Examining the Impact of Alumni Mentoring on Student Satisfaction and Engagement in Higher Technical Education

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Abstract— **Student mentoring is widely adopted in academia to build engagement and enhance achievement levels. Mentoring is typically carried out by faculty advisors at institutions and shown to be effective in different academic settings. For professional development and enhancing career skills, mentoring of students by alumni has rapidly gained traction, due to its effectiveness. Alumni mentoring is now an established best-practice at all the top universities globally and is being replicated across institutions. However, very few case studies on the implementation and effectiveness of Alumni Mentorship Programs exist in the Indian context. We present a case study on the formulation and implementation of an alumni mentoring program from a higher technical education institution at Jammu, India. A formal Alumni Mentoring Model supported by active intervention by institute personnel is proposed. The study indicates that alumni mentoring when implemented in a structured manner has significant positive impact on student outcomes in the medium and long-term. Quantitative and qualitative analysis of data from 56 student mentees and 10 alumni mentors over a one-year engagement period reveals interesting insights into mentor and mentee perceptions, experiences, quantum of improvement in student performance, challenges and areas for improvement.**

Keywords—: **Alumni mentoring; Alumni-student mentoring; Indian higher education**

ICTIEE Track*: Entrepreneurship, Administration and Collaboration.*

ICTIEE Sub-Track: Role of Alumni in Enhancing the Education Ecosystem.

I. INTRODUCTION

The Indian Higher Education (IHE) sector has often been criticized for its quality outcomes in terms of student engagement, satisfaction and achievement levels and has been an area of concern. Institutions across the higher education spectrum have struggled to create and deliver value for the students, resulting in rapidly declining enrolments and existential concerns. This is especially true for higher technical education institutions. The New Education Policy envisages delivering a student experience built around diverse exposure, holistic development, flexibility and adoption of global best-practices. Institutions therefore need to adopt a student-centric model with deep engagement at its core. While institutions need to build intrinsic capability and capacity to deliver value, they also need to leverage external expertise to create new learning opportunities and career paths for their students. However, rather than relying on impersonal, large-scale intervention such as training and skill development initiatives, institutions need to deliver a more personalized experience to their students.

Mentoring and coaching are global best-practices designed for deep engagement, proven to work in diverse settings and applicable to the apprentice as well as the senior manager. Mentorship is essential for the growth and development of both graduate students and faculty members (Meier ,2023). Most of the studies conducted previously have focused on the student mentorship being conducted by institutional faculties (Law et.al, 2020; Morales et.al, 2017; Rachel, 2022). While mentoring of students by faculty members is followed to some extent in Indian institutions, it is limited in effectiveness. For one, faculty members with no prior professional experience are not effective mentors to groom students for the industry, second, they lack formal training and hence credibility from the student's perspective and third the mentoring process is not structured or scientific. Thus, the availability of high-quality mentors is a challenge for most of the institutions. On the other hand, successful alumni from any institution can serve as effective mentors as they have typically traversed the same career path that many of the current students may be interested in emulating. Alumni are also better at connecting at a more

personal level with the current students as they share a cultural connection.

While the student or the mentee gets benefited from the mentorship, studies like (Dollinger et.al,2019) reveal that in the process the alumni mentors also get benefitted as it also helps them develop leadership and mentoring skills, which are essential for their career growth. By participating in the mentorship programme, they not only contribute to their alma mater, but the recognition received is also a source of gratification for them. Therefore, alumni mentoring can help enhance student satisfaction, engagement and ultimately achievement levels. It also may enable institutions to achieve multiple strategic objectives by leveraging the power of their alumni network.

This paper presents an analysis of alumni mentoring on student satisfaction and engagement at a Higher Education Institution at Jammu, India, a Tier-II city which is at a locational disadvantage in terms of proximity to industry and resultant opportunities. A formal alumni mentoring program was designed with a novel analytics-based outcome tracking and benchmarking mechanism. A longitudinal study measuring the impact of a formal alumni mentoring program for a pilot group of students was conducted, and results are presented. The study also provides strategic interventions and recommendations for higher education institutions as to how the adoption of the Alumni mentorship programme can have an accelerated growth path for the students.

The paper is organized as follows: Section 2 presents the detailed literature review of literature regarding mentorship, studies in the global context as well as India. Section 3 provides the research methodology used for the study and section 4 provides the results and discussion. Section 5 provides the recommendations for effective implementation of Alumni Mentoring, and the last section 6 presents the conclusion.

II. REVIEW OF LITERATURE

Mentoring has been found to have a significant relationship with students' performance and achievement levels. The concept of alumni mentoring is not new; however, most institutions in India practice the more traditional student/faculty mentoring without a formal structure. In contemporary society, the role of mentors has gained significant prominence in facilitating the growth and development of individuals within educational and professional settings. It is a challenging task to quantify the outcomes from mentoring.

The primary objective of any mentoring programme is to provide guidance and support to the mentee to facilitate the attainment of their personal and professional objectives (Zentgraf, 2020, Kantola & Penttilä, 2023). Further, in the realm of higher education, mentoring has been implemented in diverse manners, contingent upon the specific learning objective. These approaches encompass e-mentoring (Nouman et.al,2024), peer-group mentoring (Gehreke et.al,2024) as well as faculty mentoring (Gupta,2021). Such mentoring programmes within the framework of higher education exhibit a wide range of diversity. The mentoring relationship between teachers and students is dynamic in which the faculty members and field educators often adopt an evaluative role with respect to the students (Guzzardo et al., 2021). Even the role of peers

in evaluating students is limited, as they lack the necessary expertise that seasoned professionals possess (Lim et al., 2022). Therefore, it can be argued that faculty and peer mentoring may not provide students with the same level of professional socialization, support, and network development as an industrial experienced mentor.

In the current context, students require additional resources beyond faculty support to fulfill their needs. They aspire to gain the skills and tools necessary for success and competitiveness in the marketplace, seeking credible sources for such vital information. Alumni mentoring effectively reconnects alumni with their alma mater and engages them in supporting current students (Pfeifer,2002). The practice of alumni mentoring holds immense importance in shaping students' educational experiences and fostering a sense of belonging within the community of learners (Kurian & Nair, 2023). The mentoring of the students enhances their potential to be employed and, in the process, also enhances the confidence and efficacy of the mentors (Bolton,2022). Alumni mentoring relationships can help to develop the skills required for the professional career of students (Renuga and Ezhilan,2017).

A comprehensive model for designing, developing and implementing the program was given by Skrzypek et.al (2019) where the researchers have explored the needs of the student mentees, alumni mentors as well as the connections and opportunities for alumni involvement. Most of the studies on Alumni Mentorship have been conducted in the Western Context (Skrzypek et.al,2020; Chu,2019; Dollinger et. al ,2019). The current body of literature pertaining to alumni mentoring in the Indian context is limited in scope, with only a handful of studies conducted thus far like Boregowda et.al,2018 and Renuga & Ezhilan (2014).

A study by Kurian and Nair (2023) has tried to study the effectiveness of the alumni mentorship programme in ensuring academic student success and building a learner's community. Induja et.al (2020) also studied about the use of cloud computing portal to build alumni relationships. Dollinger et.al (2019) also in their study how the alumni mentorship programme helps to build university students engagement. Boregowda (2018) has also presented an innovative approach where the alumni were involved to help the students to do innovative and creative projects. The impact of Alumni Mentorship on the student satisfaction and engagement has not been taken into account in the previous studies.

The present study, therefore, assumes significance as it represents one of the first instances of exploring alumni mentoring in an institute of Engineering education institute in Northern India, located in a Tier-II city. In this study, we have tried to conduct a pilot study in one of the Engineering institutes of higher education which has implemented the Alumni Mentorship Model. The primary focus of our study is to assess the mentor-mentee perceptions post the implementation of a structured alumni mentoring program. The study has important implications for the students as well as higher education institutes in terms of improved student success, networking opportunities, engagement and retention. The pilot study was implemented with approximately 56 mentees and 10 alumni mentors from various industry backgrounds. Following this implementation, we assessed the influence of alumni mentoring on student engagement and satisfaction.

III. RESEARCH METHODOLOGY

A. Research Design

The study was designed as a pilot program covering 56 students of Engineering Batch 2019-23 at the institute. The objective of the study was to devise an effective mentoring strategy for the selected students to enhance their performance and develop their skills further to make them industry ready, which is the desired outcome for any institute or University. The primary questions addressed by the study are:

1. Does formal mentoring of the students by the Alumni at a TIER II institution lead to student engagement and satisfaction?
2. What are the attitudes and perceptions of mentees and mentors towards a formal alumni mentorship program?

B. Participants

The mentoring responsibility was carried out by alumni with an experience of five to ten years. Around fifty-six mentees were selected for the mentoring program across various disciplines (ECE, IT, CSE, EE) from the Engineering departments. The demographic details of the participants for the alumni mentorship programme are provided in Table I which indicates that there were around 34 male and 22 female mentees. The mentees were students of various engineering streams viz. CSE, ECE, Civil and EE.

TABLE I
DEMOGRAPHIC PROFILE OF MENTEES

Parameter	Distribution
Parameter	Distribution
Gender	Male: 34, Female 22
Education	UG
Discipline/Background	CSE: 32, ECE:15, Civil:6; EE: 3

Table II indicates the demographic profile of the alumni mentors. Around 7 mentors were from the corporate and three were Entrepreneurs. Further, six of the mentors were having an experience of more than 10 years and four had an experience between 5-10 years.

TABLE II
DEMOGRAPHIC PROFILE OF MENTOR

Parameter	Distribution
Gender	Male: 6, Female 4
Position	Corporate: 7, Entrepreneur: 3
Experience	5-10 yrs: 4, More than 10 years:6

C. Intervention-Program Overview

The mentoring program process workflow. The mentoring process adopted by the institution is visually depicted in Figure 1.

The different steps for the adoption of the mentoring model are described below:

For the Alumni Mentorship programme, the institute was using the Alma Shine portal.

1.Selection of the Mentee: The alumni mentorship initiative was launched with the aim of fostering both personal and professional development among students, equipping them for securing internships, placements, and guidance for further education.
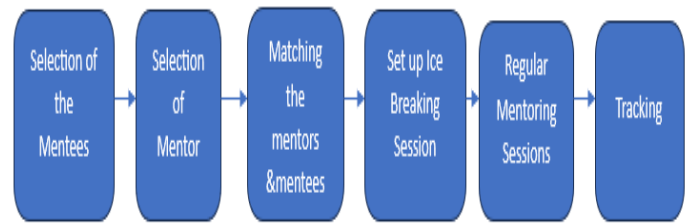

Fig. 1. Mentoring process adopted by the institution

Students with trong academic credentials, active participation and good personal aspiration were shortlisted by the respective departments. These students were interviewed by senior functionaries of the Alumni Relations Cell to understand their motivation to receive alumni mentoring. Students with strong motivation levels and aspiration levels were finally, selected. Additionally, students were asked to specify their areas of interest requiring mentoring. Following a comprehensive selection process, the Alumni Relations Cell selected fifty-six students (detailed in Table I) from various engineering departments for participation in the alumni mentoring program.

2.Selection of the Mentor: The mentors chosen for the program were alumni of the institute, each possessing a minimum of 5-10 years of professional experience. A uniform invitation is extended to all alumni, requesting their interest in mentoring students, along with their profiles, areas of expertise, and intentions. These mentors were from corporate backgrounds and included entrepreneurs based in India and abroad, offering diverse exposure to guide students on various aspects of their professional journeys.

3.Matching the Mentors and Mentees: After the mentees and mentors were chosen for the program, the alumni relations cell endeavors to align the students' expectations with the mentors' areas of expertise. Leveraging their firsthand knowledge of both the students' guidance needs and the mentors' profiles, the alumni relations cell facilitates the matching process between mentees and mentors.

4.Set up Ice Breaking Session: The mentees and mentors are sent individual selection letters outlining the objectives of the program along with the guidelines. Once the mentees and the mentors are selected the Alumni Relation Officer then sets up an Ice Breaking Session. The Alumni Relation Officer formally welcomes the mentees as well as mentors to the program and provides a detailed overview of the program outlining the benefit to the mentees, setting expectations and defining the process to be followed.

5. Regular Meetings: After the first meeting, subsequent meetings are set up between the mentors and mentees where the mentee can seek appointment from the mentor by using the Alma Shine portal where the mentor and mentee are registered. The frequency of the meetings is generally once a month or bimonthly in the online mode. However, in case the Alumni visits the city, then the Alumni Relation Cell also sets up meetings of the mentor and mentee in the physical mode.

6. Tracking and Feedback: The Alumni Relation cell collects regular feedback from the mentors as well as the mentees regarding the progress of the mentorship programme**.**

D. Instruments

The questionnaire was used to collect firsthand data from 56 students who were put under the alumni mentorship programme. Student satisfaction was measured using a self-structured scale and student engagement was measured using a scale developed by Gunuc and Kuzu (2014). Before finalizing the final instrument, the reliability of the scale was checked using CronBach Alpha.The Cronbach Alpha for each of the extracted factors was also found to be greater than 0.7, which proves its reliability. (Nunnaly,1978). Further, the instrument was validated by seeking the opinion of the subject matter experts and conducting pilot testing with 10 respondents.

TABLE III
RELIABILITY ANALYSIS

Construct	Number of Items	Cronbach's Alpha
Student Engagement	41	0.89
Student Satisfaction	10	0.85
Overall Scale	51	0.87

For qualitative analysis, interviews were the primary instrument for data collection. The questions were prepared referring to previous literature and interacting with the experts in the field. Some of the questions asked to the mentees and mentors were:

a) Mentees
1. Were the objectives of the Alumni Mentoring Program explained to you before the program commenced?
2. Were you satisfied with the process of aligning you with the mentor? Do you want to have control over the selection of the mentor?
3. Do you think there was a match between your aspirations and your mentor's area of expertise?
4. What were your expectations from the Alumni mentorship program? Do you think your expectations were met?
5. Were you satisfied with the mode and frequency of engagement with the mentor?
6. How was your relationship with the alumni mentor? (mentor attitude - amicable, supportive; behavior - courteous, warm; professionalism - punctual and process-oriented)
7. Did you always feel comfortable during the mentoring process?
8. Was the institute able to provide proper resources and assistance for smoothly carrying out the mentoring program?
9. Which skills do you think were improved because of the alumni mentoring program?
10. Do you want to continue to engage with your mentor in future?
11. What were the major challenges faced by you during the mentoring program?
12. What changes would you recommend to the program to make it more engaging and meaningful from your perspective?

13. How would you describe the impact of the alumni mentoring program on you as an individual?

b) Mentors
1. What was your motivation for participating in the Alumni Mentoring Program?
2. Have you ever received formal mentoring as part of your professional life? Is mentoring a part of your current organization's culture?
3. Were the objectives of the program clear to you at the outset?
4. How would you rate the process of mentee selection and allotment by the institution? Would you have liked greater say in the mentee selection process?
5. What is your assessment of mentee readiness, attitude and willingness towards the mentoring program?
6. Are you satisfied with the mentoring outcomes attained? Were the benefits of the program worth the time you invested?
7. Are you satisfied with the resources provided and assistance extended by the institute for the smooth conduct of the mentoring program?
8. What are the two most beneficial activities/exercises you undertook with your mentees?
9. Would you be willing to mentor more students from the institution in future?
10. What challenges did you face during the mentoring program?
11. Any constructive feedback/recommendations you would like to give for further improving the mentoring program?

Qualitative analysis was carried out to analyze the responses of the mentees to questions during the informal interviews using NVivo 12 software.

IV. RESULTS AND DISCUSSION

There were two research questions. The results and discussion for each of the research question are presented below:

Research Question 1: Does formal mentoring of the students by the Alumni at a TIER II institution lead to student engagement and satisfaction?

The study was a pilot programme in which we tried to assess the impact of the alumni mentorship programme on student satisfaction and engagement. Correlation analysis was first conducted to examine the correlation between alumni mentorship, student satisfaction and student engagement.

TABLE IV
CORRELATION ANALYSIS

		AM	SS	SE
AM	Pearson Correlation	1	.554**	.677**
	Sig. (2-tailed)		.000	.000
	N	56	56	56
SS	Pearson Correlation	.554**	1	.638**
	Sig. (2-tailed)	.000		.000
	N	56	56	56

SE	Pearson Correlation	.677**	.638**	1
	Sig. (2-tailed)	.000	.000	
	N	56	56	56

The results of Table IV have indicated that there exists a strong correlation between alumni mentoring with student satisfaction (r=0.554, p=0.000) and student engagement (r=0.667, p=0.000) Further, regression analysis was conducted to examine the impact of alumni mentorship on student satisfaction.

TABLE V
REGRESSION ANALYSIS: ALUMNI MENTORING AND STUDENT SATISFACTION

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.503a	.463	.465	.381 56	.281	54.086	2	468	.000

The adjusted R square value in Table V is .465 which clearly indicates that alumni mentorship exerts an influence to the tune of 46.5% on student satisfaction and the result was found to be significant (p=0.000).

The impact of alumni mentorship on the student engagement was also examined using regression analysis. The results in Table VI indicate that the alumni mentorship has a 53.8 % influence on student engagement and the impact was found to be significant. (p=0.000).

TABLE VI
REGRESSION ANALYSIS: ALUMNI MENTORING AND STUDENT ENGAGEMENT

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.503a	.532	.538	.361 23	.314	56.084	2	454	.000

Research Question 2: What are the attitudes and perceptions of mentees and mentors towards a formal alumni mentorship program?

Interviews with the mentees and mentors were transcribed, coded and subjected to thematic analysis using NVivo 12 software.

Some of the sample representative responses from the interviews are tabulated in Table VII below:

TABLE VII
THEMES FROM MENTEE RESPONSES

S.No	Themes	Representative Responses
1.	Career Guidance	*"My mentor helped me to gain clarity of thought on choosing the right career path. I was very confused in which areas to build skills in to get the higher packages during placements"* *"My mentor worked with me to help me define the area and scope of my major project. He had great ideas, and his experience was invaluable in helping me attain my objectives. I could*
2.	Networking Opportunities	*showcase my skills through an innovative and impactful major project"* *"My Mentor connected me with professionals in my area of interest and network with experts"* *"It was a great experience to get connected with successful alumni from my institution. They were very approachable and helped me connect with the right people for internships".*
3.	Skill Development	*"Mentoring by alumni is a great practice. I was instantly made comfortable by my mentor, and he helped me create a good vision for myself. We created a plan based on smart-goals and reviewed the plan regularly. I felt good as we ticked off the milestones on the plan. I am ready to enroll for a higher degree program at a University outside India"*
4.	Personal Branding	*"I really benefited from the mentoring program at my institution. It was a very good initiative, and my mentor went out of her way to ensure that I received all the support I needed. She was very approachable and friendly. I am much more confident of my abilities and my preparation to succeed in the corporate world."* *"The mentoring program gave me immense confidence and belief. To see alumni who would have been in my position some years back go on to succeed in the real-world, gave me the assurance that I could also make it. The success story of my mentor and his journey was inspiring"*
5.	Demanding Mentorship	*"I found the mentoring process tough. My mentor had too many expectations from me and wanted me to work according to a schedule to deliver results. I felt I was working for a tough manager. With my academic workload I could not manage well."* *I needed very specific help which included technical guidance, but my mentor was always talking about the big picture. After a while I lost interest in the mentoring program as my basic questions and doubts remained unanswered"* *"Mentoring added to my workload and created pressure. I could not cope up with trying to show consistent progress to my mentor. I was expecting more handholding"*

The major themes which emerged from the responses of the interviews conducted with the mentees were: career guidance, networking opportunities, skill development, personal branding and demanding mentorship.

Also, based on the responses of the mentees a word cloud has been presented in Figure 2.

Fig. 2. Word Cloud based on the responses of Mentees

Further, the interviews conducted with the Alumni mentors were also coded and analyzed and the following themes presented in Table VIII emerged.

TABLE VIII
THEMES FROM RESPONSES OF ALUMNI MENTORS

S. No	Themes	Representative Responses
1	Personal Fulfillment	*"I thoroughly enjoyed mentoring the students at my alma mater. It was satisfying to see their growth and development. I believe that I am a better people manager now and am confident of mentoring juniors at my workplace in a structured manner."* *"The mentoring program was one the highlights of the year for me. I not only developed mentoring capabilities, but leadership skills as well. I became a better listener and felt that I was making an impact in someone's life"* *"Mentoring was gratifying and fulfilling. I needed to work with people outside my current organization to hone my people management and leadership skills. I believe this program and the learnings will help me grow in my career as well."*
2	Well Structured and Focused	*"The mentoring program was well structured which allowed me to focus on the key deliverables. The use of analytics and benchmarking for assessing outcomes was a unique aspect of the mentoring program. Helped keep the mentor and mentee focused on attaining the outcomes."* *"Kudos to the institution for initiating this mentoring program which is unique in the region. I never thought I would enjoy it so much. I am definitely going to recommend this to my batchmates and encourage them to give their time. It is definitely worth it."*
3	Aspirations and Achievements	*"Students especially from J&K need additional support in the form of mentoring as they are bound by a homogenous environment, have limited exposure and tend to develop low aspiration levels. The most successful outcome for the mentoring program is to enhance the mentee's aspiration and achievement levels, which I believe is being considerably achieved in the current program."*
4	Clarity of Thoughts	*"The mentoring program was satisfying, but definitely not a walk in the park. I had to work hard with the mentee for attitude shaping and felt that sometimes the commitment was lacking. I think mentors need to be involved in mentee selection for it to work smoothly"* *"The biggest challenge for a mentor is providing professional guidance when the mentee is not sure about the final goal. So, it was tough for me to work with my assigned mentee as there was no clarity of thought on the way ahead."* *"I am divided between generic mentoring or professional mentoring. I think mentors and mentee matching needs to be spot on. Only mentors who are currently working in deep tech need to be selected for professional mentoring to guide students on their projects, job interview preparation, higher studies etc. Otherwise answering student queries on technology etc. become challenging"*
5	Giving Back	*"My mentee attained a high-paying job in line with her vision for herself. She is happy and so am I. I am thrilled that I could help her prepare and succeed for the final job interview. I am satisfied at giving back in some way."*

The responses of the Alumni who served as mentors are also captured in the word cloud as shown in Figure 3.

Fig. 3. Word Cloud based on the responses of the Alumni Mentors

V. RECOMMENDATIONS FOR EFFECTIVE IMPLEMENTATION OF ALUMNI MENTORING

Based on the initial results, the key learnings leading to specific recommendations for effective implementation of the alumni mentoring at higher education institutions are as follows:

A. Recommendations for Institutions

1. **Defining Outcomes:** Institutions need to know that Alumni Mentoring is an enrichment program leading to bonhomie, enhanced satisfaction, positive brand perception and community engagement. Thus, the approach towards the alumni mentoring needs to be based on commitment of resources, organizational bandwidth and personnel.

2. **Selection of Personnel:** The people driving the Alumni mentoring program need to be thoroughly professional in their approach, appreciate the criticality of the program and work to create a highly engaging and positive experience for all stakeholders. Thus, people with good experience, work ethic and communication skills need to be selected and assigned.

3. **Student Selection:** Alumni mentoring at scale is not feasible due to finding a sufficiently large number of motivated alumni for delivering mentoring and challenges involved in effective tracking of a large number of mentor-mentee groups. Thus, a small subset of students most likely to benefit from sustained mentoring is the key. Typically, students who are aspirational, self-driven and motivated are most likely beneficiaries of such an engagement.

4. **Orientation and Expectation Setting:** Once students are selected, conducting an orientation program outlining the scope of the program and delineating the expectations is crucial. Students need to be apprised on how to conduct themselves, meeting agreed upon timelines for deliverables and giving a good account of themselves during the mentoring process.

5. **Tracking and Review:** Continuous tracking through periodical review meetings with the mentors and mentees is also a critical aspect for effective implementation. This helps in ironing out any shortcomings and ensures that the program stays on track to deliver the intended outcomes.

6. **Closure:** The final activity is the closure which allows the articulation of the benefits of the program to all stakeholders, recording, analyzing and sharing feedback and noting down areas of improvement. At this stage the involvement of the leadership team is deemed critical to lend credibility to the program, engage with the alumni mentors, recognize their contributions and acknowledge the mentees as well.

B. Recommendations for the Mentees

The study has important recommendations for the mentees as the Alumni Mentorship programme offers them a great opportunity to clarify their career paths and goals, taking a more proactive approach to attain satisfactory outcomes sooner than later.

1. **Goal Clarity**: Before the student registers for the Alumni Mentorship programme, there must be sufficient clarity of goals so that the institute can help to find a suitable mentor as per her domain/interest area.

2. **Proactive Approach**: The student should follow a proactive approach and show a keen interest in setting up the meetings and showing a high level of commitment. The students must prepare well before the meetings and should ideally work out a specific set of questions to be asked to the mentor.

3**. Positive Outlook**: The student must maintain a positive attitude throughout the mentorship programme and should take constructive feedback for improvement.

4. **Build Personal Network:** The student must seek the help of the mentor and build up a professional network that can help open new avenues and opportunities for growth.

5. **Gratitude**: The student must remain courteous and express gratitude towards the mentor for her time and assistance in helping the mentee on various projects, internships and references for the placement opportunities.

6. **Confidentiality**: The element of trust needs to be there between the mentor and the mentee. The confidentiality of the information must be maintained by the mentee.

C. Recommendations for the Mentors

1.**Emphasize Soft Skills**: In the context of II-tier cities, it is imperative to broaden the focus beyond the mere acquisition of technical or academic skills. The significance of soft skills, including communication, problem-solving, adaptability, and interpersonal skills, should be emphasized by mentors, as they are essential for achieving success in various professional domains.

2. **Networking and Exposure**: Engaging mentees in networking events might help them meet people from different fields. By doing so, mentees can expand their knowledge and professional development. Mentors are essential to career advancement because they offer advice and assistance as they can help link the mentees with industry professionals, arrange trips to industry facilities, and suggest related events and workshops. These activities in turn help mentees learn, network, and advance professionally.

3. **Empathy, Mental Health and Well-being**: It is recommended that alumni mentors acknowledge and understand the mental health challenges that students may encounter as a result of academic stress, information overload and personal circumstances. So, fostering an empathetic environment that promotes open discussions becomes important for the mentors.

4. Long-term Relationship Building: It is recommended that mentors consider making mentorship an ongoing and continuous experience rather than a one-time interaction. As a mentor, it is required to strive for building a lasting and meaningful connection with your mentees. It is suggested that regular check-ins, follow-ups, and continuous guidance for sustained growth and development.

5. Goal Setting and Planning: It is recommended assisting mentees in establishing well-defined and attainable objectives that align perfectly with their academic and career ambitions. So, mentors should assist in creating a realistic roadmap for their mentees with SMART (Specific, Measurable, Achievable, Relevant and Time-Bound) goals.

6. Cultural Sensitivity and Communication: It is recommended that mentors prioritize cultural sensitivity in all their interactions. It is crucial to understand and respect cultural differences if any to effectively connect with and support the mentees.

CONCLUSION

This paper presents results from implementing a formal alumni mentoring program for students at a tier-II institution in the higher technical education space. The case study underscores the significant influence of alumni mentoring on enhancing student satisfaction and engagement levels. The structured program facilitated by experienced alumni resulted in a range of positive outcomes for both the student mentees and the alumni mentors. Mentors played a pivotal role by offering career guidance, industry insights, project guidance and avenues for professional growth. Students reported significantly enhanced satisfaction and engagement levels while feeling confident in navigating their professional careers. The initial success of the alumni mentoring program emphasizes the importance of alumni involvement in promoting comprehensive student development. Consequently, alumni mentorship, when implemented scientifically has significant potential for enhancing student satisfaction, engagement and nurturing a sense of community within educational institutions at all levels. Future studies can focus on how the online platforms can be leveraged for facilitating alumnii engagement and mentoring. Such a platform, structured as a closed social network can facilitate informal engagement between alumni and current students and be more suited to the propensity of students to adopt digital platforms over traditional approaches. Analyzing mentoring outcomes across multiple institutions located in different geographical areas can also be considered while focusing on how cultural factors impact alumni mentoring outcomes.

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