

# A Systematic Literature Review on Training Higher Education Students for Soft Skills

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### ABSTRACT

**Purpose:** *The research entails drawing up new ideas and laying down them into action while availing former work as a foundation. The impetus of the literature review in this paper is to acquaint and learn about the review topic to amalgamate existing ideas with the new ones.*

**Methodology:** *Multiple secondary sources, such as journals, conference proceedings, book chapters, and other web resources, were utilised to compile the literature for this study. All of the literature has been reviewed in-depth and is encapsulated. It's also utilised to come up with research agendas and research gaps.*

**Findings/Result:** *The current study's contribution can be observed in the classification of numerous students' soft skills. It has the potential to convey useful information to higher education stakeholders. Higher education institutions must rethink their coaching and study methods to invigorate the soft skills that employers demand to generate job-ready graduates. The research also revealed that students who are graduated lack soft skills, which is highly valued from employer's perspective to be job-ready. Universities and the government both have been instrumental in creating as well as expanding the country's human capital to address this issue.*

**Originality:** *This literature survey is based on secondary data that was gathered from a variety of online sources. The data gathered will be utilized to improve existing theories and frameworks or to create new methodologies in the future. Any final judgment or decision is also viewed to be non-biased or unidirectional. An earnest attempt is driven to identify a study topic and to carry out the research.*

**Paper Type:** *Literature Review.*

**Keywords:** Soft skills, Higher education, Training, Employees' perspective, University Graduates, Human resource management, Competencies, Systematic review, Literature Review, ABCD Analysis, SLOC Analysis.

### 1. INTRODUCTION :

The quality of students is a critical part of the growth of a high-income and industrialized country. Graduates acquire an excellent level of education facilitated by professional course institutions which improve the quality of learning. Professional institutions should create a market driven methodology that helps students to be job-ready. On analyzing the skill-gap we find that students are well trained This article aims to discover the skills gap between what supervisors expect and what graduates in the banking industry have. A survey-based poll was done among bank employees who supervise new business graduates. They were asked to rank the relevance of 12 industry-specific employability abilities and grade business graduates who worked under them on these skills [1].

One of the arguments is that in the present economic environment, students need to be mobilized by managing their energies for a higher purpose [2]. Almost all graduates lack necessary combination skills which lead to outstanding academic credentials through formation of soft skills [3]. The soft skills have been determined to be the most vital in studies since they have received more emphasis in the organizations as employer seeks graduates with employable skills [4]. High demand for skilled

employees has led to realize the gap between the generic skills required and possessed by the employees in the industry [5].

Soft skills should be developed in a person from an early childhood age starting from their house and throughout primary schooling. Nevertheless, at the university levels, students are highly conscious about their soft skills as they are connected to their employment in the future. This understanding should serve as a self-motivator for them to improve their soft skills using the university syllabus [6].

Soft skills are not the important part of particular activities or disciplines, but those skills are required for maintaining good interpersonal relationships with whom an individual works [7]. Soft skills are prioritised during the hiring process and an employee's tenure with the company. This is because an individual's soft skills can help a company's outcomes and productions in some way [8].

For most graduates, seeking jobs is a global concern as they lack necessary soft skills. While recruiting graduates it is observed that soft skills mismatches between university graduates and company wants due to high competency level in the industry [9].

Employment providers are concerned about students' ability to acquire skills that are very much essential in the labour market. Employers are dissatisfied with graduates' soft skills, despite students learning discipline-related talents. When it comes to hiring personnel, it has been proven that employers give greater importance to soft talents than to hard skills. Employers value soft talents namely communication skills, teamwork, entrepreneurship, leadership, critical thinking, interpersonal skills, communication, and managerial abilities. This is true not only for new graduates or entry-level professionals but also for experienced employees who are seeking a new job [10].

The growing problem of students lacking soft skills and consequently being unemployed could be attributed to graduates being so focused on their self-development and future profession that they forget to be realistic in the beginning. Job seekers tend to exaggerate their abilities with the assumption that certificates will allow them to get entry into the labour market and graduates be communication competent [11]. Passed out candidates can only have a successful future if they find a solid job, to begin with. To get the job, keep it, and advance in it, they'd have to start with a resume, go to interviews, go through training, and then slowly grow. These things collectively necessitate developing soft skills using different approaches like grounded theory approach to understand the process of teaching soft skills on the job which will help graduates or employees in their profession like even Hospitality classroom [12]. As a result, graduates must have an understanding of why soft skills are important and what they lack to take advantage of opportunities and improve such talents while in university and develop a good positive attitude, behaviour to build a developed nation [13].

Thinking skills are the ability to engage in critical thinking while being creative, innovative, and analytical and being able to apply their knowledge in multiple circumstances and also fit into the expectation of the employer [14].

Despite the number of studies on students' soft skills in specific graduate programs, institutions, regions, or sectors, there is however a deficiency of complete and extensive review of these researches. As a part of the results, the study conducted a structured literature analysis to explore the existing soft skills that students need to improve to be ready for the workplace. A structured analysis scrutinized a determined subject by availing systematic and explicit procedures to discover, select, and mortally appraise relevant investigation, collect and analyse the information from the learning included in the evaluation. Graduates are those students who have completed their studies as per the university criteria and passed their final exams at the end of their academic sessions with the minimum percentage of marks or grades. This research aims to close the gap in detecting and classifying existing students' soft skills from the perspective of employers and also add soft skills training as a part of academic curriculum.

## **2. OBJECTIVES OF THE SCHOLARLY REVIEW :**

Soft skills are becoming progressively indispensable and valuable for graduates in today's employment environment. According to reports, employers continue to find passed out graduates being inadequate in essential soft skill proficiencies necessary in their respective job roles, resulting in joblessness in an extremely cut-throat job market. Employers also require fresh graduates with a blend of technological and soft abilities to work in a multifaceted group with increasing responsibilities in the present environment. This review aims to understand the students' soft skills and the amount of training they get before becoming employees. The detailed list of research agenda is given below:

- (1) To explore the primary or necessary soft skills required by any student before he graduates.
- (2) To investigate and understand the theoretical underpinning utilised to indoctrinate soft skills to the students if any.
- (3) To explore different sources which are used to teach these soft skills.
- (4) To know the educators' training level to conduct the required soft skills to the students.
- (5) To understand the measures or evaluation criteria used to analyse the soft skills learned by the students.
- (6) To know about the different organizations/groups/governing bodies involved in improving students' soft skills.

### 3. RESEARCH METHODOLOGY OF LITERATURE REVIEW :

The section explains the method used to collect the review articles on Training Students for Soft Skills. The PRISMA Statement guided the systematic literature review (Preferred Reporting Items for Systematic reviews and Meta-Analyses). The PRISMA Statement allows for a precise search of phrases related to students' soft skills. Scopus, Web of Science, and Google Scholar are the three different databases considered for this systematic literature survey. These databases contain more than 10000 publishers with very high impact factor journals and have articles of more than 100 years. The considered review process has four stages. In the first stage, keywords required for the search process are identified. Several keywords which are similar and related to the terms such as graduates, students, soft skills, training, and so on are considered in the first phase. The entire group of keywords used in the study is given in Table 1. Each keyword has its variants; for example, student words can be used as a student, students, student's, students', and so on. This entire set is represented using students\* in Table 1. Careful examining was done after selecting all the articles obtained using the keywords, and 31 duplicated articles were removed.

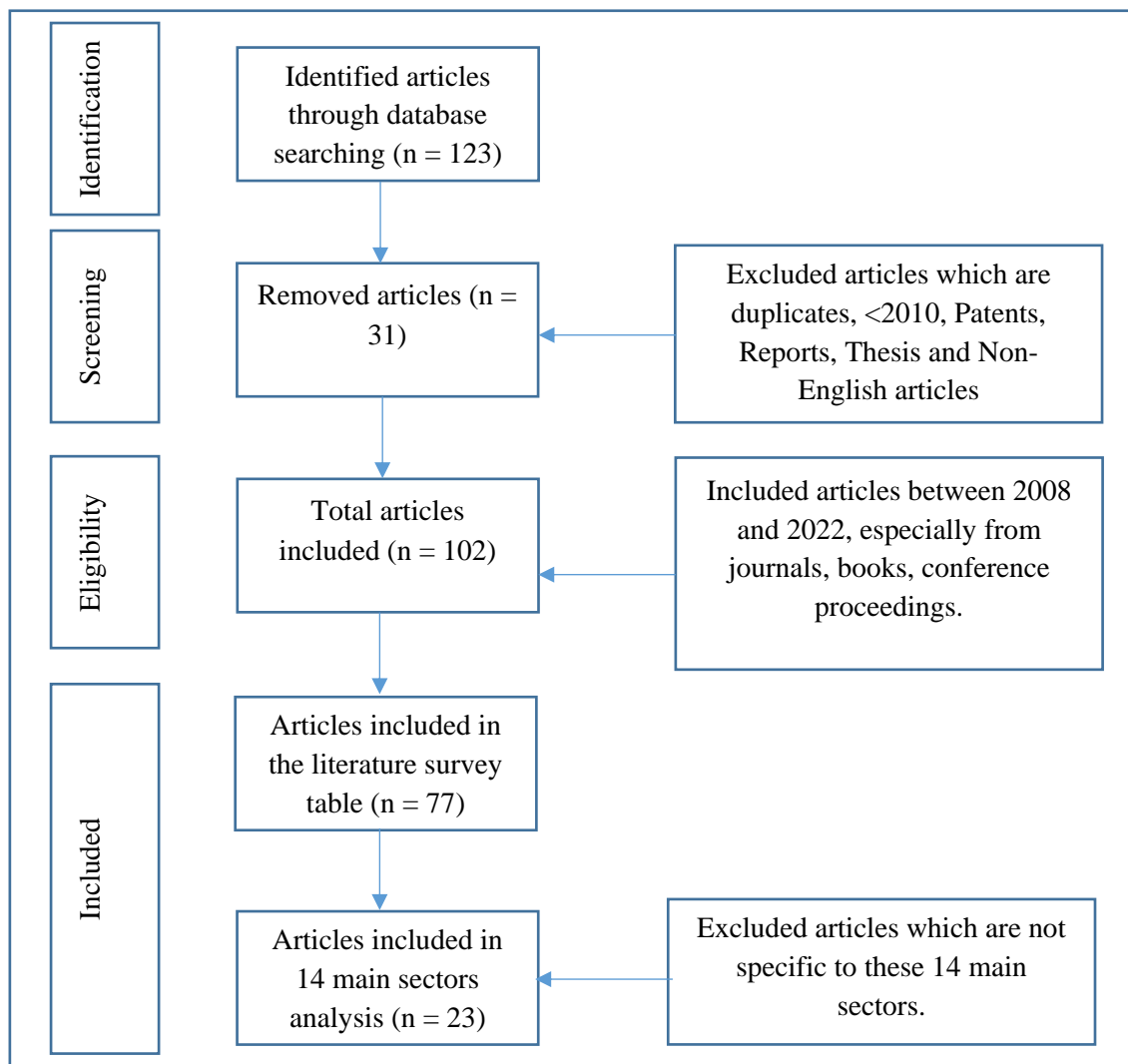
**Table 1:** The search keywords used in the systematic literature survey process

Databases	Keywords used
Scopus Web of Science & Google Scholar	TITLE-ABS-KEY((graduate* \ undergraduate* \ postgraduate* \ student*) AND (“soft skill*” \ “generic skill*” \ “transferable skill*” \ “employability skill*” \ “key skill*”, “core skill*” \ “essential skill*” \ “basic skill*” \ “necessary skill*” \ “life skill*” , “graduate* skill*” \ “personal* skill*” AND “soft competen*” \ “generic competen*”, “transferable competen*” \ “employability competen*” \ “key competen*” \ “core competen*” \ “essential competen*” \ “basic competen*” \ “necessary competen*” \ “life competen*” \ “graduate* competen*” \ “personal* competen*” \ “soft attribute*” \ “generic attribute*” \ “transferable attribute*” \ “employability attribute*” \ “key attribute*” \ “core attribute*” \ “essential attribute*” \ “basic attribute*” \ “necessary attribute*” \ “life attribute*” \ “graduate* attribute*” \ “personal* attribute*” \ “soft trait*” \ “generic trait*” \ “transferable trait*” \ “employability trait*” \ “key trait*” \ “core trait*” \ “essential trait*” \ “basic trait*” \ “necessary trait*” \ “life trait*” \ “graduate* trait*” \ “personal* trait*” AND “soft talent*” \ “generic talent*” \ “transferable talent*” \ “employability talent*” \ “key talent*” \ “core talent*” \ “essential talent*” \ “basic talent*” \ “necessary talent*” \ “life talent*” \ “graduate* talent*” \ “personal* talent*” AND “soft abilit*” \ “generic abilit*” \ “transferable abilit*” \ “employability abilit*” \ “key abilit*” \ “core abilit*” \ “essential abilit*” \ “basic abilit*” \ “necessary abilit*” \ “life abilit*” \ “graduate* abilit*” \ “personal* abilit*” \ “soft capabilit*” \ “generic capabilit*” \ “transferable capabilit*” \ “employability capabilit*” \ “key capabilit*” \ “core capabilit*” \ “essential capabilit*” \ “basic capabilit*” \ “necessary capabilit*” “life capabilit*” \ “graduate* capabilit*” \ “personal* capabilit*” AND “soft proficien*” \ “generic proficien*” \ “transferable proficien*” \ “employability proficien*” \ “key proficien*” \ “core proficien*” \ “essential proficien*” \ “basic proficien*” \ “necessary proficien*” \ “life proficien*” \ “graduate* proficien*” \ “personal* proficien*” AND

	<p>“soft aptitude*” \ “generic aptitude*” \ “transferable aptitude*” \ “employability aptitude*” \ “key aptitude*” \ “core aptitude*” \ “essential aptitude*” \ “basic aptitude*” \ “necessary aptitude*” \ “life aptitude*” \ “graduate* aptitude*” \ “personal* aptitude*” AND                  “soft profile*” \ “generic profile*” \ “transferable profile*” \ “employability profile*” \ “key profile*” \ “core profile*” \ “essential profile*” \ “basic profile*” \ “necessary profile*” \ “life profile*” \ “graduate* profile*” \ “personal* profile*”) AND                  (“employer* perspective*” \ “manager* perspective*” \ “industr* perspective*” \ “employer* perception*” \ “manager* perception*” \ “industr* perception*” \ “employer* interpretation*” \ “manager* interpretation*” \ “industr* interpretation*” \ “employer* expectation*” \ “manager* expectation*” \ “industr* expectation*” \ “employer* view*” \ “manager* view*” \ “industr* view*” \ “employer* viewpoint*” \ “manager* viewpoint*” \ “industr* viewpoint*” \ “employer* point of view*” \ “manager* point of view*” \ “industr* point of view*”))</p>
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**3.1 The Inclusion and Exclusion Criteria :**

Screening of the articles is done in the second stage. Here a summation of 123 write-ups was obtained from the previous phase, and several inclusion-exclusion criteria mentioned in Table 2 are applied and removed some of the articles.



**Fig 1:** A complete flow of the systematic review study process.

Source: Author

The first criteria are about the timeline where the articles are selected from 2008 to 2021, which are adequate periods to analyse and understand the evolution of the existing studies and understand the



new-fangled changes in the field. The second criteria are literature type, where all the research articles in the form of journals, books chapter, books, conference proceedings, and review articles are selected. Other forms such as patents, reports, and thesis are not considered in the study. The third criteria are about the language of the article; non-English articles were removed. After carefully examining the selected writings, a total of 102 articles were selected for this review process. These articles are read in-depth from abstract to the conclusion and analysed their major contribution over the timeline and accordingly divided into the appropriate them into the major domains of student's soft skills. The complete flow of the systematic review process is shown in Figure 1. The major domains used in this study are mentioned in detail in the coming sections.

**Table 2:** The inclusion and exclusion criteria

Criteria	Inclusion	Exclusion
Timeline	Between 2008 and 2022	<2008
Literature Type	Journal (systematic review), Book, Book series, Chapter in the book, Conference proceeding,	Patents, Reports, Thesis
Language	English	Non-English

Source: Author

#### 4. LITERATURE SURVEY :

Training students on soft skills can also be classified into two ways. One way is general soft skills training, and the other training is specific to one or more sectors based on the requirement. Several commercial or business sectors are dominant in society and require more or rigorous training in some of the soft skills. To better understand this process, all the articles shortlisted in the survey are subdivided into the 14 main sectors as per the standard division of sectors. The considered 14 main sectors are Agricultural Industry (AI), Construction Industry (CI), Financial Institution (FI), Healthcare Industry (HI), Logistics Industry (LI), Manufacturing Industry (MI), Services Industry (SI), Technology-Based (TB), Telecommunications Industry (Tel), Tourism Industry (ToI), Government Agency (GA), Government-Linked Company (GLC), Multinational Company (MNC's), along with Small and Medium Enterprises (SMEs). Of the shortlisted articles in this systematic review, only 23 articles belong to these 14 significant sectors. The other articles are related to the students' soft skills in general and are not confined to any specific sector. Table 4 shows the various sectors considered in their studies to explore and answer the research questions used in their article.

**Table 3:** Various sectors considered in the studies.

Authors	AI	CI	FI	HI	LI	MI	SI	TB	Tel	ToI	GA	GLC	MNC	SME	Reference
Lluch et al. (2021)				√											[40]
Hariti et al. (2020)				√											[25]
Pang et al. (2019)		√	√		√	√	√	√	√	√	√				[59]
Siti Zaidah et al. (2019)											√	√	√	√	[74]
Lavy & Rashkovits (2019)						√		√						√	[37]
Khan (2018)						√	√								[35]
Ghani, E. K., Rappa, R., & Gunardi, A. (2018)											√	√	√	√	[19]
Chan, S. W., Ahmad, M. F., Zaman, I., & Ko, W. S. (2018)						√									[73]
Abbasi et al. (2018)			√												[1]

Tsai (2017)										√						[84]
Ting (2017)		√	√	√					√	√						[82]
Salleh, R., Yusof, M., & Memon, M. A. (2016)		√														[65]
Jaaffar, A. H., Ibrahim, H. I., Annuar, K., Shah, M., & Zulkafli, A. H. (2016)						√	√									[4]
Salleh, K. M., Subhi, N. I., Sulaiman, N. L & Lathif, A. A. (2016)		√				√										[32]
Radhakrishnan & Sudha (2015)						√										[63]
Saad, M. S. M., & Majid, I. A. (2014)											√	√	√	√		[49]
Saad, M. S. M., Robani, A., Jano, Z., & Majid, I. A. (2013)											√	√	√	√		[50]
Selvadurai, S., Choy, E. A., & Maros, M. (2012)											√					[75]
Dhiman (2012)										√						[15]
Hyangiin, P. A. R. K; & Haeryun, C. H. O. (2021)	√			√		√	√	√								[33]
Isai, K. I. A., Govindasamy, M., Ramalingam, R. S., Ching, H. S., & Kausalya, M. (2020)							√				√	√	√	√		[64]
Wickramasinghe & Perera (2010)								√								[88]
Lin et al. (2010)								√								[39]
	1	4	3	4	1	8	4	6	2	3	7	5	5	6		

Source: Author

The students' soft skills are classified into 11 major categories. The 11 major domains are communication skills (CS), entrepreneurial skills (ES), interpersonal skills (IS), lifelong learning skills (LLS), management skills (MS), numeracy skills (NS), problem-solving skills (PSS), professional ethics and moral skills (PEMS), self-management skills (SMS), technological skills (TeS), and thinking skills (ThS). For the same set of papers mentioned in Table 3, the 11 major categories considered for the corresponding 14 sectors are shown in Table 5.

**Table 4:** 11 major categories considered for the corresponding 14 sectors

Authors	C S	E S	IS	LL S	M S	NS	PS	PEM S	SM S	Te S	Th S	Referenc e
Lluch (2021)									√			[40]
Hariti (2020)								√				[25]
Pang (2019)	√		√	√					√		√	[59]
Siti Zaidah (2019)	√								√			[74]
Lavy & Rashkovits (2019)	√	√	√	√	√		√				√	[37]
Khan (2018)	√		√		√				√		√	[35]
Ghani, E. K., Rappa, R., & Gunardi, A. (2018)	√	√	√	√	√		√	√		√	√	[19]

Chan, S. W., Ahmad, M. F., Zaman, I., & Ko, W. S. (2018)	√		√				√					[73]
Abbasi, F. K., Ali, A., & Bibi, N. (2018)	√		√		√	√		√	√		√	[1]
Tsai (2017)	√		√									[84]
Ting et al. (2017)	√											[82]
Salleh, R., Yusof, M., & Memon, M. A. (2016)			√		√	√		√			√	[65]
Jaaffar, A. H., Ibrahim, H. I., Annuar, K., Shah, M., & Zulkafli, A. H. (2016)	√		√		√				√		√	[4]
Salleh, K. M., Subhi, N.I., Sulaiman, N. L & Lathif, A. A. (2016)	√	√	√	√	√		√	√	√	√		[32]
Radhakrishnan & Sudha (2015)			√				√		√			[63]
Saad, M. S. M., & Majid, I. A. (2014)	√		√	√			√		√			[49]
Saad, M. S. M., Robani, A., Jano, Z., & Majid, I. A. (2013)	√		√	√			√		√			[50]
Selvadurai, S., Choy, E. A., & Maros, M. (2012)	√		√	√	√	√		√	√			[75]
Dhiman (2012)		√	√		√			√				[15]
Hyangjin, P. A. R. K., & Haeryun, C. H. O. (2021)	√		√		√			√	√	√		[33]
Isai, K. I. A., Govindasamy, M., Ramalingam, R. S., Ching, H. S., & Kausalya, M. (2020)	√		√		√	√	√	√	√	√		[64]
Wickramasinghe & Perera (2010)	√		√	√			√		√		√	[88]
Lin, H. Y. (2010)	√		√	√	√	√			√	√		[39]
	18	4	19	9	12	3	13	5	14	10	11	

#### 4.1 Communication skills (CS):

Communication skills were the focus of 18 of the 23 studies. Communication skills are abilities that individuals utilise to effectively communicate with people. Oral and written communication were recognised as subdomains for communication competence. Public relations and public speaking are examples of communication abilities. Verbal communication, public speaking, participation in meetings, and written communication are all recommended communication skills.

#### 4.2 Entrepreneurial skills (ES):

Entrepreneurial skills were identified as one of the students' soft skills in four studies. Entrepreneurial skills include the ability to traverse a good time chance, generate awareness of risk while looking at a think-out- of the box approach at business or work. Entrepreneurial skills include the capacity to find business and occupational breaks and this talent encompasses the capacity to see business possibilities and the ability to develop, augment or construct, and test business strategies.

#### 4.3 Interpersonal Skills (IS):

With 19 studies on students' soft skills from the perspective of employers, interpersonal skills were the most frequently mentioned. Interpersonal competence is described as the capacity to interact effectively, coordinate, expound, and work constructively with individuals from a variety of circumstances. Task collaboration, teamwork, social intelligence, cultural and diversity awareness, influencing others, and conflict resolution are listed as subdomains for interpersonal skills. Respect for others' opinions and views, racial tolerance, and conflict resolution are subdomains of interpersonal skills.

#### 4.4 Lifelong learning skills (LLS):

Nine of the twenty-one studies looked at skills for lifelong learning. Lifelong learning skills are characterized as a yearning and competency for knowledge and understanding as a foundation for action. The graduates should be able to self-regulate their learning to acquire skills and information.



They should be capable of locating important data from a diverse set of sources and handling it effectively. Graduates should also have an eye for new ideas and be capable of cultivating an inquisitive mind.

#### **4.5 Management skills (MS):**

Management skills were identified as one of the students' soft skills in 12 studies. Management abilities are the ability to lead, supervise, and manage projects or people effectively. The management abilities include the ability to juggle money, time, materials, human resources, facility resources, and hazards.

#### **4.6 Numeracy skills (NS):**

With three research, numeracy skills were the least frequently mentioned in studies on students' soft skills from the perspective of employers. Handling of figures, general awareness of mathematics, along its application in day-to-day scenarios are all examples of numeracy skills. Employers expect students to have adequate research skills to conduct simple surveys and analyze the data acquired to provide factual information to stakeholders on the spot.

#### **4.7 Problem-solving skills (PSS):**

Thirteen of the twenty-one studies looked at problem-solving abilities. Identifying problems, and applying problem-solving, formulations, and solutions are examples of problem-solving talents. The problem-solving skills as the capacity to coordinate everything that students know and can accomplish to get satisfactory results. The problem-solving skills include reasoning, analysing and diagnosing, and making decisions.

#### **4.8 Professional ethics and moral skills (PEMS):**

Professional ethics and moral qualities were identified as one of the students' soft skills in four studies. The professional ethics and moral abilities are the ability to exercise with increased moral standards in the appropriate professional practice. Graduates are expected to exercise excellent ethics outside of the workplace and have a feeling of social responsibility.

#### **4.9 Self-management skills (SMS):**

Self-management abilities were the focus of 14 of the 23 research. Self-management skill is a graduate's potential to accept responsibility, adaptability, enhance personal performance, and time management. Stress tolerance, Self-efficacy, self-regulation, and work-life balance are among the key self-management skills.

#### **4.10 Technological skills (Tes):**

In a total of ten investigations, technological ability was identified as one of the students' soft skills. Technological skill is the ability to access, process, and create/provide information using information and communication technology. technological abilities include internet search and computer knowledge. The majority of employers consider technology abilities to be vital to their organization's demands. They propose that students have appropriate knowledge of statistical tools like SPSS along with mapping and three-dimensional tools like Auto CAD besides GIS (Mapinfo) in addition to possessing rudimentary knowledge of packages such as MS Word, MS Excel, and MS Access.

#### **4.11 Thinking skills (ThS):**

Thinking skills were the topic of 11 of the 23 research. Thinking skills are the ability to engage in critical thinking while being creative, innovative, and analytical and being able to apply their knowledge in multiple circumstances. The thinking talents as coming up with new ideas, inspirations, thinking outside the box, and having a changing attitude thinking skills are linked to creative and inventive thinking and analysing, learning, and providing feedback.

#### **4.12 Summary of Related Work:**

Detailed summary of additional readings have been mentioned in the below table 6. This gives an advantage for further scholarly work done by researchers in the field of skill development. Skills are

evolving based on the society and technology. This makes us the need to prepare them as per what is currently required. This good grounding should help them to stand for another 30-40 years of one's life.

**Table 5:** Summary of related Research Work

S. No.	Field of Research	Focus	Outcome/Findings	Reference
1	Basic Human Resources skills required for graduates of Indian tourism	The objective of this research is to show the results of a comprehensive study of employers' impressions of Indian tourism graduates in terms of assessment of the measurable traits. Only service-based skills are presented in this study, such as basic understanding and abilities, political and ethical skills, destination stewardship skills, dynamic business skills and increased human resource skills.	The findings reveal that a latest tourism curriculum and teaching methods are essential for graduates to prepare them for the rapid changes in tourism industry. The Educators are required to update curriculum, and that curriculum should become a tourist guide.	Dhiman, M. C. (2012). [15]
2	Project Based Learning outcome	The article aimed to create a PjBL theoretical outline for amalgamating soft skills among technical college students. The stratified technique of random selection was employed to select the 295 participants for the study, due to the varied complexity of the population from which the survey was derived. PjBL preparation (planning), application, commitment, and assessment procedures all had a beneficial impact on soft skill improvement among the students of technical colleges, according to the data.	The government should initiate appropriate and adequate facilities for Project Based Learning (PjBL), activities to integrate with soft skills. When PjBL techniques combined with soft skills training will produce positive impact on students in Technical colleges.	Dogara, G., Saud, M.S.B., Kamin, Y. B., & Nordin, M. S. B, (2020). [16]
3	Technical skills and soft skills	The article emphasized investigating the emphasis placed on technical and soft skills from employer's perspective for accounting positions.	Employers emphasis on soft skills, institutions and colleges should update their current curricula to complement them. The growing demands of the employers should be taken into consideration	Dunbar, K., Laing, G., & Wynder, M. (2016). [17]

			when updating the curriculum.	
4	Communication skills and self skills in music teaching	The relationship between communication, self-esteem, and the attitude towards teaching music to the candidates.	The study reveals that there is weak correlation between attitude and communication skills, weak correlation between attitude and self-esteem, and a moderate correlation between self-esteem and communication skills.	Egilmez, H. O., Engurl, D., & Nalbantoglu, E. (2019). [18]
5	Impact of soft skills on Accounting graduates	Employers' perceptions of soft skills of accounting graduates were examined in this research. The absence of soft skills is an important contribution to rising unemployment rate among graduates. Although the government has mandated that all universities include soft skills in their formal and informal curricula to educate their students, employers continue to moan that there is a lack of soft skills among graduates.	The findings shows that teamwork skill is very much essential for accounting graduates. The study also revealed the differences in how employers public and private sectors view accounting graduates' soft skills in terms of information management and lifelong learning.	Ghani, E. K., Rappa, R., & Gurnadi, A. (2018). [19]
6	Role, Issues and challenges of employability skills	The study showed the role, issues and challenges of employability skills or generic skills in designing, integrating, and assessing curriculum in Malaysian higher education.	Some Malaysian universities tried to combine generic skills into curriculum to enhance employability, which leads to ambiguity on the assessment of generic skills with respect to higher education.	Fahimirad, M., Nair, P. K., Kotamjani, S. S, Mahdinezhad, M., & Feng, J. B. (2020). [20]
7	Soft skills to be set as the part of the education curriculum	This article conducts a complete study on the educational trends to improve soft skills. It infers that the involvement of the government to form new policies to ensure well-trained and holistic graduates with better options of employability.	In music graduates hard and soft skills are equally important for the employability. The students shall apply, act and reflect upon their development skills during their studies. The Malaysian strategies, commonly used employability frameworks, and soft skills are necessary for music graduate students to enhance their employability.	Ghazali, G., & Bennett, D. (2017). [21]

8	Outdoor Team Building Training	The impact of Outdoor Team-Building Training (OTBT) in improving soft skills among MBA students is examined in this study. The OTBT integrated outdoor activities with feedback in counselling sessions to get a more significant effect from training. The OTBT was well-liked by the participants, who had a moderate learning score index. The OTBT increased communication and leadership skills, according to the self-report. The OTBT should be linked with or ideally adapted to the requirements of the candidates to maximize its impact.	The Outdoor Team-Building Training (OTBT) activities are helpful in developing and nurturing soft-skills for MBA students. Activities during the outing should be in line with or ideally adapted to the needs of the participants in order to increase the impact of OTBT.	Ginting, H., Mahiranissa, A., Bekti, R., & Febriansyah, H. (2020). [22]
9	Current trends in Malayasian Higher Education	The article aimed at the current trends in Malaysian Higher education and how it effects the practices and policies of education	Governance, teaching and learning, and the knowledge-based society all relate to globalisation of Higher Education. The Employability, Quality Assurance, Academia, and English Language Competency positively impacts educational policies and procedures.	Grapragasem, S., Krishnan, A., & Mansor, A. N. (2014). [23]
10	Employer's perspective on graduates soft skills	This literature referred to the employers perspective on graduate's soft skills and the impact of the skill gap on the graduates.	The study is conducted with an intension to ascertain the employers' views on the value of soft skills for employees of the company, university graduates applying for or working at the company and study found that soft skill and the roles (tasks) in which the relevant competences are crucial for fruitful results.	Gruzdev, M. V., Kuznetsova, I. V., Tarkhanova, I. Y., & Kazakova, E. I. (2018). [24]
11	Soft skills for Nursing Profession	A nursing profession also requires soft skills because it requires special domain knowledge skills, attitudes and behaviors to be used in their service.	With p-values of 0.021 for caring, 0.010 for activism, and 0.001 for professionalism, there are differences in the student nurses from The Faculty of Nursing and Health	Hariti, T., & Rejeki, S. 2020 [25]

			Sciences at Universitas Muhammadiyah Semarang (UNIMUS) in the even and odd semesters.	
12	Asian's farmers' adaptation practices towards climate change	The study aimed at analysing the adaption practices of the Asian farmers towards the impacts of climate change. Guided by the PRISMA Statement	The qualitative research, standard systematic review methodology used to guide research synthesis in the context of climate change adaptation, and complementary searching strategies like citation tracking, reference searching, snowballing, and contacting experts.	Shaffril, H. M., Krauss, S. E., & Samsuddin, S. F. (2018) [26]
13	Lack of Soft skills in Employees blamed by Employers	Rethinking the soft skills like interpersonal and social skills deficit blame game by the Employers and also reported the soft skills gaps.	The employers blame most of the employees withdrawn from an organization lacking in soft skills. The study also confirmed that if firms do not contextually integrate their selection, induction, and training methods with their skill demands, they may be to fault for their soft skills shortages.	Hurrell, S. A. (2016). [27]
14	The effect of Education and Human Capital on Malaysian Economic Growth	The goal of the study is to identify human capital and education as crucial factors that have an impact on economic growth. Human capital is a collection of resources that incorporates education-related information, training, and skills.	The study revealed the increasing demand for knowledgeable human capital, and the same has significant impact on the economic growth.	Islam, R., Ghani, A. B. A., Kusuma, B., & Theseira, B. B. (2016). [28]
15	Non-technical Competencies in Undergraduate business degree programs	The study aims at the eminent need for the essential competencies of fresh business graduates. To evaluate the degree to which they are generic across the globe.	Findings showed only minor differences in competency standards by discipline and country of origin, indicating that non-technical competencies are the same across countries with similar cultures leads to little bearing on how academics determine the competency profiles of business graduates.	Jackson, D., & Chapman, E. (2012). [29]
16	The role of Internship and its	This study considered the students studying business	The finding shows that the validated dimensions	Jawabri, A. (2017). [30]

	experience in building better profile among the graduates	in the UAE and explored the internship experience and their satisfaction level. They spoke about the use of active engagement in the internship programs and how it benefitted from improving the soft skills	of workplace comfort, a positive work environment, personal qualities, and the acquisition of new skills contributed significant effect in the internship experience.	
17	Secondary School Teachers essential conditions and Employability skills	To explore the value of employability skills of secondary school graduates from the employers' perspective.	The results indicated that Personal management skills, fundamental skill, and Teamwork skills were the qualities needed for a high potential of employment for Secondary School Teachers.	Sermasuk, S., Triwichtkhun, D., & Wongwanich, S. (2017). [31]
18	Perception on Generic Skills of Technical graduates and Industrial Employers	The objective of this research was to determine the gap between the degree of basic skills mandated by the industry and basic skills acquired by graduates.	The results shows large gap between the graduates' competencies and what the industries need in terms of skills. In conclusion, there is a disconnect between the general abilities that technical graduates possess and the skills that businesses require.	Salleh, K. M., Subhi, N. I., Sulaiman, N. L., & Latif. A. A. (2016). [32]
19	Perception on Nursing Education and Professional Nursing Values	This study used an exploratory strategy, which included reviewing archival material, observation, interviews, and short and long dialogues with both staff and students from the four research universities. The historical research on the use of essential soft skills has been corroborated through observation, interviews, and conversations.	Cinenurducation is a strategy for encouraging nursing students' sense of their professional identity. Films should be used by educators when teaching nursing. Additionally,, a variety of instructional resources shall be used in nursing education to give students the chance to engage in reflective learning.	Hyangjin, P. A. R. K., & Haeryun, C. H. O. (2021). [33]
20	Experimental Learning as a Soft Skill	Connecting the classroom to workplace with experiential learning.	There is substantial evidence that developing a more soft-skilled workforce is necessary to establishing a stronger Morocco based on the systematic evaluation and analysis of 20 articles.	M. El. Messaoudi (2021). [34]
21	University Graduates Core Competencies on	In this article, it is mentioned that the graduates' basic	The findings showed that strategic competencies are not mediated by	Khan, S. (2018). [35]



	Work Performance	competencies are adequate for getting hired and know the influence of these employability skills (ES) on job performance (WP). Interpersonal competences (IPCs), Delivery-related competencies (DRCs), and strategic competencies (SCs) were used as independent factors, while ESs and WP were used as predictor factors	employable abilities but rather only by delivery competencies, interpersonal competencies, and work performance.	
22	Interrelation of Regional Markets of Labor and Educational Services	The research aimed at challenges faced in the interrelation of regional markets of labor and educational services through the example of the Lipetsk Region as one of the developed industrial and agricultural regions of Russia.	The resource for the region's increased reproductive development, establishment a regional labour market and educational events must produce the conditions and stimuli necessary for human capital assets.	Kostenkova, T. A., Pishchulin, V. N., & shepelev, M. I. (2016). [36]
23	Work Integrated Learning (WIL) Model	The research on the work-integrated learning (WIL) model is presented in this article. The goals were to investigate their properties as well as the approaches used to study them. Models related to the IT industry or IT departments in non-IT industries are the emphasis. The methodology used was a systematic literature review (SLR). The authors gathered information from eight databases between 2006 and 2016.	The model procedures, which include knowledge, methods, and tools for gathering research problems and generating answers, need to be defined to prioritize to future jobs and the demands of the digital workforce.	Lavy, I., & Rashkovits, R. (2019). [37]
24	Generic competences in the area of Higher Education	The generic skills can be added in the university curriculum and can be evaluated using different tools.	The findings support the hypothesis that a particular course can considerably improve students' acquisition of generic competencies in both intrapersonal and interpersonal areas. Acquisition of these skills can be accomplished, according to the evidence,	Crespi, P., & Ramos, J. M. G. (2021). [38]

			by taking specific courses on generic competences.	
25	Analytic Hierarchy Process to explore Management Competency	The Analytic Hierarchy Process is used in this study to provide a framework (AHP). It examines the management skills that employees in the digital age must have and offers the best management curriculum options based on a gap analysis of a technological institute. A literature study and a Delphi survey were done to gather information on the present evolution of management competencies and identify AHP factors.	Graduate schools should emphasise all of the management competence dimensions from industry orientation in addition to enabling students build their professional skills because these are the skills that the management industry of today is looking for	Lin, et. al. (2010). [39]
26	Peer Mentoring tool for developing soft skills	This study aimed to see how peer mentorship affected third-year students and how non-technical skills (NTS) acquisition changed from the third to the fifth year. The one-way ANOVA and Fisher's posthoc test was used in the statistical analysis. It was discovered that during three years of clinical training, they enhanced their non-technical skill development.	Peer mentoring amongst students is a viable method for NTS training due to the clinical faculty's challenges in simultaneously instructing third-year students in technical and Non-Technical Skills (NTS). Without formal mentorship, the data indicated that mentees increased their self-assurance and growth of the acquired NTS.	Lluch, A. M. (2021). [40]
27	Soft Skills of Accounting Graduates	This study aimed on soft skills in accounting education, exploring the viewpoints of both graduates and employers.	Comparatively to employers, graduates overestimated one particular technical talent while underestimating the value of other soft abilities. The perspectives of graduates and employers overlap to some extent; accounting education still has to advance, and academic engagement is essential to enhance.	V Dolce, F. Emanuel, M. Cisi, C. Ghislieri (2020). [41]
28	Faculties experience on teaching soft skills in Teacher	This study looked into the faculty's experiences with training soft skills to (Teacher Profession	The teacher profession education program (TPEP) employed integrated/embedded	Mailool (2020). [42]

	Profession Education	Education Program) TPEP students. This study aims to have a better knowledge of how soft skills training is administered and what types of soft skills are taught throughout the TPEP. The TPEP used integrated/embedded models to teach soft skills, according to the findings. Soft skills were taught to TPEP students through lectures, presentations, assignments, mentoring, and practice. Ethics, self-reliance, responsibility, patience, communication skills, critical thinking skills, tolerance, teamwork, and social skills are among the soft skills taught during the implementation of the TPEP	strategies for teaching soft skills. The TPEP soft skills are developed through practise, coaching, assignments, lectures, and presentations. The ethics, self-reliance, responsibility, patience, critical thinking abilities, communication abilities, teamwork, tolerance, and social skills taught during the implementation of the TPEP.	
29	Students' Soft Skills, Hard Skills, and Competitiveness (SHC)	The identification of soft skills in higher education curriculum and students self-evaluate to find the skill gap after trained students with those not trained.	In this study SHC model accepted, relevant, and applicable by users for implementation in curriculum, teaching, and learning at the institution. This research aids in preparing graduates with employability skills for the demanding and complicated workplace of the Industry 4.0 revolution.	Caggiano, V. (2020). [43]
30	Industry and Higher Education	What do graduates and employers really think about soft skills	The research reveals discrepancies between graduates attitudes and Human Resource Managers (HRM). While employers claimed that graduates lacked the requisite skills, and graduates tended to overestimate their own abilities.	Matsuoka, K. (2016). [44]
31	Demand of Soft-skills by the Employer	This article determines the soft skills required for a Scottish workforce environment. They	According to the study, personal attitude, employability skills, relevant work experience,	Mc. Murray (2016). [45]

		conclude that the students should get trained for at least the following soft skills personal attitude, relevant work experience, employability skills, trustworthiness, degree results, motivation, reliability, willingness to learn, and communication skills	and degree outcome are the variables that matter most to companies when hiring graduates. The reliability, motivation, trustworthiness, communication skills, and a willingness to learn are the attributes focused by the Employer.	
32	The need of soft skills for Educators	This article stresses the role of educators in soft skills and talks about how equipped they are to do the training for the students. They considered three different educators for this study and spoke about the framework's design titled "Soft Skill Framework for Educators in Public Universities".	This report offers an insight into how three PU educators view soft skills in the context of their current careers. They offers early ideas and initiatives for soft skills framework for PU educators, which could serve as a direction for educators to develop, facilitate, and enhance soft skills among graduate students.	Md. Ali (2016). [46]
33	Employability Skills Assessment Tool Development	The employability skills are very prominent in outcome-based education with the goal to develop an Employability Skill Assessment Tool to help students and lecturers produce competent graduates in employability skills needed by the industry. The employability skill Assessment Tool was developed using the Kepner-Tregoe (KT)	The developed employability skill assessment tool examined by the employers and academic lecturers. A positive correlation discovered between employability skill assessment and employability.	Rasul (2012). [47]
34	Employability Skills Development Approaches	The study aimed at the approaches to the development of employability skills.	In order to enhance employability skills, work-integrated learning model is a successful method. The stand-alone subject model, academic support programme, embedded subject model, non-academic support programme, and campus life activities are beneficial strategies.	Harnid (2014). [48]
35	Employer Perception on	The results of a study of 299 employers from various sorts of	The results showed that employers place a high value on problem-solving	Saad, M. S. M & Majid (2014). [49]

	Employability skills	organizations that hire engineering and ICT students are presented in this article. The survey's goal was to learn about employers' perceptions of the five most critical employability aids that graduates must acquire to consider marketable and in demand in the labor market.	abilities, tool handling proficiency, presentation skills, and teamwork abilities when looking for student talents. Along with motivation to learn and apply new information in these fields, students must also be proficient of modern tools, techniques, and abilities.	
36	Employer Perception on Engineering Information and Communication Technology Students Employability skills	This study is based on the results of a survey of employers who have engineering and ICT qualifications from Universiti Teknikal Malaysia Melaka (UTeM) conducting industrial training at their companies. The goal of the study is to learn about employers' ideas of the employability skills that technical students should have, as well as to gauge their satisfaction with the students' employability abilities.	This study has given some insight into the employability qualities that businesses look for when hiring new employees, particularly engineering and ICT graduates, and it's important to highlight hard skills and soft skills.	Saad, M. S. M, Robani, A, Jano. Z. & Majid. I. A, (2013). [50]
37	The PRISMA-Systematic review and Reporting Tool	The research goal was the preferred reporting item for systematic reviews and meta-analyses with the PRISMA statement	The Research study revealed that the PRISMA used as a systematic review and reporting tool.	Moher, D. (2009). [51]
38	Soft Skills of Musical Art Teachers in Pedagogical Institutions of Higher Education	The goal of this study was to spotlight the soft skills that future professionals in musical or artistic disciplines will need and distinguish them from hard talents. The main research methods were the examination of theoretical materials and the development of general soft skills, which are crucial for the training of musical art teachers and to which teachers should pay attention.	The teamwork and communications are high significance in today's classroom environment, and soft skills are more crucial than ever to success in the profession. A music educators can learn how to incorporate soft skills into their curriculum from various sources.	Mozgalova (2021). [52]
39	Problems of educational processes development and	The study highlighted the problems of educational development and labor market need analysis.	In order to highlight the differences between industry needs and educational system	Natalia. C, (2015). [53]

	labor market needs analysis		outcomes, labor market analysis performed.	
40	The effect of Graduates characteristics on the chance of being employed	The study aimed at the graduates being employed with their potential characteristics.	The findings show that graduate employability skills (technical and soft), which the Labor Market (LM) needs from the Higher Educational Institutions (HEI), can be transmitted to the students with enough teaching resources and qualified teachers. Understanding the requirements of the LM by HEIs can improve the outcomes and prospects of graduates in the LM.	Ismail. N. A, (2011). [54]
41	Graduate Employability	The study concentrated on how the higher education institutions can meet the demand of the labour market.	The major findings show that graduate employability skills (technical and soft), which the Labor Market (LM) needs from the Higher Educational Institutions (HEI), can be transmitted to the students with enough teaching resources and qualified teachers. It has been discovered that knowing the requirements of the LM by HEIs can improve the outcomes and prospects of graduates in the LM.	Okolie (2019). [55]
42	Task-Based Language Teaching Skill	This study depicts the requirement of combining web-based language learning and Task-Based Language Teaching (TBLT) and how it enhances the student's ability to acquire soft skills. Further, it talks about the improvement in speaking, writing, and learning skills.	The findings showed that instruction in socio-scientific issues (SSIs) could have a marginally favourable impact on the development of active claims and impact students' capacity to comprehend the main ideas of others and value their perspectives.	Chung.Y. (2016). [56]
43	Employability Skill Development for Senior Secondary School Chemistry Students	The aim of the study was how to assess employability skills among senior secondary school chemistry students.	Results indicated that the employability skills of science students were deemed competent. The students' aptitude in math, independent study, and teamwork was highly	Orji. N. S, (2013). [57]



			rated, whereas aptitude in problem-solving, ICT, and time management was not. The survey also discovered that schools offer numerous opportunities for developing various employability skills in differing degrees.	
44	Role of Soft Skills in Teacher Education Programs	The research goal was to study the importance of soft skills in the teacher education programme.	Seven soft skills have been discovered and chosen to in all schools of teacher education. They are communication skills, problem-solving abilities, teamwork, information management and lifelong learning, entrepreneurship, ethics, morals, professionalism, and leadership abilities.	Pachauri (2014). [58]
45	Industry and Higher Education: Graduates Soft Skill Abilities	This article looks at the perspectives of Hong Kong companies on graduate abilities that help freshers succeed in their job. A questionnaire was used to collect data from corporate Managers or employers on the value of particular qualities in arriving at fresh graduates' performance at work. The results show that all of the skills under the study are essential to some extent.	The results show that all of the competences looked at are significant to some extent. The five highest-ranking qualities assessed include ability and readiness to learn, teamwork and cooperation, hard work and willingness to take on extra work, self-control, and analytical thinking, even though all are unquestionably important for success.	Pang. E, (2019). [59]
46	Perception of IT Internship Students on Importance of Soft and Hard Skills	A gap analysis done on IT students by exploring the importance of soft and Hard skills.	According to the respondents, teamwork and communication skills are crucial soft skills for IT graduates to possess. Additionally, the findings show that there were no significant differences in the respondents' perceptions of the significance of soft skills.	Patacsil (2017). [60]
47	Soft Skills among Students of Higher Education	The goal of this article was to test students' experiences with soft skill training and development in higher education	The findings show that higher education institutions use new approaches and tools in the learning stages to help	Pluzhnirova (2011). [61]

		institutions. The study's methodology includes a comparison of hard and soft skills and the findings of student surveys on the benefits of hackathons in the development of soft skills.	students develop soft skills.	
48	Graduates abilities to become Employable	The study was conducted on computer science students and concluded that the students lack the following abilities. To communicate when they require assistance or are facing a problem, to communicate with customers, to have an appropriate amount of detail in written communication, to listen well, to work as part of a multi-disciplinary group of project management skills that can develop them into good applicants for group leader roles, to generate alternative solutions to problems	The review's findings show that graduating students fall short in a wide range of competencies, including technical skills (design, testing, configuration management tools, etc.), interpersonal competencies (communication, teamwork, etc.), and professional attributes (ethics). It is possible for educators to become aware of these areas through enhancing student skills, and then to adapt the curriculum or make other adjustments to address these issues.	Radermacher (2013). [62]
49	Employability Skills required for Undergraduate Engineering Students	The learning and skills industry, on the other hand, is working hard to generate a more accomplished workforce. The goal of this study was to gain a better understanding of the abilities that businesses anticipate young people entering the workforce to possess.	Making all graduate students in academia employable is one of the biggest challenges. From this perspective, curriculum mapping is a core component for employability skills that must be effective delivery and assessment strategies to ensure that students develop in accordance with employer expectations and the skills necessary to compete.	Radhakrishnan & Sudha (2015). [63]
50	Preparedness Qualities required for the world of work in students	The study was conducted on Malaysian diploma students in a local institution to test their preparedness for the world of work.	The results demonstrate maximum respondents covered the categories of affect, judgement, and appreciation, and few events not reflected to these categories because of limited English language ability.	Isai, (2020). [64]
51	Industrial Perspective on	The primary goal of this study is to review the	The results indicate that attributes proposed,	Salleh (2016). [65]

	characteristics of graduated Architects	application and importance of Employability skills from industry perspective.	responsibility, a positive attitude and teamwork skills were top three attributes. This study contributes to the existing literature on employability skills by providing industry perspective on the subject, which is, thus far, less discussed in existing published research.	
52	Soft skills as a part of higher learning	The human capital development through the seven soft skills elements which includes communication skills, critical thinking and problem solving skills, team work, lifelong learning and information management skills, entrepreneurship skills, ethics, and professional moral and leadership skills are learnt.	The communication skills, critical thinking and problem solving skills, teamwork, lifelong learning and information management skills, entrepreneurship skills, ethics, and professional moral and leadership skills are seven soft skills taught to undergraduates at Malaysian higher education institutions.	Roselina Shakir (2009). [66]
53	Analysing the skill gap of graduates attributes and industry	Skills has to be changed as per the competitive industry requirements to make the business graduates employable.	Compared to numeracy skills, verbal and written communication skills evaluated higher in management and business programmes. The conclusion states that communication-related disciplines given priority when creating a management or business curriculum or syllabus.	Rohaizat (2012). [67]
54	Performance approach used to know the university curriculum	The paper aimed at the process of designing the Curriculum by identifying the essential employability skills.	In this research the findings of a few pertinent international and national research on the cross-disciplinary abilities are used. The skills identification is the first and most crucial stage of the curriculum redesign process justifies the study's applicability in university management strategy.	Parvu (2014). [68]
55	Significance and satisfaction of soft skills of	This paper aims to analyze students' satisfaction once they become an employee.	The survey of senior/professional architects from 65 architectural firms	Salleh (2015). [69]

	Architect graduates	They mentioned that the students said they were less skilled in a written presentation, English language abilities, oral presentation, written communication, analytical & critical thinking, and negotiation skills upon entering their employment.	revealed that the most crucial abilities for graduate architects were language proficiency in English (in terms of oral, written, oral presentation, and written presentation). Time management, listening, teamwork, problem solving, leadership, and decision-making are other soft talents that are highly valued.	
56	Structure of learning soft skills	The framework of soft skills was designed which was infusion based on learning contract concept	The eight principles of the co-curriculum honor, student-driven, flexible, enjoyable, experiential learning, authentic, total learning experience and soft-skills helps in enhancing soft skills among university students.	Selamat (2013). [70]
57	Classroom based and Out bound soft skills training	The findings of a study conducted on Outbound Training (OBT) practice as part of soft skills study for Indian university students were presented in this paper. The study studied if the style of outbound classes easily attains acquiring all of the core skills targeted to project the benefits of lateral thinking application of outdoor education in soft skills development. A total of 176 undergraduate students and two university instructors took part in the study. The data was gathered using both surveys and interviews.	The findings demonstrated that outdoor training could significantly help in physical, social, and academic skills.	Gibert (2017). [71]
58	Soft skills in higher education	Critical thinking, communicating skills, problem-solving skills, lifelong learning and information management skills, teamwork, entrepreneurship skills, professional moral and leadership abilities and	The Malaysian Ministry of Higher Education stated soft skills taught to undergraduates at the Malaysian Institutes of Higher Learning. The recommendations made to implement these soft	Shakir (2009). [72]

		ethics are among the seven soft-skill characteristics discussed in this article.	skills into the undergraduate course.	
59	Employability skills in Manufacturing industry	The study's main goal is to determine what employers think about the most crucial employability skills in the manufacturing business. The study also aims to examine the disparities in critical employability abilities from employers' perspectives based on their gender, the size of their organization, and the sorts of manufacturing companies.	Results indicate no significant variation in perceptions of critical employable skills in the manufacturing industry according to employers' gender or the manufacturing sector, and business size has significant differences.	Chan. S. (2018). [73]
60	English Language and soft skills	This article aims to look at how Malaysian companies and students view the necessity for English language competency and abilities in the workplace. Employers from a variety of organizations were interviewed. In addition, undergraduates at four Malaysian public universities were given questionnaires.	English has significant impact in employability, according to both students and employers. The grammar and a broad vocabulary are essential in English language. The results also revealed discrepancies between students' perspectives and employers' expectations.	Siti Zaidah Zainuddin (2019). [74]
61	Employability skills of Potential graduates	The objective of this study was to analyze the gap between the degree of generic skills mandated by industry and the basic skills acquired by graduates.	This study prescribes a comprehensive normative solution to the employability of graduates stakeholder-responsibility approach is necessary.	Selvadurai (2012). [75]
62	Guidelines on literature review process	To do our research we need to follow the methodologies and guidelines for our research activity.	In addition to providing an overview of the reviews, this paper examines literature review as a methodology for conducting research and offers advice to evaluate a literature review study. It also covers typical difficulties and how to publish literature reviews.	Synder (2019). [76]
63	Analysing need of required soft skills	The study aimed at developing the assessment tool for employability	The three components of the approach were dependability, initiative, and interpersonal skills.	Park (2016). [77]

		skills for Research and Learning	Confirmatory factor analysis results showed that the three-factor model of the Employability Skill Assessment (ESA) was suitable for the observed data and showed a substantial overall link between the ESA factors.	
64	The high competencies of the graduates in acquiring employability skills	This paper explores the level of preparedness in recent college graduates for their soft skills based on today's job market. They found the major missing link in preparedness in problem-solving, written and verbal communication, teamwork, self-confidence, and self-centeredness.	This paper examines required soft skills for college students' self-ratings of the same competencies. It also looks at how employers and job candidates signal the presence of these talents and suggests further study to determine the underlying reason for this apparent soft skill gap.	Stewart (2016). [78]
65	Employers perspective on graduates employability skills	Here, the authors explored the significance of specific soft skills required for being employable from both the students and employees and addressed some of the major concerns about self-awareness and the capability to find strengths and weaknesses in students as part of soft skills.	The higher education institutions (HEIs) should collaborate to help students understand the value of soft skills assists them take personal responsibility for learning and developing these skills so they can continuously adapt to the changing labour market and increase their employability.	Succi (2020). [79]
66	Enhancing soft skills in schools	The study objective was embedding soft skills in higher education to fill the skill gap for employability.	The higher education institutions are tackling soft skill issues head-on and reconsidering how academics, career services, and even support services may help students become more employable. The findings also showed that the UK's higher education system has critical value of non-academic skills to employability.	Tang (2019). [80]
67	Training students for interviews on online and offline mode	This article describes a semester-long CSP pedagogy in which the classroom, whether face-to-face or online, becomes	The uniqueness of the immersion strategy described in this article widens the usage of client sponsored projects (CSP)	Thompson (2021). [81]



		<p>an immersion in a normal corporate team project culture, allowing students to practice the abilities that industry reports show they lack. Students act as advisors in the model given, generating a workable marketing strategy for a client company to implement. The processes offered provide students with an experience that provides them with performance expectations, similar to that of a person working in a corporate setting.</p>	<p>by providing rigorous in-class experiences for face-to-face fully online courses are similar to those seen in corporate settings. This article outlines the steps educators may take to create a classroom environment incorporates demands from the real world of business, coaching, and accountability educate students for their future professions and meet the abilities business managers demand.</p>	
68	<p>Communication skills and English Language</p>	<p>Employers' points of view on the worth of English language and communication skills for candidates searching for jobs in the private sector were investigated in this study. Lack of English competence and communication skills among graduated candidates is sometimes blamed for their high jobless rate. The mentioned two unique features are more often amalgamated, and it is pivotal to know which is more relevant to employers.</p>	<p>The findings showed that language competency, and communication skills are valued separately by employers in Malaysia's private sector. With the exception of positions needs English communication, such customer service and marketing, employers are prepared to accept hiring candidates with average English proficiency if they have good communication skills.</p>	<p>Ting (2017). [82]</p>
69	<p>Employability skills for civil engineering students</p>	<p>In this research the analysis was made on the employability skills of Construction drawing engineering students in Indonesia.</p>	<p>The findings demonstrated that the students' employability abilities are strong low disparity of 25.82 percent from the perspective of industry and 20.81 percent from the students perspective. Higher-order thinking abilities and the students' personal attributes were additional employability skill markers that made a substantial difference.</p>	<p>Triyono (2018). [83]</p>

70	Employability skills for tourism employees	In this study, travel agency managers in Taiwan assessed the employability of vocational college graduates. The AHP was run on data from 50 valid surveys that were received. The findings suggest that the most significant employability skill for travel agency managers is "generic skills," followed by "professional attitude," "discipline," and "career planning." Travel agency managers ranked 'communication' as an essential scale item, followed by 'lifelong learning' and 'work devotion.'	Although companies in the present labour market complain about the lack of qualified candidates and job seekers finds difficult for employment. The significant differences between what the labour market needs and what job searchers are willing to supply highlighted by the cohabitation of a labour shortage and labour pool.	Tsai (2017). [84]
71	Soft skills training for legal or law education	To develop a humanistic approach among law teachers and legal practitioners soft skills courses were developed.	The study suggests a set of pedagogical guidelines centred on four axes: teaching that is compassionate, attentive, reason-based, and empathic (CARE).	Tsaoussi (2020). [85]
72	Employability skills for software engineering students	The trouble of forming software engineering technicians' soft skills is examined, as well as approaches to explain the list, detail, and maturity level of software engineering technicians' soft skills, and basic ways of their formation, including the development of new academic programs or individual innovative courses, problem-oriented approach, AGILE approach, gamification of learning, development of interdisciplinary courses, and so on.	The gathered information allows for methodological suggestions for soft skills in software engineering technicians when they study the humanities and social sciences and experimentally test their effectiveness.	Varava (2021). [86]
73	Preparedness and challenges of graduates at workplace	A stakeholder-oriented HRM model is proposed in this paper, which involves HR professionals, industry,	All three nations Australia, Indonesia, and Malaysia now having trouble luring graduates with the necessary set of	Verma (2018). [87]

		government, and educational institutes as three main stakeholders. They emphasize students' work-readiness challenges and address them using an inside-out strategy.	credentials, competencies, and personal qualities. Constraints on national economic growth, upcoming production structures, and long-term socioeconomic development are among the repercussions.	
74	Professors and employers perspective on soft skills	Reference studies were used in this investigation, which had a quasi-experimental design. The total sampling in this study consisted of 123 student nurses from odd and even semesters. With a p-value of 0.039, gender affects the caring attitude of student nurses at UNIMUS' Faculty of Nursing and Health Sciences. With a p-value of 0.017, gender influences the activism of student nurses at UNIMUS' Faculty of Nursing and Health Sciences. This research aims to look at the employability qualities that companies, university lecturers, and graduates value while appealing for beginner-level graduate positions in the field of computer science in Sri Lanka.	The results indicated that the four groups male graduates, female graduates, employers, and university lecturers differently prioritised employability skills. Furthermore, the results imply that the graduates' gender impacts employability skills.	Wickramasinghe (2010). [88]
75	Perception towards employability skills	This publication puts together discoveries from GIS employers' and educators' surveys considering the priorities of hard and soft skills among entry or beginners level GIS professionals.	The study found that the most valuable soft skills are the capacity to work in a team environment, ability to work independently, internship experience, critical thinking, flexibility/adaptability, ability to work in a team environment, and time management or multitasking.	Wikle (2015). [89]
76	Comparing the perceptions of Employers and Educators	This study said about how higher education impacted Malaysian graduates by	Malaysia's higher education system is on track to meet its objectives of preparing	Zain (2017). [90]

		reviewing the system's development.	the graduates who can compete in the global job market. To help the country move toward realising its Vision 2020, Malaysia still needs students and graduates with the capacity for independent thought and problem-solving.	
77	Evolution of higher education	The goal of this paper is to evaluate the perspectives of Malaysian employers and students on the need for English language proficiency and generic skills.	The students, and employers states that English language significantly impacts on employability. The grammar and a broad vocabulary are essential in English language. The results also revealed discrepancies between students' perspectives and employers' expectations.	Zainuddin (2019). [91]

**Table 6:** A table of scholarly publications on soft skills.

S. No.	CONCEPTS	REFERENCES
1	Skill gap in students	[1]
2	Managing and mobilising talent	[2]
3	Formation of soft skills	[3]
4	Graduate employability skills	[4]
5	Soft skills-advanced training technology	[5]
6	Soft skills versus hard business knowledge	[6]
7	Employability skills	[7]
8	Analysing curriculum and soft skills	[8]
9	Assessment of soft skills and competencies	[9]
10	Quality of organisations and enterprises	[10]
11	Teaching communicative competence	[11]
12	Hospitality in classrooms.	[12]
13	Nation development	[13]
14	Critical thinking	[14]
15	Hospitality and soft skills	[15]
16	Integration of soft skills and technical skills	[16]
17	Skill gap between accounting job advertisement as a graduate	[17]
18	Communication skills, self esteem and positive attitude required even towards music students.	[18]
19	Employers expected the accounting graduates to acquire soft skills	[19]
20	Blending employability skills in higher education	[20]
21	Soft skills for employing music graduates	[21]
22	Impact of out bound team building for MBA graduates	[22]
23	Impact on education policy and practices	[23]
24	Employers expectation from soft skilled graduates	[24]

25	Enhance soft skills in nursing students.	[25]
26	Economic and environmental effect on farming	[26]
27	Draw out from soft skills observed by Employers	[27]
28	Impact of education	[28]
29	Competency in Pre-degree business graduate program	[29]
30	Study of Apprenticeship experience leading to good career	[30]
31	Teaching –learning model in soft skills	[31]
32	Employers perception on Soft skills of technical Pre-degree students	[32]
33	Perception on biotechnological streamed graduates	[33]
34	Structured evaluation with five stages	[34]
35	Gap between core and standard performance of university graduates	[35]
36	Issues and expectation from the relationship of educational organisations and regional labour	[36]
37	IT candidates in a Practical based curriculum	[37]
38	Unemployment rate	[38]
39	Analytical hierarchy process technique to company oriented management competency	[39]
40	Soft skills in clinical practice with cpm-peer guide	[40]
41	Expectation from Accounting specialised graduates	[41]
42	Encounter Teachers experience in training soft skills	[42]
43	Hard and soft skills using ADDIE model to analyse, design, develop, implement and evaluate the training session	[43]
44	Expectations from employers and graduates	[44]
45	Demand for soft skills in graduates from employers in the companies	[45]
46	Knowing the importance of soft skills for educators	[46]
47	Tools and techniques for skill assessment	[47]
48	Application and developing employability skills in Analytical network process	[48]
49	Prominent employability skills required	[49]
50	Employability skills for engineering graduates	[50]
51	Meta Analysis	[51]
52	Methods of soft skills of music art teachers	[52]
53	Issues of educational methods and need analysis of the Labour	[53]
54	Features of graduates and jobless market	[54]
55	Matching the requirement of labour market with employability skills	[55]
56	Internet language learning for magnifying soft skills	[56]
57	Evaluation of employability skills for chemistry students of Pre degree level	[57]
58	Prominence of generic skills in Teachers graduation courses	[58]
59	Success rate at work of the Fresh graduates	[59]
60	Differentiating the prominence of hard and soft skills among students during internship in IT Industry	[60]
61	Soft skills for higher primary students	[61]
62	Skill gap between expectations of companies and graduates	[62]
63	Analysing the Employers point of view on employability skills	[63]
64	Employability skills in service sector	[64]
65	Industrial Perspective on characteristics of graduated Architects	[65]
66	Soft skills as a part of higher learning	[66]
67	Analysing the skill gap of graduates attributes and industry.	[67]
68	Performance approach used to know the university curriculum	[68]

69	Differentiating between Significance and satisfaction of soft skills of Architect graduates	[69]
70	Structure of learning soft skills	[70]
71	Classroom based and Out bound soft skills training	[71]
72	Soft skills in higher education	[72]
73	Employability skills in Manufacturing industry	[73]
74	English Language and soft skills	[74]
75	Employability skills of Potential graduates	[75]
76	Guidelines on literature review process	[76]
77	Analysing whether students have the required soft skills for research and learning	[77]
78	With high competencies do the graduates acquire employability skills	[78]
79	Employers perspective on graduates employability skills	[79]
80	Enhancing soft skills in schools	[80]
81	Training students for interviews on online and offline mode	[81]
82	Communication skills and English Language	[82]
83	Employability skills for civil engineering students	[83]
84	Employability skills for tourism employees	[84]
85	Soft skills training for legal or law education	[85]
86	Employability skills for software engineering students	[86]
87	Preparedness and challenges of graduates at workplace	[87]
88	Professors and employers perspective on soft skills	[88]
89	Perception towards employability skills	[89]
90	Comparing perceptions of employers and educators	[90]
91	Evolution of higher education	[91]
92	ABCD analysis	[92]
93	Soft skill impact in the long term	[93]
94	Soft skills throughout bound training	[94]
95	Enhancing learning with fun while soft skills Training	[95]
96	Creativity and innovation in Training	[96]
97	Ideation and creativity thinking	[97]
98	Problem solving skills	[98]
99	Goal setting through soft skills	[99]
100	SWOT analysis in soft-skills training	[100]
101	Better prospects for the youth through soft skills	[101]
102	Prospects and problems in enhancement of soft skills	[102]

## 5. CONCEPTUAL THEORETICAL FRAMEWORK :

Pedagogy and employability skills are to be connected conceptually. Employability means the ability of a candidate to be employable with all the required skills. Employability is a set of skills or attributes that a graduate should possess to be employed in an organisation. Sometimes the students will be excellent in their studies getting first-class grades but do not get employed due to a lack of required soft skills to be a job fit. Hence, it is vitally important that companies should recruit highly skilled employees who should be trained in soft skills. The students will be trained not only in the classrooms but also outside the classrooms which will have a very effective impact on their learning process.

The conceptual framework of this study is developed and designed for understanding soft skills and needs in a pictorial form based on the literature study and the training conducted by the primary author for students from different streams like Bachelors of Engineering from Computer science branch, Electronics, and information science, Civil, Aeronautical, Mechanical branches, BBM, B.com, MBA, M.com, MCA, M.Tech, M.sc for different types of soft skills Communication skills, Interpersonal skills, Team Management skills, Time Management skills, Presentation skills, Behavioural skills,



Business Etiquettes, Placement skills, Life Skills, Stress Management skills, Personality development etc.

Based on the literature review, six skills are identified as the primary skills or soft skills which are lacking among the students observed while training keeping in mind the industry needs. They are Interpersonal skills, Team Building skills, Numerical skills, Presentation skills, Aptitude skills and Communication skills. All these skills have a high impact on a student to be recruited or employed in an organisation.

The Figure 2 shows the model which is developed based on Primary Author’s/ trainer’s understanding, common sense, experience, exposure, observation and reading of various publications along with the above mentioned in the content development matrix.

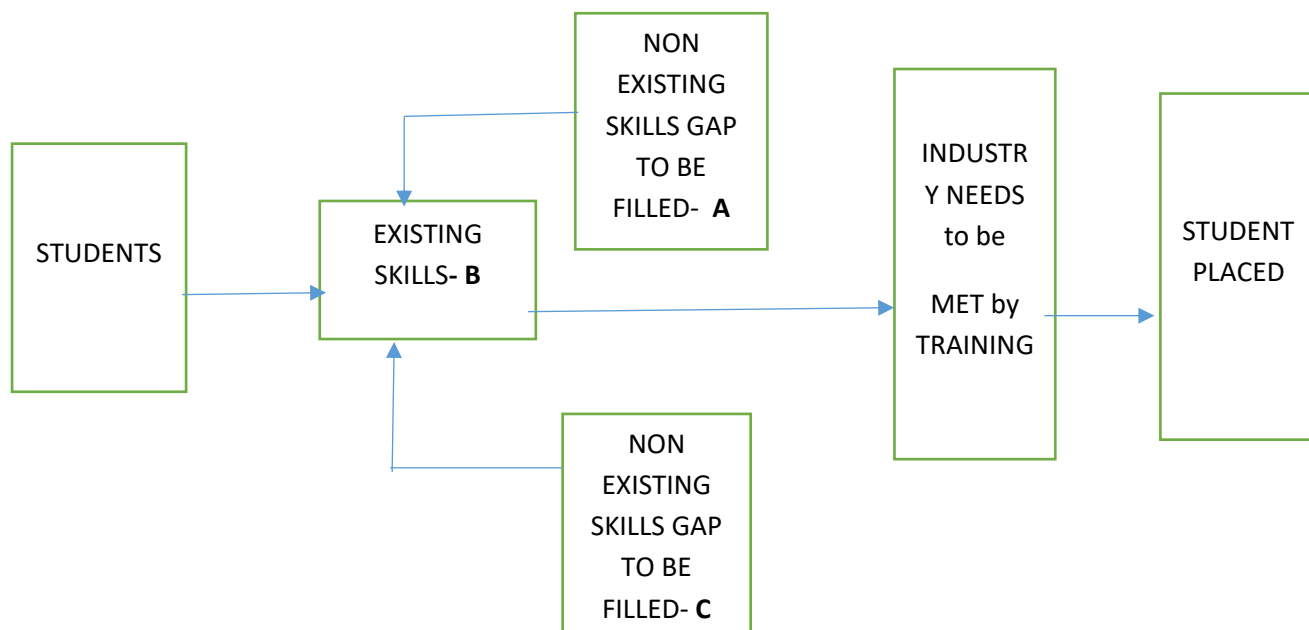


Fig. 2: A conceptual model to identify skill gaps Category A and C & fill up to Industry Needs

Table 7: The training conducted by the primary author on skills to address the gaps felt in students keeping the industry needs in mind

S. No.	Type of students	Training module	Gaps – A, C	Duration	Observation
1	Engineering	Interpersonal skills	A, C	4 hours	It was observed that students lack confidence level to interact with each other but after training they improved on their interpersonal skills.
2	Undergraduates – BBM, B.com, BCA, BHRD, B. SC.	Numerical skills	A, C	3 hours	They were initially Unwilling to communicate coordinate and cooperate with the team members due to lack of numerical knowledge in Math, Accounting, Statistics but post the training there was tremendous change in their
3	M.Com	Communication skills	A, C	6 hours	Lack of confidence primarily develops due to weak communication as it is one of the major skills required and the language skills to speak in front of the audience. After training the students build up

					confidence to speak in front of the audience and developed the willingness to learn and practice reading speaking in English.
4	MBA	Management or managerial skills	A, C	4 hours	Lack of punctuality, and low value for time was noticed during training. Post the training they changed their view on time and were making ready their daily to do list.
5	M.Sc	Presentation skills	A, C	4 hours	Lack of confidence, knowledge, and poor communication skills was observed but post the training they improvised in these areas and could confidently present their content using Technical skills with videos, pictures, interactions too.
6	MCA	Technological skills	A, C	4 hours	They were observed to be weak in Developing PowerPoint presentation, MS word, Excel but after training they were confident enough to present by learning the techniques and tools of technical part of presentation.

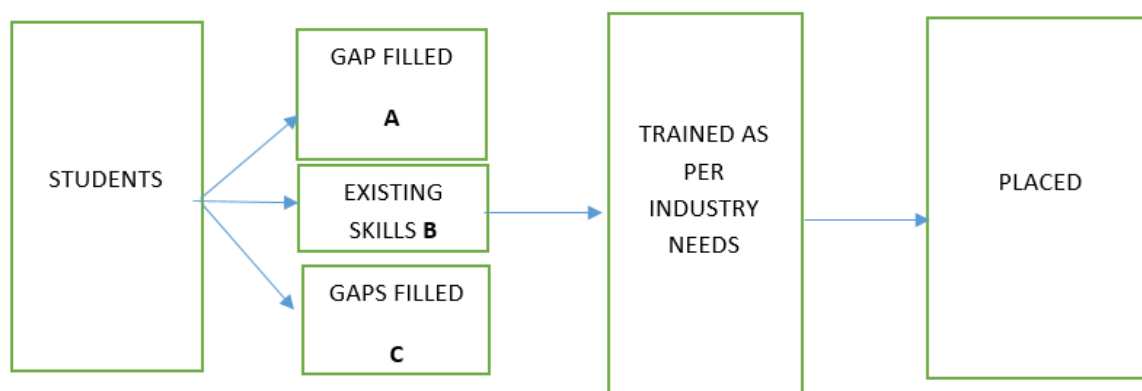
The skill gaps are categorised based on the rank order as per the industry priority.

**Category A-** Communication skills, Management skills, Interpersonal skills

**Category C-** Technological skills, Numeric Skills, Presentation skills.

**Category B -** Existing skills - Basic qualification and certification necessary as prerequisite for qualifying to enter an organization.

The post training programme helped students to acquire the above mentioned gaps and the new paradigm of the student would reflect in the following manner as shown in the figure 3 below:



**Fig. 3:** A Conceptual model once the skill gap filled post the training

The table 8 depicts the shortfalls as well as industry expectations based on the HR requirements understood from the literature studied and the recruiters. The same has been converted in to model to

bridge the gap of shortfall. The following model has been developed for the sake of understanding as a structure to develop module and conduct training programmes. This also is studied in an article authored by Nathan and Rajamanoharane published in 2016 [102] and a similar conceptual model is developed and design for analysing pre and post training needs. The model worked up on encompassing these basic and common gaps for all the streams of students as needs to be filled by a trainer by training students on soft skills.

**Table 8:** This table shows the content development to fill the skill gap.

S. No.	Sector/Stream	Shortfall Category A	Shortfall Category C	Content developed to fill the gap
1	Engineering	Communication skills, Management skills, Interpersonal skills	Numeric skills, Technological skills Presentation skills	Verbal and Non verbal communication activities
2	Humanities			Outbound inbound training, Moral and ethical training, Time management, Team Management, Personality development activities.
3	Management			Online and offline mock Presentations using technology for Powerpoint slides, videos, images.
4	Computer Applications			Comprehensive reading and writing activity, Mock presentations, role plays, Group discussion, Mock interview. Mock aptitude tests for improving their numerical skills- analytical, Critical and lateral thinking.

## 6. DISCUSSION AND FUTURE WORK :

Employers are looking for versatile students who will be able to drive the organizations to the next level with a positive impact so that they can compete successfully in the competitive marketplace. The current economic situation is very challenging, so employers are looking for versatile students who will be able to drive organizations by delivering highly qualitative performance by inculcating the soft skills required to survive successfully in the competitive world. Employers currently demand graduates get strong degrees, thrive in their academics, and equip themselves with soft skills required professionally. In today's world, globalization entails a greater integration of diverse sectors, requiring higher-level graduates' soft skills. The current study used a systematic literature review technique to analyse employers' viewpoints on the soft skills that graduates need to develop to be ready for the job market. The PRISMA Statement served as a guide for the review (Preferred Reporting Items for Systematic reviews and Meta-Analyses). A thorough analysis of the literature was carried out. All of the studies were chosen from journals published between 2008 and 2021. The literature was synthesized based on the search results, and the varied soft skills were considered, analysed, and systematically represented. The findings show that there is still a deficiency of agreement on the descriptions of both terminologies. It was also discovered that several parts of the studies required a strong theoretical grounding. The rest of the publications, on the other hand, showed that there is theoretical dispersion in business research on competencies and soft skills. In terms of the approaches used, we believe that they need to be improved to develop competencies and soft skills. As a result, based on the more valid theoretical viewpoints uncovered in the literature study, a theoretical model explaining the links between these notions needs to be built. According to the findings of this study, graduates are deficient in the soft skills that employers give importance to and seek. Candidates are unaware of this circumstance, which leads to university graduates' delayed development of soft skills. To address this issue, both the

institution and the government are working to generate holistic graduates who are ready to enter the workforce. These cooperative efforts are essential for our country's continued economic prosperity. More precisely, the growth and development of soft skills in the universities, graduates can be helped to generate productive individuals who will benefit the country. This study highlights the importance of all higher education institutions reviewing their soft skill development initiatives and implementing tools to assess this growth among their alumni.

## 7. RESEARCH GAP :

The Literature survey conducted with the identified keywords has shown various soft skills required by the students for different domains before becoming employees. It is observed that there are several ways in which the state-of-the-art works can be further optimized. Concerning this, the following Research Gaps are identified-

**Research Gap 1:** Primary or necessary soft skills required by any student Pre training as per the industry needs (Category A and C).

Understanding that students are lacking necessary primary or soft skills as per industry needs which are Gap A and C mentioned in the content development matrix mentioned Theoretical conceptual framework.

**Research Gap 2:** Theoretical foundation utilised to train students in soft skills. (Category - A).

Most of the literature talks about the teaching skills than how best are they taught to the students. There is no such theoretical foundation to teach some of the basic or popularly used soft skills.

**Research Gap 3:** Different sources to teach soft skills. (Category – C).

Most of the existing work uses traditional ways to teach soft skills. Only a few users online environments, hackathons, and so on in their study. Not much study is conducted on various other ways to teach soft skills to the students.

**Research Gap 4:** Measures or evaluation criteria used to analyze the soft skills learned by the students. (Category A & C).

There are very limited articles that measure the students' soft skills using statistical methods, and further, there are no standard measures to evaluate the required students' soft skills.

**Research Gap 5:** Different organizations/groups/governing bodies are involved in improving students' soft skills.

There are not many works that talk about the involvement of companies or government bodies to improve the students' soft skills. In the Indian scenario, there is very limited work on this.

## 8. RESEARCH AGENDAS :

- (1) What are the primary or necessary soft skills required by any student before he is Trained ?
- (2) What is the theoretical underpinning used to teach these soft skills?
- (3) What are the sources used to teach these soft skills?
- (4) Are the educators trained to teach the required soft skills to the students?
- (5) How to measure or evaluate the soft skills learned by the students?
- (6) How are soft skills and proficiencies explicated or developed in existing literature?
- (7) What are the specific soft skills required to any domain?
- (8) What are different organizations/groups/governing bodies involved in improving the soft skills of students?

## 9. ANALYSIS OF RESEARCH AGENDAS :

Many studies have explored the individual talents that students must possess to graduate competently. Students who graduate are unprepared for success in the workplace since they did not develop adequate soft skills in higher school. The majority of the research, on the other hand, documented the development of competency assessment instruments to evaluate student performance. Furthermore, no study has explicitly addressed the necessity of integrating and assessing soft skill aspects in a general skills evaluation. As a result, skill evaluation should be combined with assessments of students' knowledge, judgments, and personal characteristics that are essential for them to perform safely and ethically in a certain position and situation.

## 10. FINAL RESEARCH PROPOSAL IN CHOSEN TOPIC :

It is evident from the literature that no standard is set on the classification of primary or necessary soft skills that a student must possess before graduating. But this is a basic requirement and can be done at least based on a regional or cultural basis. The majority of the literature focuses on teaching abilities rather than how best to teach them to pupils. Creating a standard for using some mathematical or statistical foundation can be a good contribution as some of the most fundamental and commonly used soft skills have no theoretical foundation. The majority of existing work teaches soft skills in traditional methods. Only a few researchers used online settings, hackathons, and other methods in their research. Using the current state-of-the-art methods, including virtual reality, augmented reality, the internet of things, and online learning will enhance how we can directly or indirectly imbibe the soft skills in the students. There hasn't been much research done on different techniques to teach students soft skills, and hence this will be another good contribution. Very few papers use statistical methods to assess students' soft skills, and there are no standard tests to determine the required students' soft skills. Proposing a common metric or measure to analyze at least the popular soft skills can be a significant contribution.

### 10.1 Proposed Research Title:

A generic framework design for training students in soft skills.

### 10.2 Purpose:

To close the Gap by detecting and classifying existing students' soft skills and employability skills and make the soft skills training the Part of the academic curriculum.

### 10.3 Research and investigative objective:

- (1) To explore the primary or required soft skills for the students to be job-ready.
- (2) To be able to understand and validate the logical and theoretical basis used while training soft skills to the students, if any.
- (3) To explore different sources used to teach these soft skills from the employer's perspective.
- (4) To understand better the measures taken to evaluate and analyze the soft skills learned by the students.
- (5) To know about the different organizations/groups/governing bodies involved in improving students' soft skills which can train them professionally.

### 10.4 Proposed methodology of the Research Proposal:

**Study population:** The people under study consist of students from schools, colleges, and postgraduate students from different streams in Mangalore and D.K.

**Study sample:** A sample population of students will be chosen among the various schools and colleges in Mangalore and Dakshina Kannada districts.

**Study Instruments:** The learning process will set up a validated natural, prearranged questionnaire. This questionnaire will be pre-meditated in the Likert scale setup. The primary part of the questionnaire will be based, on respondents' personal profiles, while the second section will focus on the factors that affect students' soft skills and employability skills.

**Study procedure:** The learning is mostly the primary information using a validated questionnaire and the secondary data collected from published books, journals, scholarly and researched articles, opinions blogs, books, websites, research news, reports, and other related projects.

**Examination and explanation from the Learning:** The in-sequence data gathered; from main- sources will be put; to test using the app and statistical package test; and SPSS software.

**Consequences and answers from the learning:** The findings and the results will be published utilizing relative- tables, stream charts, and metamorphic depictions for educational explanations.

### 10.5 Limitations and constraints to this learning:

- (1) No fundamental or primary soft skills can be used for all the Domains.
- (2) No single standard metric or measure to evaluate the soft skills.
- (3) No standard theoretical underpinning to train the students in soft skills.
- (4) Time and money are the major constraints. These two factors can deprive a student of getting multiple skills.

- (5) Another component is that the student should also have access to the source and resources that can train and equip them in the right way. Right practice leads to the right results.
- (6) The other constant challenge is the interest to learn. Many students lose interest in the process of getting new skills; hence it is the duty of the resource person to motivate and keep their interest alive.
- (7) The critical aspect is perfection. One needs to develop perfection skills to take the benefits of the skills.

### 10.6 Conclusions and implications of this learning:

This conclusion will get big and more significant once the findings are assimilated; through a light on the soft skills and employability skills. The suggestions will improve the quality and efficiency of students to be employed with the proper soft skills training. The findings of the study will be suggested to the educational institutions to make the soft skills the part of the academic syllabus from the schools to colleges till the student get graduated and is employed as a part of the implementation.

### 11. SLOC ANALYSIS OF RESEARCH PROPOSAL :

The table below gives the details of the SLOC (Strengths, Limitations, Opportunities, and Challenges) analysis conducted on the research proposal. As the full form of the acronym SLOC suggests, SLOC analyzed to analyse and assess the Strengths, Limitations, Opportunities, and Challenges that need to be taken care of while proposing a methodology to solve a problem or an issue.

**Table 9:** SLOC analysis

Strengths	Limitations
<ul style="list-style-type: none"> <li>• Availability of various soft skills used to train students.</li> <li>• Availability of domain-specific soft skills.</li> <li>• Availability of different ways to teach soft skills.</li> <li>• Upcoming and most sought after Research Problem in the domain of Human resource management in India</li> </ul>	<ul style="list-style-type: none"> <li>• No fundamental or primary soft skills can be used for all the Domains.</li> <li>• No single standard metric or measure to evaluate the soft skills.</li> <li>• No standard theoretical underpinning to train the students in soft skills.</li> </ul>
Opportunities	Challenges
<ul style="list-style-type: none"> <li>• The need for basic or primary soft skills is required to be taught to the students before they become employees.</li> <li>• This issue also opens up new avenues for research.</li> </ul>	<ul style="list-style-type: none"> <li>• To get a huge set of students who work in different domains.</li> <li>• Training the educator or choosing the expert to train the students.</li> <li>• The on-time support from the company or governing bodies.</li> </ul>

### 12. ABCD ANALYSIS :

This framework allows us to view from multiple angles in terms of understanding the literature review pertaining to the training of students on soft skills. There is a need to train students, to compete, and deliver better skills. Skills are essential to perform their roles once they are appointed in an organization. Hence we would consider this framework for further probing in terms of advantages, benefits, constraints, and disadvantages. Training needs to be proper to imbibe those skills that are essential to perform [92].

**A- Advantages:** It is always the students who are able to handle a problem that can handle an expected difficult situation in an organization. Skills change the mind programming and hence they start applying automatically to required situations. We also call it muscle memory. Certain types of skills are stored in the muscle and hence one starts applying automatically, for example driving a car, we apply breaks instantly in quick seconds as it is stored in the muscle memory. Higher the skills higher the productivity and the greater the value addition.

**B- Benefits:** When skills are multiple in nature students can apply and become capable of multi-tasking and multi-tasking is the key to delivering higher results and bigger value to customers. Students should



be persuaded to garner multiple skills be it technical or life skills. They should be independent to survive all challenges and skilling in students will give them superior strength as their confidence increases. The confident students approach is much more at ease than a student who is less confident.

**C-Constraints:** There are many constraints like time and money. These two factors can deprive a student of getting multiple skills. Another component is that the student should also have access to the source and resources that can train and equip them in the right way. Right practice leads to the right results. The other constant challenge is the interest to learn. Many students lose interest in the process of getting new skills; hence it is the duty of the resource person to motivate and keep their interest alive. The critical aspect is perfection. One needs to develop perfection skills to take the benefits of the skills.

**D- Disadvantages:** Skills that are not taught at the right age become useless, as agility is the key to learning and delivering those skills when needed. There is a dearth of leaders and teachers who can train students to those standards as expected. The issue is to ensure that there are ample sources where the skill-based training happens; it's only the lack of awareness of the source to students deprives them of growing higher or acquiring those skills. Once a student is equipped with better skills he or she has to teach another student but this seldom happens as students move on to their jobs and professions.

### 13. SUGGESTIONS TO IMPLEMENT RESEARCH ACTIVITIES ACCORDING TO THE PROPOSAL :

**(1) Establish the population to study:** The respondents to be studied are; the students or population, which will be determined; by consulting various students from schools and colleges in Mangalore and DK region.

**(2) Develop and adopt study methods and methodologies:** A learning survey questionnaire will be developed; by the researcher; based on the students who are trained in soft skills and without training in soft skills to identify the gap between soft skills and employability skills. Engaging, the Likert scale format is subject to validation or substantiation process.

**(3) Carry out to collect of data:** After substantiation of the questionnaire that is going to be, used a: survey questionnaire to be distributed; among the sample population for primary data collection. The less important secondary facts will be composed of various websites, journals, reports, thesis books, blogs, newspapers, and magazines

**(4) Execute data study:** SPSS software will be engaged in analyzing the data collected and SPS will be applied to operate and assess the data composed. Every variable will be subjected to expressive statistics in the form of the incidence/ frequency with percentages and permanent variables will be subjected to mean and standard deviation. ANOVA test, as well as Cronbach's alpha, shall be undertaken for analyzing and evaluating various groups' similarities and student t-tests (unpaired) will also be used to compare incessant variables

**(5) Result in understanding and explanation:** The findings and the result will be published utilizing comparative tables, stream charts, and metamorphic representation for academic and industry explanations

**(6) References and Bibliography:** A range of inputs will be engaged: to take it forward: blogs, books, publications, websites, various web applications, thesis publications, and many more will be referred, to for the sake of going deeper and stronger in the chosen field.

### 14. CONCLUSION :

With the increasing demands from business organisations or corporates, there is a growing need for an in-depth understanding of students' soft skills requirements which is very much essential for their success [93]. This research intended to undertake a detailed review of the available literature on students' soft skills to be conducted outbound which makes a positive impact on the personality and behaviour of the management students [94]. The game based learning approach in acquisition of soft skills makes an impact on undergraduate students specifically from software engineering courses [95]. Innovation, and Creativity plays a major role in the psychology of the students which can be developed by motivating students by having activity-based based skills approach [96]. The systematic review emerged from communication, entrepreneurial, interpersonal, and lifelong learning skills, numeracy skills, management skills, problem-solving skills, moral skills and professional ethics, self-management skills, and technological skills and thinking skills [97]. To make students ready for the job, higher education institutions must try to strengthen students' soft skills by promoting mental health and

reducing risk behaviour in children and youth [98]. In the workplace, the quality of graduates is more important than the quantity. This study is significant for the reason it may help higher education institutions and students prepare and train students with suitable soft skills like team management skills preparing them to work in groups of different attitudes, culture, behaviour which will help to fulfil the needs of employers [99]. SWOT analysis framework will add to the body of knowledge on self-concepts [100]. This study is significant because it may help higher education institutions and students prepare students with suitable soft skills required in the corporates or to fulfil employers' needs [101]. The study will contribute to develop the knowledge by presenting discoveries on graduates' soft skills from employers' perspectives. Thus, there are several constraints to this research. It simply classifies the major fields of soft skills among all students. Therefore, a subdomain of graduates' soft skills that consider the greater context nuance is desirable. To complete this research in a more generalized manner, it will also be necessary to conduct this study from the perspectives of students or faculty members and employers.

#### REFERENCES :

- [1] Abbasi, F. K., Ali, A., & Bibi, N. (2018). Analysis of skill gap for business graduates: Managerial perspective from the banking industry. *Education and Training*, 60(4), 354-367. [Google Scholar](#) [CrossRef](#)
- [2] Azman, N., Sirat, M., & Pang, V. (2016). Managing and mobilising talent in Malaysia: issues, challenges and policy implications for Malaysian universities. *Journal of Higher Education Policy and Management*, 38(3), 316-332. [Google Scholar](#) [CrossRef](#)
- [3] Amantay, Z. A., & Ermakov, D. S. (2021, June). Socio-pedagogical Features of the Formation of Soft Skills in the Republic of Kazakhstan. In 1st International Conference on Education: Current Issues and Digital Technologies (ICECIDT 2021), 555(1), 17-22. Atlantis Press. [Google Scholar](#)
- [4] Jaaffar, A. H., Ibrahim, H. I., Annuar, K., Shah, M., & Zulkafli, A. H. (2016). Work-Integrated Learning and Graduate Employability Skills: The Employers' Perspective. *The Social Sciences*, 11(21), 5270-5274. [Google Scholar](#)
- [5] Amiruddin, M. H., Ngadiman, N., Abdul Kadir, R., & Saidy, S. (2016). Review of soft skills of tvet trainees from the Malaysian advanced technology training centre (ADTEC). *Journal of Technical Education and Training*, 8(1), 14-24. [Google Scholar](#)
- [6] Andrews, J., & Higson, H. (2008). Graduate employability, 'soft skills' versus 'hard' business knowledge: A European study. *Higher Education in Europe*, 33(4), 411-422. [Google Scholar](#) [CrossRef](#)
- [7] Azmi, I. A. G., Hashim, R. C., & Yusoff, Y. M. (2018). The employability skills of Malaysian university students. *International Journal of Modern Trends in Social Sciences*, 1(3), 1-14.. [Google Scholar](#)
- [8] Caggiano, V., Schleutker, K., Petrone, L., & Gonzalez-Bernal, J. (2020). Towards identifying the soft skills needed in curricula: Finnish and Italian students' self-evaluations indicate differences between groups. *Sustainability*, 12(10), 4031. [Google Scholar](#)
- [9] Chiu, K. K., Mahat, N. I., Rashid, B., Razak, N. A., & Omar, H. (2016). Assessing Students' Knowledge and Soft Skills Competency in the Industrial Training Programme: The Employers' Perspective. *Rev. Eur. Stud.*, 8(1), 123-124. [Google Scholar](#) [CrossRef](#)
- [10] Cimatti, B. (2016). Definition, development, assessment of soft skills and their role for the quality of organizations and enterprises. *International Journal for quality research*, 10(1), 97-130. [Google Scholar](#)
- [11] Clokie, T. L., & Fourie, E. (2016). Graduate employability and communication competence: Are undergraduates taught relevant skills?. *Business and Professional Communication Quarterly*, 79(4), 442-463. [Google Scholar](#) [CrossRef](#)
- [12] Crawford, A., Weber, M. R., & Lee, J. (2020). Using a grounded theory approach to understand the process of teaching soft skills on the job so to apply it in the hospitality classroom. *Journal*

- of Hospitality, Leisure, Sport & Tourism Education*, 26(1), 100239-100240. [Google Scholar](#)<sup>↗</sup>  
[CrossRef](#)<sup>↗</sup>
- [13] Da Wan, C., Sirat, M., & Razak, D. A. (2018). Education in Malaysia towards a Developed Nation. *ISEAS Yusof Ishak Institute*, 4(1), 1-19. [Google Scholar](#)<sup>↗</sup>
- [14] Desai, M. S., Berger, B. D., & Higgs, R. (2016). Critical thinking skills for business school graduates as demanded by employers: a strategic perspective and recommendations. *Academy of Educational Leadership Journal*, 20(1), 10-31. [Google Scholar](#)<sup>↗</sup>
- [15] Dhiman, M.C. (2012). Employers' perceptions about tourism management employability skills. *Anatolia: An International Journal of Tourism and Hospitality Research*, 23(3), 359-372. [Google Scholar](#)<sup>↗</sup> [CrossRef](#)<sup>↗</sup>
- [16] Dogara, G., Saud, M. S. B., Kamin, Y. B., & Nordin, M. S. B. (2020). Project-based learning conceptual framework for integrating soft skills among students of technical colleges. *IEEE Access*, 8(1), 83718-83727. [Google Scholar](#)<sup>↗</sup> [CrossRef](#)<sup>↗</sup>
- [17] Dunbar, K., Laing, G., & Wynder, M. (2016). A content analysis of accounting job advertisements: Skill requirements for graduates. *e-Journal of Business Education & Scholarship of Teaching*, 10(1), 58-72. [Google Scholar](#)<sup>↗</sup>
- [18] Eğilmez, H.O., Engür1, D., & Nalbantoğlu, E. (2019). Communication skills, self-esteem and attitude towards the music teaching of candidates studying in the TRNC. *Universal Journal of Educational Research*, 7(1), 190-197. [Google Scholar](#)<sup>↗</sup> [CrossRef](#)<sup>↗</sup>
- [19] Ghani, E. K., Rappa, R., & Gunardi, A. (2018). EMPLOYERS'PERCEIVED ACCOUNTING GRADUATES'SOFT SKILLS. *Academy of Accounting and Financial Studies Journal*, 22(5), 1-11. [Google Scholar](#)<sup>↗</sup>
- [20] Fahimirad, M., Nair, P. K., Kotamjani, S. S., Mahdinezhad, M., & Feng, J. B. (2019). Integration and Development of Employability Skills into Malaysian Higher Education Context: Review of the Literature. *International Journal of Higher Education*, 8(6), 26-35. [Google Scholar](#)<sup>↗</sup>
- [21] Ghazali, G., & Bennett, D. (2017). Employability for music graduates: Malaysian educational reform and the focus on generic skills. *International Journal of Music Education*, 35(4), 588-600. [Google Scholar](#)<sup>↗</sup> [CrossRef](#)<sup>↗</sup>
- [22] Ginting, H., Mahiranissa, A., Bektı, R., & Febriansyah, H. (2020). The effect of outing Team Building training on soft skills among MBA students: Article 100423. *The international journal of management education*, 18(3), 1-12. [Google Scholar](#)<sup>↗</sup>
- [23] Grapragasem, S., Krishnan, A., & Mansor, A. N. (2014). Current Trends in Malaysian Higher Education and the Effect on Education Policy and Practice: An Overview. *International Journal of Higher Education*, 3(1), 85-93. [Google Scholar](#)<sup>↗</sup> [CrossRef](#)<sup>↗</sup>
- [24] Gruzdev, M. V., Kuznetsova, I. V., Tarkhanova, I. Y., & Kazakova, E. I. (2018). University Graduates' Soft Skills: The Employers' Opinion. *European Journal of Contemporary Education*, 7(4), 690-698. [Google Scholar](#)<sup>↗</sup> [CrossRef](#)<sup>↗</sup>
- [25] Hariti, T., & Rejeki, S. (2020). Strengthening soft skills as the character of student nurses through the preceptorship management model. *Enfermería Clínica*, 30(1), 64-68. [Google Scholar](#)<sup>↗</sup>  
[CrossRef](#)<sup>↗</sup>
- [26] Shaffril, H. A. M., Krauss, S. E., & Samsuddin, S. F. (2018). A systematic review on Asian's farmers' adaptation practices towards climate change. *Science of the Total Environment*, 644(1), 683-695. [Google Scholar](#)<sup>↗</sup>
- [27] Hurrell, S. A. (2016). Rethinking the soft skills deficit blame game: Employers, skills withdrawal and the reporting of soft skills gaps. *Human Relations*, 69(3), 605-628. [Google Scholar](#)<sup>↗</sup>  
[CrossRef](#)<sup>↗</sup>

- [28] Islam, R., Ghani, A. B. A., Kusuma, B., & Theseira, B. B. (2016). Education and human capital effect on Malaysian economic growth. *International Journal of Economics and Financial Issues*, 6(4), 1722-1728. [Google Scholar](#)
- [29] Jackson, D., & Chapman, E. (2012). Non-technical competencies in undergraduate business degree programs: Australian and UK perspectives. *Studies in Higher Education*, 37(1), 541-567. [Google Scholar](#) [CrossRef](#)
- [30] Jawabri, A. (2017). Exploration of Internship Experience and Satisfaction Leading to Better Career Prospects among Business Students in UAE. *American Journal of Educational Research*, 5(10), 1065-1079. [Google Scholar](#)
- [31] Sermsuk, S., Triwichitkhun, D., & Wongwanich, S. (2014). Employment conditions and essential employability skills required by employers for secondary school graduate. *Procedia-Social and Behavioral Sciences*, 116(1), 1848-1854. [Google Scholar](#) [CrossRef](#)
- [32] Salleh, K. M., Subhi, N. I., Sulaiman, N. L., & Latif, A. A. (2016). Generic skills of technical undergraduates and industrial employers perceptions in Malaysia. *International Journal of Applied Business and Economic Research*, 14(14), 907-919. [Google Scholar](#)
- [33] Hyangjin, P. A. R. K., & Haeryun, C. H. O. (2021). Effects of nursing education using films on perception of nursing, satisfaction with major, and professional nursing values. *The Journal of Nursing Research*, 29(3), 1-10. [Google Scholar](#) [CrossRef](#)
- [34] El Messaoudi, M. (2021). Soft Skills: Connecting Classrooms with the Workplace--A Systematic Review. *Üniversitepark Bülten/Universitepark Bulletin*, 10(2), 116-139. [Google Scholar](#)
- [35] Khan, S. (2018). Demystifying the impact of university graduate's core competencies on work performance: A Saudi industrial perspective. *International Journal of Engineering Business Management*, 10(1), 1-10. [Google Scholar](#) [CrossRef](#)
- [36] Kostenkova, T.A., Pishchulin, V.N., & Shepelev, M.I. (2016). Interrelation of regional markets of labour and educational services: problems and prospects. *International Journal of Economics and Financial*, 6(2), 123-130. [Google Scholar](#)
- [37] Lavy, I., & Rashkovits, R. (2019). Engaging Information Systems students in a practicum-based project: Employers' perceptions and comparison. *International Journal of Information and Communication Technology Education*, 15(1), 67-82. [Google Scholar](#) [CrossRef](#)
- [38] Crespí, P., & Ramos, J. M. G. (2021). Generic skills at university. Evaluation of a training program. *Educación XXI*, 24(1), 1-30. [Google Scholar](#) [Cross Ref](#)
- [39] Lin, H.Y., Lin, S.H., Chiu, C.Y., Hung, W.T., & Chen, C.Y. (2010). An AHP approach to industry-oriented management competence development in an institute of technology. *World Transactions on Engineering and Technology Education*, 8(3), 339-343. [Google Scholar](#)
- [40] Lluch, A. M., Lluch, C., Arregui, M., Jiménez, E., & Giner-Tarrida, L. (2021). Peer mentoring as a tool for developing soft skills in clinical practice: A 3-year study. *Dentistry Journal*, 9(5), 1-9. [Google Scholar](#)
- [41] Dolce, V., Emanuel, F., Cisi, M., & Ghislieri, C. (2020). The soft skills of accounting graduates: Perceptions versus expectations. *Accounting Education*, 29(1), 57-76. [Google Scholar](#)
- [42] Mailool, J., Retnawati, H., Arifin, S., Kesuma, A. T., & Putranta, H. (2020). Lecturers' experiences in teaching soft skills in teacher profession education program (TPEP) in Indonesia. *Problems of Education in the 21st Century*, 78(2), 215-216. [Google Scholar](#)
- [43] Hadiyanto, H., Noferdiman, N., Syamsurizal, S., Muhaimin, M., & Krisantia, I. (2021). Students' soft skills, hard skills, and competitiveness (SHC): A suggested model for Indonesian higher education curriculum. *International Journal of Learning, Teaching and Educational Research*, 20(2), 218-234. [Google Scholar](#) [CrossRef](#)



- [44] Matsouka, K., & Mihail, D.M. (2016). Graduates' employability: What do graduates and employers think? *Industry and Higher Education*, [Sage Publishing] 30(5), 321-326. [Google Scholar](#) [CrossRef](#)
- [45] McMurray, S., Dutton, M., McQuaid, R., & Richard, A. (2016). Employer demands from business graduates. *Education+ Training*, 1(1), 1-32. [Google Scholar](#)
- [46] Md-Ali, R., Shaffie, F., & Yusof, F. M. (2016). Public university educators' understanding and conception of soft skills for educators. *International Review of Management and Marketing*, 6(7S), 181-186. [Google Scholar](#)
- [47] Rasul, M. S., Rauf, R. A. A., Mansor, A. N., & Puvanasvaran, A. P. (2012). Employability Skills Assessment Tool Development. *International Education Studies*, 5(5), 43-56. [Google Scholar](#)
- [48] Hamid, M. S. A., Islam, R., & Abd Manaf, N. H. (2014). Employability skills development approaches: An application of the analytic network process. *Asian Academy of Management Journal*, 19(1), 93-111. [Google Scholar](#)
- [49] Saad, M. S. M., & Majid, I. A. (2014). Employers' perceptions of important employability skills required from Malaysian engineering and information and communication technology (ICT) graduates. *Global Journal of Engineering Education*, 16(3), 110-115. [Google Scholar](#)
- [50] Saad, M. S. M., Robani, A., Jano, Z., & Majid, I. A. (2013). Employers' perception on engineering, information and communication technology (ICT) students' employability skills. *Global Journal of Engineering Education*, 15(1), 42-47. [Google Scholar](#)
- [51] Moher, D., Liberati, A., Tetzlaff, J., Altman, D. G., & PRISMA Group (2009). Preferred reporting items for systematic reviews and meta-analyses: the PRISMA statement. *Annals of internal medicine*, 151(4), 264-269. [Google Scholar](#)
- [52] Mozgalova, N. G., Baranovska, I. G., Hlazonova, I. K., Mikhailishen, A. V., & Kazmirschuk, N. S. (2021). Methodological foundations of soft skills of musical art teachers in pedagogical institutions of higher education. *Linguistics and Culture Review*, 5(S2), 317-327. [Google Scholar](#) [CrossRef](#)
- [53] Natalia, C., Maria, S., Vladislav, S., & Paquet, P. (2015). Problems of educational processes development and labor market needs analysis in Russia. *Procedia-Social and Behavioral Sciences*, 166, 309-316. [Google Scholar](#) [CrossRef](#)
- [54] Ismail, N. A. (2011). Graduates' characteristics and unemployment: A study among Malaysian graduates. *International journal of business and social science*, 2(16), 94-102. [Google Scholar](#)
- [55] Okolie, U. C., Nwosu, H. E., & Mlanga, S. (2019). Graduate employability: How the higher education institutions can meet the demand of the labour market. *Higher Education, Skills and Work-Based Learning. Epub ahead of print*, 9(4), 1-10. [Google Scholar](#)
- [56] Chung, Y., Yoo, J., Kim, S. W., Lee, H., & Zeidler, D. L. (2016). Enhancing Student's Communication Skills In The Science Classroom Through Socio-scientific Issues. *International Journal of Science and Mathematics Education*, 14(1), 1-27. [Google Scholar](#)
- [57] Orji, N. S. (2013). Assessment of employability skills development opportunities for senior secondary school chemistry students. *Journal of Educational Research and Reviews*, 1(2), 16-26. [Google Scholar](#)
- [58] Pachauri, D., & Yadav, A. (2014). Importance of soft skills in the teacher education programme. *International Journal of Educational Research and Technology*, 5(1), 22-25. [Google Scholar](#)
- [59] Pang, E., Wong, M., Leung, C.H., & Coombes, J. (2019). Competencies for fresh graduates' success at work: Perspectives of employers. *Industry and Higher Education*, 33(1), 55-65. [Google Scholar](#) [CrossRef](#)
- [60] Patacsil, F. F., & Tablatin, C. L. S. (2017). Exploring the importance of soft and hard skills as perceived by IT internship students and industry: A gap analysis. *Journal of Technology and Science Education*, 7(3), 347-368. [Google Scholar](#)

- [61] Pluzhnirova, E. A., Zhivoglyad, M. V., Kulagina, J. A., Morozova, I. M., & Titova, N. V. (2021). Formation of soft skills among students of higher educational institutions. *Revista Eduweb*, 15(1), 112-122. [Google Scholar](#) [CrossRef](#)
- [62] Radermacher, A., & Walia, G. (2013, March). Gaps between industry expectations and the abilities of graduates. In *Proceeding of the 44th ACM technical symposium on Computer science education*, 39(1), 525-530. [Google Scholar](#) [CrossRef](#)
- [63] Radhakrishnan, M., & Sudha, S. (2015). Analysis of employability skills of undergraduate engineering students in view of employers' perspectives. *ARPJ Journal of Engineering and Applied Sciences*, 10(20), 9304-9308. [Google Scholar](#)
- [64] Isai, K. I. A., Govindasamy, M., Ramalingam, R. S., Ching, H. S., & Kausalya, M. (2020). Preparedness for the world of work among Malaysian diploma students in a local institution. *Malaysian Journal of Social Sciences and Humanities (MJSSH)*, 5(4), 56-70. [Google Scholar](#)
- [65] Salleh, R., Yusof, M., & Memon, M. A. (2016). Attributes of graduate architects: An industry perspective. *Social Sciences (Pakistan)*, 11(5), 551-556. [Google Scholar](#) [CrossRef](#)
- [66] Roselina Shakir. (2009). Soft skills at the Malaysian institutes of higher learning. *Asia Pacific Educ. Rev.*, 10(1), 309-315. [Google Scholar](#)
- [67] Rohaizat, B., Ebi, S. S., & Zubaidah, A. (2012). Changing skills required by industries: Perceptions of what makes business graduates employable. *African Journal of Business Management*, 6(30), 8789-8796. [Google Scholar](#) [CrossRef](#)
- [68] Pârnu, I., Ipate, D. M., & Mitran, P. C. (2014). Identification of employability skills-starting point for the curriculum design process. *Economics, Management and Financial Markets*, 9(1), 237-246. [Google Scholar](#)
- [69] Salleh, R., Yusoff, M. A. M., Harun, H., & Memon, M. A. (2015). Gauging Industry's Perspectives on Soft Skills of Graduate Architects: Importance vs Satisfaction. *Global Business & Management Research*, 7(2), 1-10. [Google Scholar](#)
- [70] Selamat, J. H., Ismail, K. H., Ahmad, A., Hussin, M. H., & Seliman, S. (2013). Framework of soft skills infusion based on learning contract concept in Malaysia higher education. *Asian Social Science*, 9(7), 22-28. [Google Scholar](#)
- [71] Gibert, A., Tozer, W. C., & Westoby, M. (2017). Teamwork, soft skills, and research training. *Trends in ecology & evolution*, 32(2), 81-84. [Google Scholar](#)
- [72] Shakir, R. (2009). Soft skills at the Malaysian institutes of higher learning. *Asia Pacific Education Review*, 10(3), 309-315. [Google Scholar](#)
- [73] Chan, S. W., Ahmad, M. F., Zaman, I., & Ko, W. S. (2018). Employers' perception on important employability skills in the manufacturing industry. *International Journal of Engineering & Technology*, 7(2.29), 170-175. [Google Scholar](#)
- [74] Othman, Z., Shan, S. W., Yusoff, I., & Kee, C. P. (2018). Classification techniques for predicting graduate employability. *International Journal on Advanced Science, Engineering and Information Technology*, 8(4-2), 1712-1720. [Google Scholar](#)
- [75] Selvadurai, S., Choy, E. A., & Maros, M. (2012). Generic skills of prospective graduates from the employers' perspectives. *Asian Social Science*, 8(12), 295-303. [Google Scholar](#)
- [76] Snyder, H. (2019). Literature review as a research methodology: An overview and guidelines. *Journal of Business Research*, 104(3), 333-339. [Google Scholar](#) [CrossRef](#)
- [77] Park, H., & Hill, R. B. (2016). Employability skills assessment: Measuring work ethic for research and learning. *Career and Technical Education Research*, 41(3), 175-192. [Google Scholar](#)
- [78] Stewart, C., Wall, A., & Marciniak, S. (2016, July). Mixed signals: do college graduates have the soft skills that employers want?. In *Competition forum*. 14(2), 276-282. [Google Scholar](#)



- [79] Succi, C., & Canovi, M. (2020). Soft skills to enhance graduate employability: comparing students and employers' perceptions. *Studies in higher education*, 45(9), 1834-1847. [Google Scholar](#)<sup>↗</sup>
- [80] Tang, K. N. (2019). Beyond Employability: Embedding Soft Skills in Higher Education. *Turkish Online Journal of Educational Technology-TOJET*, 18(2), 1-9. [Google Scholar](#)<sup>↗</sup>
- [81] Thompson, K., Conde, R., Gade, M., & Mims, T. (2021). An Immersion Approach to Client-Sponsored Projects: Preparing Students with Soft Skills Required for Hiring--Face to Face & Virtual Methods. *International Journal of Higher Education*, 10(2), 42-61. [Google Scholar](#)<sup>↗</sup>
- [82] Ting, S.H., Ernisa Marzuki, Chuah, K.M., Misieng, J., & Jerome, C. (2017). Employers' views on the importance of English proficiency and communication skill for employability in Malaysia. *Indonesian Journal of Applied Linguistics*, 7(2), 315-327. [Google Scholar](#)<sup>↗</sup> [CrossRef](#)<sup>↗</sup>
- [83] Triyono, M.B., Trianingsih, L., & Nurhadi, D. (2018). Students' employability skills for construction drawing engineering in Indonesia. *World Transactions on Engineering and Technology Education*, 16(1), 29-35. [Google Scholar](#)<sup>↗</sup>
- [84] Tsai, Y. H. (2017). Travel agency managers' perceptions of tourism industry employability. *Journal of Hospitality, Leisure, Sport and Tourism*, 20(3), 122-133. [Google Scholar](#)<sup>↗</sup> [CrossRef](#)<sup>↗</sup>
- [85] Tsaoussi, A. I. (2020). Using soft skills courses to inspire law teachers: a new methodology for a more humanistic legal education. *The Law Teacher*, 54(1), 1-30. [Google Scholar](#)<sup>↗</sup> [CrossRef](#)<sup>↗</sup>
- [86] Varava, I. P., Bohinska, A. P., Vakaliuk, T. A., & Mintii, I. S. (2021, June). Soft Skills in Software Engineering Technicians Education. *In Journal of Physics: Conference Series*, 1946(1), 012012. IOP Publishing. [Google Scholar](#)<sup>↗</sup> [CrossRef](#)<sup>↗</sup>
- [87] Verma, P., Nankervis, A., Priyono, S., Moh'd Saleh, N., Connell, J., & Burgess, J. (2018). Graduate work- readiness challenges in the Asia-Pacific region and the role of HRM. *Equality, Diversity and Inclusion: An International Journal*, 37(2), 1-10. [Google Scholar](#)<sup>↗</sup>
- [88] Wickramasinghe, V., & Perera, L. (2010). Graduates', university lecturers' and employers' perceptions towards employability skills. *Education and Training*, 52(3), 226-244. [Google Scholar](#)<sup>↗</sup>
- [89] Wikle, T. A., & Fagin, T. D. (2015). Hard and soft skills in preparing GIS professionals: Comparing perceptions of employers and educators. *Transactions in GIS*, 19(5), 641-652. [Google Scholar](#)<sup>↗</sup> [CrossRef](#)<sup>↗</sup>
- [90] Zain, N. M., Aspah, V., Abdullah, N., & Ebrahimi, M. (2017). Challenges and evolution of higher education in Malaysia. *UMRAN-International Journal of Islamic and Civilizational Studies*, 4(1-1), 78-87. [Google Scholar](#)<sup>↗</sup> [CrossRef](#)<sup>↗</sup>
- [91] Zainuddin, S. Z. B., Pillai, S., Dumanig, F. P., & Phillip, A. (2019). English language and graduate employability. *Education+ Training*, 1(1), 1-16. [Google Scholar](#)<sup>↗</sup> [CrossRef](#)<sup>↗</sup>
- [92] Aithal, P. S., Shailashree, V., & Kumar, P. M. (2016). ABCD analysis of Stage Model in Higher Education. *International Journal of Management, IT and Engineering*, 6(1), 11-24. [Google Scholar](#)<sup>↗</sup> [Cross Ref](#)<sup>↗</sup>
- [93] Johnson, B. (2021). Soft Skills-Essential for Success. *BMH Medical Journal-ISSN 2348-392X*, 8(3), 99-102. [Google Scholar](#)<sup>↗</sup>
- [94] Munshi, M. M., & Deshpande, S. K. (2014). An Empirical Study on the Impact of Outbound Training on the Personality and Behavior of Management Students. *IUP Journal of Soft Skills*, 8(3), 56-65. [Google Scholar](#) <sup>↗</sup>
- [95] Garcia, I., Pacheco, C., Méndez, F., & Calvo-Manzano, J. A. (2020). The effects of game-based learning in the acquisition of "soft skills" on undergraduate software engineering courses: A systematic literature review. *Computer Applications in Engineering Education*, 28(5), 1327-1354 [Google Scholar](#)<sup>↗</sup>

- [96] Cropley, D. H. (2015). Promoting creativity and innovation in engineering education. *Psychology of Aesthetics, Creativity, and the Arts*, 9(2), 161-171. [Google Scholar↗](#)
- [97] Lucchiari, C., Sala, P. M., & Vanutelli, M. E. (2019). The effects of a cognitive pathway to promote class creative thinking. An experimental study on Italian primary school students. *Thinking Skills and Creativity*, 31(1), 156-166. [Google Scholar↗](#)
- [98] Payton, J. W., Wardlaw, D. M., Graczyk, P. A., Bloodworth, M. R., Tompsett, C. J., & Weissberg, R. P. (2000). Social and emotional learning: A framework for promoting mental health and reducing risk behavior in children and youth. *Journal of school health*, 70(5), 179-185. [Google Scholar↗](#)
- [99] Prichard, J. S., Bizo, L. A., & Stratford, R. J. (2006). The educational impact of team-skills training: Preparing students to work in groups. *British Journal of Educational Psychology*, 76(1), 119-140. [Google Scholar↗](#)
- [100] Mishra, R. P., Anand, G., & Kodali, R. (2008). A SWOT analysis of total productive maintenance frameworks. *International Journal of Management Practice*, 3(1), 51-81. [Google Scholar↗](#)
- [101] Noah, J. B., & Aziz, A. A. (2020). A Systematic review on soft skills development among university graduates. *EDUCATUM Journal of Social Sciences*, 6(1), 43-58. [Google Scholar↗](#)
- [102] Nathan, S. K., & Rajamanoharane, S. (2016). Enhancement of skills through e-learning: prospects and problems. *The Online Journal of Distance Education and e-Learning*, 4(3), 24-32. [Google Scholar↗](#)

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