning employment. This will allow them as well to be aware on the needs and demands of Fourth Industrial Revolution Skills in modern-day workplaces (Renjen, 2018) so when hired, they could perform well in their respective areas of employment by mastering these Industry 4.0 skills which include job search and career enhancement skills.

Summary and Comparison on the Extent of Knowledge of Engineering Students on the Components of the ESD Module

The extent of knowledge of engineering students on the components of the ESD Module is shown through their scores as presented in Table 7.

The engineering students are in the very knowledgeable level of the components of the ESD module as indicated by the average weighted mean of 4.12.

The engineering students are to be knowledgeable of the components of the ESD module as Perera, et al. (2018) consider it an all-in-one pack that prepare graduates to display good communication, team work, leadership, and problem-solving abilities collectively known as employability skills. It is believed everything that an engineering graduate requires is found in the ESD module which likewise meet employer expectations.

The evidently strong knowledge of the components of the ESD module by the engineering students indicates that they are careful and sensible enough on the components of the ESD module which enable them to possess and be equipped with essential employability skills and be well prepared when challenges on job hunting and employment searching are experienced.

Table 7

Summary and Comparison on the Extent of Knowledge of Engineering Students on the Components of the ESD Module

$n_1 = 158$ male, $n_2 = 77$ female

Indicators	Extent of Knowledge						Rank
	Male		Female		Combined		
	WM	DE	WM	DE	WM	DE	
1. Engineering skills and competencies	4.23	VMK	4.14	VK	4.20	VMK	7
2. Career pathway planning and goal setting	4.15	VK	4.10	VK	4.13	VK	10
3. Recruitment and selection	4.03	VK	3.91	VK	3.99	VK	13
4. Labour market	3.92	VK	3.81	VK	3.88	VK	14
5. Conventional and infographic CV	4.19	VK	4.27	VMK	4.22	VMK	4
6. Cover letter	4.22	VMK	4.34	VMK	4.26	VMK	1
7. Personal commercial	4.14	VK	4.17	VK	4.15	VK	9
8. Employability with UN SDGs and 4IR skills	3.80	VK	3.73	VK	3.78	VK	15
9. Leadership styles	4.25	VMK	4.17	VK	4.22	VMK	4
10. Online job applications	4.08	VK	4.21	VMK	4.12	VK	11
11. Creating LinkedIn profile	4.17	VK	4.16	VK	4.17	VK	8
12. Professional work environment & ethics	4.20	VK	4.23	VMK	4.21	VMK	6
13. Chartered engineer application	4.03	VK	4.04	VK	4.03	VK	12
14. Interview questions	4.23	VMK	4.23	VMK	4.23	VMK	2
15. Interview portfolio	4.23	VMK	4.19	VK	4.22	VMK	4
Average Weighted Mean	4.12	VK	4.11	VK	4.12	VK	

$t_{-comp} = 0.001$

$t_{value(0.05), 233, df} = 1.960$

Result: Not Significant

Decision: Accept H_0

The component of the ESD module that is topped and categorized as very much knowledgeable is the "Cover Letter" with a combined weighted mean of 4.26.

This result implies that the engineering students are knowledgeable as much as they are aware in preparing impressive cover letters that initially catch the eyes of employers which likely result in interview calls. According to Krishnan (2022), more than 80% of engineering graduates of the College of Engineering of the National University of Science and Technology have been employed in various sectors in the Sultanate according to data gathered from the Quality Enhancement and Assurance Department. This is attributed to the strong and sharp self-marketing and presentation skills our graduates have been equipped with through the ESD module and training they had while in college.

Having observed their consistency in awareness and knowledge in cover letters of CVs, it is therefore implied that the engineering students are able to write cover letters that clearly reflect job adverts which come in various forms.

Moreover, the results also imply that the engineering students had learned to tailor their cover letters to specific attributes required for a specific job role which meet target employer expectations.

In the study conducted by Perera, et al., (2018), majority of the students, i.e., 79.85%, conveyed that they were certain that they

had learned to write strong cover letters which would add value to their CVs which likely results in a job recruitment interview.

Meanwhile, the least ranked component is “Employability with UN SDGs and 4IR skills” with a combined weighted mean of 3.78 interpreted as very knowledgeable. Since both male and female engineering students ranked least in this component, it is again suggested that optimum priority be given to UN Sustainable Development Goals with regards to employment. Observing so will allow them to be sensible and shrewd to the requirements of Fourth Industrial Revolution Skills and how these are vital in performing well in their workplaces (Renjen, 2018).

Considering that the UN Sustainable Development Goals were only introduced in 2015 and the Fourth Industrial Revolution (4IR) by Klaus Martin Schwab (2016) of World Economic Forum in 2016, the students involved in this study might not be much aware of these goals and skills due to its recency and novelty to their knowledge and understanding, hence ranking least by both engineering males and females in this current study.

Again, this proves that students are not quite keen on the relation of UN Sustainable Development Goals to employment nor are they conscious on the prerequisite of Fourth Industrial Revolution Skills in the workplace. Hence, it is essential for fresh

graduates to comprehend the need and apply the importance of UN Sustainable Development Goals and Fourth Industrial Revolution Skills to employment because it is what further equips them to face issues in the workplace and solve problems and challenges with resilience and flexibility.

This component was integrated into the ESD module in order to enable engineering students to be aware of the Fourth Industrial Revolution Skills which are commonly known as 4IR skills as well as the Sustainable Development Goals and targets set by UN considering that the Sultanate of Oman is a member-nation of the said international organization. Besides, these are highly essential skills which present-day employers require from fresh graduates bearing in mind the modernization of employment in this advanced technological age. As mentioned by Chaka (2020), these are the current workplace skills employers require from graduate job-seekers of today.

The combined average weighted mean of the engineering students on the extent of knowledge on the components of the ESD module is 4.12 interpreted as very knowledgeable. This implies that both the male and female engineering students are able to reflect on themselves and internalize the needed skills and competencies future work demands because according to Wingrove and Turner

(2014) self-reflection is a power-enabler for graduates because it prepares them for professional practice in the unknown future. In a study conducted by Helyer (2015) on reflective practice in work-based learning, she observed that being reflective enables workforce to create plans that will hone their skills and strategically transform themselves for the better. It is therefore believed that the ESD module helps graduates enter, sustain, and progress in the workplace.

It is observed that the components on “Conventional and Infographic CV”, “Leadership Styles”, and “Interview Portfolio” ranked similar with a weighted mean of 4.22 interpreted as very much knowledgeable. It is observed that being knowledgeable on all these three components enable a graduate to easily get the job they desire.

“Recruitment and Selection”, “Labour Market”, “Employability with UN SDGs and 4IR Skills” were ranked the lowest three with weighted means of 3.99, 3.88, and 3.78, respectively and interpreted as very knowledgeable. It is therefore confirmed that these three components need to be given focus and acquire the necessary knowledge so as to be well-equipped and empowered for employment.

In summary, the engineering students are very knowledgeable on the components of the ESD module as indicated by the combined average weighted mean of 4.12.

Null hypothesis number two (2) which states that there is no significant difference between the extent of knowledge of the male and female engineering students on the components of the ESD module is accepted as revealed by the computed t value of 0.0010 which is less than the table value of 1.960 at 5% level of significance.

Degree of Importance of the Components of the ESD Module as Perceived by the Male Engineering Students

The degree of importance of male engineering students on the components of the ESD Module is shown through their scores as presented in Table 8.

The male engineering students are in the very important level of the components of the ESD module as indicated by the average weighted mean of 4.17.

They ranked first in the component on “Acing a job interview” of the ESD module with a weighted mean of 4.30 and interpreted as very much important. This implies that the male engineering students consider being at and doing their best when interview opportunities arise.

Answering questions in interviews is a skill which many prospective candidates miss out on, thus failing to hear the most sought-after statement, “You’re hired!” (MindTools, 2022).

In order to put one’s best foot forward in job interviews, it is believed that prospective candidates should be confident and well prepared in answering commonly asked interview questions so as to do well at job interviews (Rook, 2013).

Table 8

Degree of Importance of the Components of the ESD Module as Perceived by the Male Engineering Students

n = 158

Components	Scores					TWP	WM	DE	R
	VMI 5	VI 4	MI 3	SI 2	LI 1				
1. Facing career challenges	66 (330)	58 (232)	25 (75)	7 (14)	2 (2)	653	4.13	VI	7
2. Using essential soft skills	65 (325)	66 (264)	21 (63)	5 (10)	1 (1)	663	4.20	VI	4.5
3. Aligning skills to job adverts	64 (320)	54 (216)	33 (99)	6 (12)	1 (1)	648	4.10	VI	9
4. Highlighting skills at career fairs	68 (340)	57 (228)	25 (75)	7 (14)	1 (1)	658	4.16	VI	6
5. Preparing reports for job site visits	62 (310)	61 (244)	28 (84)	5 (10)	2 (2)	650	4.11	VI	8
6. Preparing effective personal commercial / elevator pitch	56 (280)	64 (256)	31 (93)	5 (10)	2 (2)	641	4.06	VI	10
7. Organizing and maintaining an interview portfolio	70 (350)	61 (244)	18 (54)	7 (14)	2 (2)	664	4.20	VI	4.5
8. Creating a professional LinkedIn profile	72 (360)	57 (228)	21 (63)	7 (14)	1 (1)	666	4.22	VMI	3
9. Presenting cover letter and CV in an impressive manner	76 (380)	57 (228)	17 (51)	6 (12)	2 (2)	673	4.26	VMI	2
10. Acing a job interview	81 (405)	53 (212)	17 (51)	5 (10)	2 (2)	680	4.30	VMI	1
Average Weighted Mean (AWM)							4.17	VI	

Legend:

Score / Scale	Statistical Limit	Descriptive Equivalent	Symbol
5	4.21 – 5.00	Very Much Important	VMI
4	3.41 – 4.20	Very Important	VI
3	2.61 – 3.40	Moderately Important	MI
2	1.81 – 2.60	Slightly Important	SI
1	1.00 – 1.80	Least Important	LI

Moreover, men are said to do better in interviews because in a study conducted by Renmin University in China (Dongxu, 2015), male college graduates were more likely to get an interview than their female peers. It was found that discrimination against female college graduates with higher degrees and better school performance is even more acute.

Contrastingly, the least ranked component of the male engineering students is “Preparing effective personal commercial/elevator pitch” with a weighted mean of 4.06 interpreted as very important. Considering this interpretation, the male engineering students still give importance to this component, however, they should ensure that their personal commercials and elevator pitches are sharp and clear and likewise reflect employer expectations.

Personal commercial which is also called elevator pitch should be a concise and clear impression of any job-prospective candidate. Personal commercial or elevator pitch is considered a self-marketing tool which employers use to find the fit-factor among prospective candidates. This helps recruiters screen and further identify the most suitable candidate to fill an available post other than through the CV with cover letter and other self-marketing tools.

This component which they ranked least shows that the said group finds preparing effective personal commercial or elevator pitch challenging as it should be delivered in less than a minute in interviews when asked the question, “Can you tell me about yourself?”

Besides, men should prepare well their personal commercials or elevator pitches because these are self-marketing tools which lead them closer to getting hired as this is usually what is asked in an interview where one’s best foot is always put forward. Overall, for the male group, all components of the ESD module are at least in the very important range.

Degree of Importance of the Components of the ESD Module as Perceived by the Female Engineering Students

The degree of importance of female engineering students on the components of the ESD Module is shown through their scores as presented in Table 9.

The female engineering students are in the very important level of the components of the ESD module as indicated by the average weighted mean of 4.13.

The female engineering students considered the ESD module component on “Preparing cover letter and CV in an impressive manner” the highest in rank with a weighted mean of 4.34 interpreted as very much important.

This denotes that the said female engineering students give high regard to the preparation and impressiveness of cover letters and CVs when presenting to prospective employers. According to Careersmart (2020), a cover letter is just as important as one’s CV and is likely the first document which prospective employers look at. This is one good opportunity for the job candidate to convince the employer that the former is a strong candidate whose showcased skills, experience, and achievements will enable the candidate to succeed and get the job.

Table 9

Degree of Importance of the Components of the ESD Module as Perceived by the Female Engineering Students

n = 77

Components		Scores								
		VMI 5	VI 4	MI 3	SI 2	LI 1	TWP	WM	DE	R
1.	Facing career challenges	38 (190)	20 (80)	18 (54)	0 (0)	1 (1)	325	4.22	VMI	3
2.	Using essential soft skills	36 (180)	32 (128)	7 (21)	0 (0)	2 (2)	331	4.30	VMI	2
3.	Aligning skills to job adverts	30 (150)	28 (112)	16 (48)	2 (4)	1 (1)	315	4.09	VI	7
4.	Highlighting skills at career fairs	26 (130)	33 (132)	14 (42)	3 (6)	1 (1)	311	4.04	VI	8
5.	Preparing reports for job site visits	24 (120)	31 (124)	18 (54)	3 (6)	1 (1)	305	3.96	VI	9
6.	Preparing effective personal commercial / elevator pitch	23 (115)	28 (112)	23 (69)	2 (4)	1 (1)	301	3.91	VI	10
7.	Organizing and maintaining an interview portfolio	33 (165)	24 (96)	18 (54)	2 (4)	0 (0)	319	4.14	VI	6
8.	Creating a professional LinkedIn profile	35 (175)	25 (100)	11 (33)	6 (12)	0 (0)	320	4.16	VI	5
9.	Presenting cover letter and CV in an impressive manner	41 (205)	24 (96)	10 (30)	1 (2)	1 (1)	334	4.34	VMI	1
10.	Acing a job interview	33 (165)	28 (112)	13 (39)	2 (4)	1 (1)	321	4.17	VI	4
Average Weighted Mean (AWM)								4.13	VI	

Legend:

Score / Scale	Statistical Limit	Descriptive Equivalent	Symbol
5	4.21 – 5.00	Very Much Important	VMI
4	3.41 – 4.20	Very Important	VI
3	2.61 – 3.40	Moderately Important	MI
2	1.81 – 2.60	Slightly Important	SI
1	1.00 – 1.80	Least Important	LI

A study conducted by labelling solutions provider DYMO (2010) reveals that females are more organized even in the workplace especially when it comes to meeting deadlines and arriving at work on time. This confirmation attests to the findings that females carefully prepare and consider cover letter and CV in order to get hired.

On the other hand, the least ranked component of the ESD module by the female engineering students is “Preparing effective personal commercial / elevator pitch” with a weighted mean of 3.91 interpreted as very important. Considering this interpretation, even so the female engineering students give importance to this component, however, like the male engineering students, they should make their personal commercials and elevator pitches sharp and clear which meet employer expectations because it is a short

and effective way to make an impressive introduction to a potential employer and being able to say it confidently can help significantly in the job search (Perera, et al., 2018).

Summary and Comparison on the Degree of Importance of the Components of the ESD Module as Perceived by the Engineering Students

The summary and comparison on the degree of importance of the Components of the ESD Module as Perceived by the Engineering Students is shown through their scores as presented in Table 10.

The engineering students are in the very important level of the components of the ESD module as indicated by the combined average weighted mean of 4.16.

The foremost component of the ESD module as ranked by the engineering students is the component on “Presenting cover letter and CV in an impressive manner” with a weighted mean of 4.29 interpreted as very much important.

Table 10

Summary and Comparison on the Degree of Importance of the Components of the ESD Module as Perceived by the Engineering Students

$n_1 = 158$ male, $n_2 = 77$ female

Indicators	Degree of Importance						Rank
	Male		Female		Combined		
	WM	DE	WM	DE	WM	DE	
1. Facing career challenges	4.13	VI	4.22	VMI	4.16	VI	6
2. Using essential soft skills	4.20	VI	4.30	VMI	4.23	VMI	3
3. Aligning skills to job adverts	4.10	VI	4.09	VI	4.10	VI	8
4. Highlighting skills at career fairs	4.16	VI	4.04	VI	4.12	VI	7
5. Preparing reports for job site visits	4.11	VI	3.96	VI	4.06	VI	9
6. Preparing effective personal commercial / elevator pitch	4.06	VI	3.91	VI	4.01	VI	10
7. Organizing and maintaining an interview portfolio	4.20	VI	4.14	VI	4.18	VI	5
8. Creating a professional LinkedIn profile	4.22	VMI	4.16	VI	4.20	VI	4
9. Presenting cover letter and CV in an impressive manner	4.26	VMI	4.34	VMI	4.29	VMI	1
10. Acing a job interview	4.30	VMI	4.17	VI	4.26	VMI	2
Average Weighted Mean	4.17	VI	4.13	VI	4.16	VI	

$t_{-comp} = 0.250$

$t_{value (0.05), 233, df} = 1.960$

Result: Not Significant

Decision: Accept H_0

This suggests that the engineering students primarily consider preparing cover letter with CV a priority and which employers mainly refer to when recruiting graduates for engineering posts. One's cover letter with accompanying CV should be evidently portraying one's perfect fit through the elaboration of qualification

and training as well as selling of skills and experience with clear and sharp evidences obtained, according to Perera, et al. (2018).

While the least ranked component of the ESD module is “Preparing effective personal commercial / elevator pitch” with a weighted mean of 4.01 interpreted as very important. Considering that this component is interpreted as very important, the engineering students still believe that the component on “Preparing effective personal commercial / elevator pitch” relevant just that there are other components which these students found of greater importance, thus taking higher places than the former component.

The combined average weighted mean of the engineering students on the degree of importance on the components of the ESD module is 4.16 interpreted as very important. This implies that both the male and female engineering found the relevance and usefulness of the ESD module which is a means for them to receive further support for their professional and career development. This is corroborated to the study of Creasey (2015) who identified 54% of students responding positively in support of employability and professional development skills, particularly highlighting their confidence in being equipped for interviews and comprehending necessities of engineering chartership which is the ultimate goal of engineers to be able to develop solutions to engineering problems

using new or existing technologies, through innovation, creativity and change and/or they may have technical accountability for complex systems with significant levels of risk. (Engineering Council, 2013)

In summary, the engineering students consider the components of the ESD module very important as indicated by the average weighted mean of 4.16.

Null hypothesis number three (3) which states that there is no significant difference between the perceptions of the male and female Engineering students on the degree of importance of the components of the ESD module is accepted as revealed by the computed t value of 0.250 which is less than the table value of 1.960 at 5% level of significance.

This study sought to assess the Employability Skills Development (ESD) Module used in the National University of Science and Technology in the Sultanate of Oman in preparing graduates for employment. It also would like to analyze whether the syllabus covered by the said module was beneficial in enhancing the employability and job search skills of fresh graduates.

Furthermore, this study focused on the extent of awareness and extent of knowledge on the contents of the said module as well as the degree of importance of the components of the module.

After careful analysis and interpretation of the results, the researcher discovered that all hypotheses were accepted as there are no significant differences in terms of level of awareness, extent of knowledge, and degree of importance of the components of the ESD module between the male and female engineering students of the National University of Science and Technology in the Sultanate of Oman. This means that both the male and female engineering students of the National University of Science and Technology found that learning the ESD module is extremely relevant and useful to their career direction and in promoting their self-awareness in handling the job search process. Also, greater awareness about career path through Chartered Engineering (CEng) and professional body memberships including external opportunities for internships and training are evident.

Chapter 4

CONCLUSIONS AND RECOMMENDATIONS

This chapter focuses on the conclusions and recommendations based on the findings of the study.

Conclusions

The following conclusions were drawn from the findings:

1. The extent of awareness of the engineering students on the contents of the ESD Module which is much aware is attributed to their desire to be equipped with the necessary employability skills.
2. The extent of knowledge of the engineering students on the components of the ESD Module which is very knowledgeable is due to their being sensible that these will prepare them for employment in the future.
3. The degree of importance of the components of the ESD Module which was perceived by the engineering students as very important is attributed to their desire to be fully equipped to face the challenges in their future career.

Recommendations

The following recommendations were based on the conclusions:

1. The engineering students with the assistance of their tutors, are encouraged to walk through the ESD Module and identify the contents which still need to know better.
2. The engineering students are encouraged to master the components of the ESD Module with the help of their tutors for them to benefit from these.
3. The engineering students are encouraged to apply the skills learned from the ESD Module even before graduation for them to appreciate the importance of these even during their study period in the university.

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APPENDIX

Appendix A

The Questionnaire

QUESTIONNAIRE:

Employability Skills Development Module: An Assessment

Dear Student,

The main objective of this questionnaire is to determine the role of the Employability Skills Development in preparing fresh graduates of the College of Engineering of the National University of Science and Technology for employment in the Sultanate of Oman.

All gathered information through this questionnaire will be treated confidential and will only be used for the sole purpose of research and development in the field under concern.

Email: _____

Name (optional): _____

Student Number: _____

Gender: _____

Programme: _____

Part I. Extent of Awareness on the Contents of the ESD Module*Legend:***VWA** – Very Much Aware**SA** – Slightly Aware**MuA** – Much Aware**LA** – Least Aware**MoA** – Moderately Aware*Instruction:* Tick (/) the column that corresponds to your response.

SN	Indicators	VWA (5)	MuA (4)	MoA (3)	SA (2)	LA (1)
1	Engineering Skills and Competencies					
2	Career Pathway Planning and Goal Setting					
3	Recruitment and Selection					
4	Labour Market					
5	Conventional and Infographic CV					
6	Cover Letter					
7	Personal Commercial					
8	Employability with UN SDGs and 4IR Skills					
9	Leadership Styles					
10	Online Job Applications					
11	Creating LinkedIn Profile					
12	Professional Work Environment & Ethics					
13	Chartered Engineer Application					
14	Interview Questions					
15	Interview Portfolio					

Source: Panikar, P. and Perera, M. A. (2014, September 20). Employability Skills Development. Muscat, Sultanate of Oman; College of Engineering, National University of Science and Technology.

Part II. Extent of Knowledge on the Components of the ESD Module*Legend:***VMK** – Very Much Knowledgeable **SK** – Slightly Knowledgeable**VK** – Very Knowledgeable **LK** – Least Knowledgeable**MK** – Moderately Knowledgeable*Instruction:* Tick (/) the column that corresponds to your response.

SN	Indicators	VMK (5)	VK (4)	MK (3)	SK (2)	LK (1)
1	Engineering Skills and Competencies					
2	Career Pathway Planning and Goal Setting					
3	Recruitment and Selection					
4	Labour Market					
5	Conventional and Infographic CV					
6	Cover Letter					
7	Personal Commercial					
8	Employability with UN SDGs and 4IR Skills					
9	Leadership Styles					
10	Online Job Applications					
11	Creating LinkedIn Profile					
12	Professional Work Environment & Ethics					
13	Chartered Engineer Application					
14	Interview Questions					
15	Interview Portfolio					

Source: Panikar, P. and Perera, M. A. (2014, September 20). Employability Skills Development. Muscat, Sultanate of Oman; College of Engineering, National University of Science and Technology.


Part III. Degree of Importance of the Components of the ESD Module*Legend:***VMI** – Very Much Important**SI** – Slightly Important**VI** – Very Important**LI** – Least Important**MI** – Moderately Important*Instruction:* Tick (/) the column that corresponds to your response.

SN	Indicators	VMI (5)	VI (4)	MI (3)	SI (2)	LI (1)
1	Facing career challenges					
2	Using essential soft skills					
3	Aligning skills to job adverts					
4	Highlighting skills at career fairs					
5	Preparing reports for job site visits					
6	Preparing effective personal commercial / elevator pitch					
7	Organizing and maintaining an interview portfolio					
8	Creating a professional LinkedIn profile					
9	Presenting cover letter and CV in an impressive manner					
10	Acing a job interview					

Source: Panikar, P. and Perera, M. A. (2014, September 20). Employability Skills Development. Muscat, Sultanate of Oman; College of Engineering, National University of Science and Technology.

Appendix B

Permit to Conduct Study



BAGUIO CENTRAL UNIVERSITY
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Expanded Tertiary Education Equivalency & Accreditation Program (ETEEAP)
GRADUATE SCHOOL

May 24, 2022

Prof. AHMED AL BALUSHI
 Dean, College of Engineering
 National University of Science and Technology
 Muscat, Sultanate of Oman

RE: Permit to Conduct Study

Sir:


The bearer, **Mr. MICHAEL ANGELO DUCA - PERERA**, is a Doctor of Philosophy in Administration and Supervision student of this University through the Expanded Tertiary Education Equivalency and Accreditation Program (ETEEAP).

He is currently conducting a study entitled "EMPLOYABILITY SKILLS DEVELOPMENT (ESO) MODULE: AN ASSESSMENT".. Please allow him to administer his questionnaire in your institution.

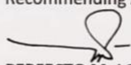
Your favorable consideration to the bearer is highly appreciated.

Thank you and more power.

Very Truly Yours,


JULIET F. TURPIANO, PhD
 ETEEAP Director

Recommending Approval:


PERFECTO M. LOPEZ, EdD
 Dean, Graduate School
 24.5.22

Approved:

Prof. AHMED AL BALUSHI
 Dean, College of Engineering

Appendix C

Sample T-test Computation – Table 4

	X ₁	X ₁ ²	X ₂	X ₂ ²
1	4.13	17.0569	4.04	16.3216
2	4.13	17.0569	3.97	15.7609
3	4.01	16.0801	3.64	13.2496
4	3.90	15.2100	3.66	13.3956
5	4.22	17.8084	4.23	17.8929
6	4.31	18.5761	4.39	19.2721
7	4.07	16.5649	4.05	16.4025
8	3.80	14.4400	3.77	14.2129
9	4.14	17.1396	4.14	17.1396
10	4.13	17.0569	3.87	14.9769
11	4.23	17.89269	4.18	17.4724
12	4.23	17.8929	4.22	17.8084
13	3.97	15.7609	3.86	14.8996
14	4.17	17.3889	4.03	16.2409
15	4.21	17.7241	4.05	16.4025
Σ	61.65	253.6495	60.10	241.4484
AWM	4.11		4.01	

$$\frac{\Sigma X_1^2 - \frac{(\Sigma X_1)^2}{N_1}}{N_1 - 1} = \frac{253.6495 - \frac{(61.65)^2}{15}}{15 - 1} = 229.59$$

$$\frac{\Sigma X_2^2 - \frac{(\Sigma X_2)^2}{N_2}}{N_2 - 1} = \frac{241.4484 - \frac{(60.10)^2}{7}}{7 - 1} = 194.54$$

$$t_{\text{-comp}} = \frac{\bar{X}_1 - \bar{X}_2}{\sqrt{\frac{\Sigma X_1^2 + \Sigma X_2^2}{N_1 + N_2 - 2} \left[\frac{1}{N_1} + \frac{1}{N_2} \right]}}$$


$$t_{\text{-comp.}} = \frac{4.11 - 4.01}{\sqrt{\left[\frac{229.59 + 194.54}{158 + 77 - 2} \right] \left[\frac{1}{158} + \frac{1}{77} \right]}}$$

$$t_{\text{-comp.}} = \frac{0.10}{0.19}$$

$$\mathbf{t_{\text{ comp }} = 0.526}$$

Appendix D

Mail from Admissions and Registration Department – List of Students


Fayis Hussain <fayis@mu.edu.om>
 to me, All ▾

Sun, 22 May, 09:49

Dear Mr Michael,

Please find attached the requested data for ESD module from the AY 18-19 to 21-22 registration

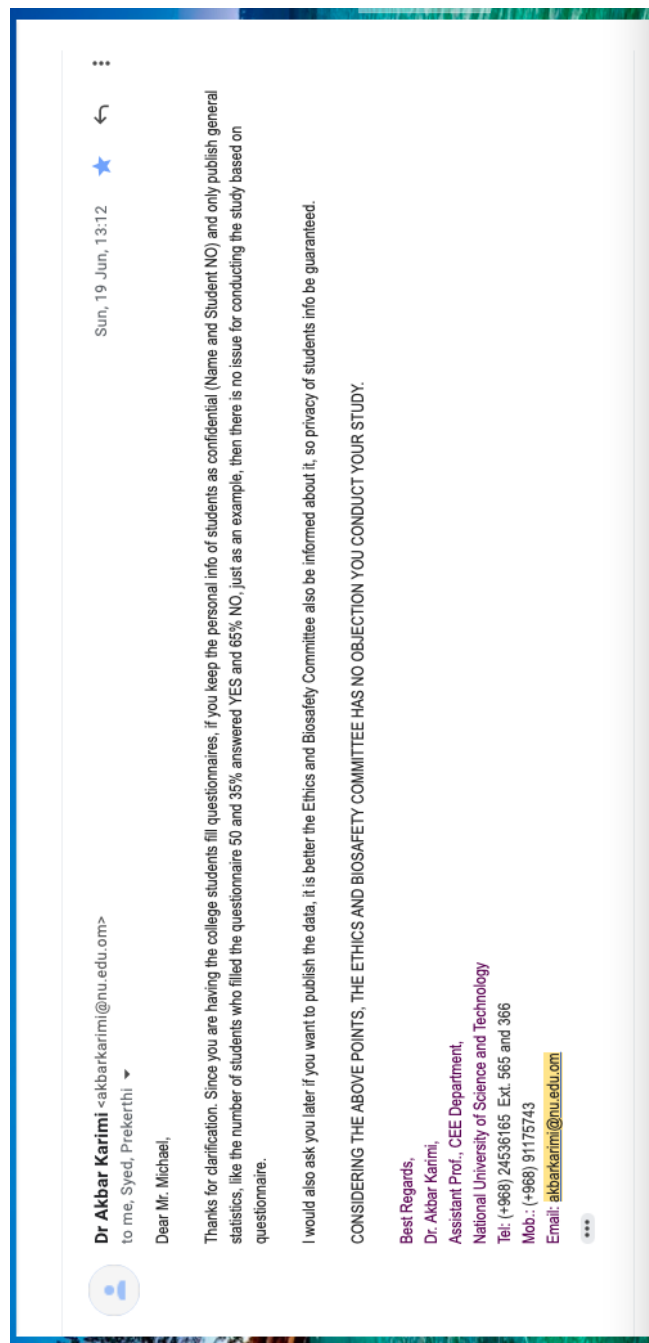
Period	Normal	Re-Register	Resit	Grand Total
Sem A, 18-19	208		5	213
Sem B, 18-19	294	5	13	312
Sem A, 19-20	161	2	1	164
Sem B, 19-20	253	2	2	257
Aug Resit, 19-20			6	6
Sem A, 20-21	144	1	2	147
Sem B, 20-21	223	1	9	233
Aug Resit, 20-21			3	3
Sem A, 21-22	48			48
Sem B, 21-22	20			20
Grand Total	1351	11	41	1403

Regards,

Fayis Hussain

Appendix E

Mail from Ethics and Biosafety Committee – Permit to Conduct Study



Appendix F


Mail from Dean of College of Engineering, NUST – No Objection Clearance


From: **Professor Dr Ahmed Hassan Al-Bulushi** <ahmedalbulushi@nu.edu.om>
 Date: Sun, 19 Jun 2022 at 15:00
 Subject: Re: Permit to Conduct Study
 To: Prekerthi Panikar <prekerthipanikar@nu.edu.om>
 Cc: Dean Office at College of Engineering <deanoffice-ce@nu.edu.om>, Prof. Dr. Vallavaraj A. <vallavaraj@nu.edu.om>, Prof. Dr. Syed Mohammed Rizwan <syedrizzwan@nu.edu.om>

ok, no objection
 wish him all the best

On Sun, 19 Jun 2022 at 08:00, Prekerthi Panikar <prekerthipanikar@nu.edu.om> wrote:

Dear Professor Ahmed,
 Good Morning Hope you are well. Please see the mail from Mike- who has recently registered for Doctorate with a University in the Philippines. He is not under staff Development cover. He would like to run a quantitative study towards his study which is of immediate relevance to our department. His study is on Employability skills Development of Engineering Graduates. Please see attached his questionnaire and the letter from the university. We request your kind permission to run the questionnaire with the students he has taught.
 Thank you very much for your support,
 Kind regards,
 PP


Prekerthi Panikar
 Head, Professional Development & Innovation
 National University of Science & Technology
 Email: prekerthipanikar@nu.edu.om
 Phone: +968 2222 1111 (Ext. 1111) Had. Muscat, Sultanate of Oman | www.nu.edu.om


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Appendix G

Output of the Study

The following are proposed measures to address the least mastered components of the ESD Module:

- Conduct brainstorming sessions with the students to trace their reasons for not being aware about the content on Employability with UN SDGs and 4IR Skills. List down suggested activities and address them.
- Implement activities suggested by the students such as small group discussion or mind mapping of a skill which needs reinforcement on the component on Employability with UN SDGs and 4IR Skills and perform feedback sessions with them as a monitoring technique.
- Allow students to do peer assessments in order to support the acquisition of work-based and employability skills through the component on presenting cover letter and CV in an impressive manner.

Appendix H

Employability Skills Development Module