

Developing Career Skills of Professional Students Through Student Mentees - Alumni Mentoring Program

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ABSTRACT The present research explores to develop career skills of professional students through student mentees- alumni mentoring relationship program. In the study, 15 student mentees of engineering, 10 student mentees of management institutions and 5 of alumni mentors participated. A questionnaire was prepared with open and closed questions separately for the students on their feedback and alumni on their facilitations. Researchers conducted series of two semi-structured interviews and the results indicated that the students enhanced career skills and they acquired guidance and support from the alumni mentors and had the industry exposure. The mentors had satisfaction in guiding the students and this program helped them to refresh their technical and soft skills and in turn they demonstrate to their students. The findings and suggestions to be incorporated into the professional education institutions.

INTRODUCTION

The purpose of the study is to develop career skills of professional students through student mentees- alumni mentoring program. Contemporary technological and economic changes have created a challenging context for professional students. Currently, employability is the buzzword among the professional students. During the last decade, the opportunities for engineering students in various sectors have increased multifold globally. The real key to the effectiveness of professional students is their ability to put their domain knowledge into effective practice and professional skills have a crucial role to play for the effectiveness. The challenge for professional colleges is to work out a healthy balance between the wholeness of knowledge and skill sets that cater to current technological demands. In many countries, the issue of incorporating professional skills into the curriculum being taught to professional students has gained momentum in recent years.

Therefore, the best way to prepare potential employees for the future workforce is to develop not only technical but also competent.

Proficiency in soft skills is the need of hour and our technocrats can be made well versed into these soft skills with the help of literature as part of their syllabus (Sita and Rekha 2014). Communication skills are essential for an engineer who aspires to carry out his/her professional practice in the global arena (Thanky 2014). Communication is not just speaking, but it also involves various aspects like listening, writing, visual, intercultural and interdisciplinary aspects. Engineers coming from metro cities have better communication skills comparing to engineers from non-metro cities and this shows the large variation exists in basic competencies of students who join engineering colleges in India (P'Rayan and Shetty 2008). Since the introductions of the new outcome based evaluation of the National Board of Accreditation, India (NBA 2012) criteria, many engineering programs have tried in various ways to incorporate communication skills in their curriculum. The concern of employability of professional students has become very serious and critical in most of the countries. The biggest challenge facing colleges of engineering and management to develop employable skills enhance knowledge and make the students more attractive to employers. Most students are not 'industry ready' or 'business

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ready' because they lack career skills and other skill sets. The issue is that professional education today focuses on curriculum alone and industry and businesses look for beyond what a syllabus is capable of teaching like communication, creative skills and team spirit.

The McKinsey Global Institute survey indicates that India produces 3,60,000 engineering graduates, but only 25 per cent of them are employable (Rao 2010). According to Andreas Blom (2011), 64 per cent of the employers said that the performance of the engineering graduates in India is not up to the level of satisfaction. Aggarwal (2013) found that graduates mostly lack the skills required by the industry. As per a recent study of the India Skills Report (2014), the severity of the situation can be estimated that only 10% of MBA graduates of the country are employable and same is true for the engineering graduates where this number is as low as 17%.

To achieve these desired standard colleges need to adapt to current student needs and identify new learning models (Caruana 2011). Social cognitive learning (Bandura 2011), for example, role modeling, observing and imitating, is used, especially by young children and adolescents, and is the basis of the mentoring or coaching strategies. Mentoring program provides an opportunity to build the potential of employees and also professional students who are likely to become employees after graduation. It offers a forum to offer constructive and honest advice to support the career development of the students. Mentoring has long been acknowledged as a strategy for developing individuals, both professionally and personally.

In mentoring relationships, students develop and learn through discussions with more experienced mentors who share knowledge and skills that can be incorporated into their thinking and practice. Formal mentoring programs are now characteristically found in a variety of organizations, including industry, businesses, educational colleges, and service providers. A range of professional associations, such as the American-based International Mentoring Association and The European Mentoring and Coaching Council, host conferences and offer journals, newsletters, and websites for disseminating information about mentoring. Additionally, a number of successful consulting practices are devoted to helping organizations design and implement mentoring programs. Mentors help

younger and less experienced workers develop soft skills in their personal and professional lives. These older, wiser mentors are often called 'Wise Guides' (Teresa 2014).

One-on-one mentoring has been identified by a growing number of organizational consultants as the most effective method for training soft skills (Boehle 2009). Mentoring has been shown to foster teamwork, improve staff motivation, and increase employee competency levels (Messmer 2003). Mentoring improves individual and organizational performance and results in higher employee retention. Mentees achieve higher promotion rates (Smith 2011). Kechagias (2011), points out that the learning process during on-site training calls for a form of tutoring that embraces features including coaching and mentoring. In coaching, the supervisor offers students advice and guidance, and reaches agreements with them about substantive action plans designed to improve their training in particular skills. Schlee's (2000) study of the mentoring and the professional development of management students in USA management schools found that alumni were the major source of mentors; moreover Schlee's research evaluated mentoring programs, concluding that all of the mentor program administrators interviewed for the second stage of the research felt that most students benefited greatly from participating in mentoring activities.

Objectives

The purpose of this paper is to bridge the gap between college and industry among the engineering students to develop their career skills with the student- alumni mentoring model. The study was directed by these questions:

1. What are the engineering and management students' motivations for involving in the student mentees - alumni mentors program?
2. In what ways do the students and mentors enriched the mentoring relationships?
3. How does the mentoring program meet students' expectations?
4. How does the mentoring relationship enhance career skills?

Literature on Mentoring Relationship

Jenni Jones (2012) investigated on what mentees and mentors perceive they are learning and

what factors contribute to this learning, within formal mentoring relationships. The results were presented within four categories of learning: cognitive, skill-based, affective-related learning and social networks. They demonstrate the changing scope of learning as process and product, and the impact of moderating factors on the mentoring relationships. Elaine Cox et al. 2014 highlighted on the theoretical foundations of coaching and developed a structural analysis of coaching engagement to indicate the potential interplay between organizational and individual agendas and to help HRD professionals become better informed about the value of coaching in the context of wider HRD paradigms.

There is no universal definition when it comes to defining, mentoring, however, it appears terms such as facilitate, assist, help, and reciprocity seem to describe this ancient term that was first predicted in the classical vision of Odysseus (Wright and Smith 2000). The term “mentor” actually derived from the character named Mentor. Mentor was a faithful friend of the Greek hero Odysseus in Homer’s epic story *The Odyssey*. When Odysseus left for war, Mentor was left behind to serve as a tutor to his son, Telemachus. Mentor served in this role, earning a reputation of being wise, sober, and loyal. The classic understanding of the term “mentorship” evolved from the relationship of these two characters.

Kerry and Mayes (1995) indicate that definitions of mentor need include: Nurturing; role modeling; functioning (as a teacher, sponsor, encourage, counselor and friend); focusing on the professional development of the mentee; and sustaining a caring relationship over time. Mentoring can be defined in various ways. Mentoring is a typically a one-to-one relationship between a more experienced and a less experienced employee which is based upon encouragement, constructive comments, openness, mutual trust, respect and a willingness to learn and share (New South Wales Public Service Commission 2014).

Mentoring is viewed as a series of meaningful interactions between a more experienced person, identified as the mentor, and a protégé that enhances the protégé’s personal growth and professional advancement (Green and Bauer 2006). The mentor may serve as a role model, teacher, sponsor, coach, friend or counselor (Anderson and Shannon 1988; Fagenson 1989). The key element in a mentoring relationship is a

consistent interest on the part of the mentor in the protégé’s progress (Rhodes 2002). An ethic of care enacted by mentors as they monitor their protégé’s progress is found in many mentoring relationships (Buell 2004). Mentoring can take place through conversations, collaboration, and participation in an online or virtual community as well as through opportunities for the protégé to observe his or her mentor (Wright and Wright 1987).

In contemporary times, mentors have played a vital role in the development of individuals in education and business organizations. Mentoring for a professional career became a topic of research in the mid-1970s. Caffarella (1992) defined mentoring as an ‘intense caring relationship in which persons with more experience work with less experienced persons to promote both professional and personal development’. Daloz (1986) was more expressive in his description of mentors as guides who ‘lead us along the journey of our lives... they cast light on the way ahead, interpret arcane signs, warn us of lurking dangers, and point out unexpected delights along the way.

First, mentoring is an intentional process. Second, mentoring is a nurturing process that fosters the development of the protégé towards his full potential. Third, mentoring is an insightful process in which the wisdom of the mentor is acquired and applied by the beneficiary (Wong and Premkumar 2007). Mentors facilitate students’ learning by providing or highlighting appropriate learning opportunities and assess the students’ practice, taking responsibility for identifying whether prescribed or negotiated outcomes have been achieved.

Coaching and mentoring are similar, flexible methods of development that are based on the use of one-to-one discussion that aims to enhance an individual’s skills, knowledge or work performance. They are both characterized by a willingness to listen, openness to new ideas, enthusiasm and encouraging individuals to become involved in new work experiences (CIMA 2008). Coaching and mentoring programs are activities that can be considered part of the spectrum of ‘talent management’ because they either focus on developing specific new skills that benefit the individual and the company (coaching) or they help individuals develop new ways of thinking to overcome obstacles and enable them to progress in their career through a relation-

ship with a more experienced individual (mentoring) (CIPD 2012). Organizations use a variety of methods to develop talent and produce high performing employees. Over the last 20 years, professional coaching and mentoring schemes have become popular methods of supporting learning and career development amongst new recruits, graduates and potential business managers (University of Wolverhampton 2010).

Kram's (1985) mentor role theory has provided the basis for much of the research conducted on the topic. In the theory espoused by Kram, mentoring can be categorized as a career or psychosocial. Career mentoring functions includes sponsoring professional advancements and overseeing career preparation within an academic setting, coaching the protégé, protecting the protégé from opposing forces, presenting challenging assignments, and increasing the protégé's exposure and visibility. Psychosocial mentoring functions include helping the protégé develop a sense of self through acceptance and affirmation, providing counseling, establishing friendly rapport, and serving as a role model. Storrs et al. (2008) additionally suggest that in order for mentoring relationships to be successful, there must be clarity and consensus of roles.

A trained workplace mentor or coach was used to guide employees while working. In fact, the role of trained workplace mentor has been often to develop the generic skills, such as enhancing communication, presentation and negotiation skills. Coaching and mentoring schemes can be delivered at relatively low cost, making them particularly appropriate talent management tools for businesses in the current economic climate (CIPD 2012). Anderson and Shannon (1988) believed that good mentors should be committed to three values. First, mentors should be disposed to opening themselves to their students like allowing their students to observe them in action and convey to them the reasons behind their decisions and actions. Second, mentors should be prepared to lead their students incrementally over time. Third, mentors should be willing to express care and concern about the personal and professional welfare of their students. The broader process of mentoring may be defined as an on-going process whereby the supervisor, who is known as the 'mentor', instructs and guides new or inexperienced work colleagues in their process of adapting to their job and to the organization.

Mentoring is one type of intervention to facilitate workplace learning, but it does not exist in isolation, in any form. It is influenced by other workplace learning activities (D'Abate et al. 2003) and also by a variety of other factors, internal and external to the individual and organization involved, for example organizational structure and context (Lee et al. 2004). Peer mentoring focuses on a more experienced student helping a less experienced student improve overall academic performance, encourages mentors' personal growth (Falchikov 2001; Kram 1985). In higher education, Lyons et al. (1990) found that mentors not only transmitted formal academic knowledge and provided socialization experiences into their chosen discipline, but also bolstered the students' confidence and professional identity, giving them a vision of the identity they might one day achieve. Universities are increasingly seeking alternative approaches to education that supplement traditional classroom learning, especially given that budgets have been cut and student populations have raised in many universities (Miller et al. 2001).

Theoretical Framework

The First Phase of Meeting between Engineering and Management Students and Mentors

The students and mentors introduced among themselves and exchanged their contact details in the first phase of meeting in the college. The advisers and counselors asked the students and mentors to discuss on establishing the 'mutual understanding, boundaries between mentors and students, basic rules, setting some expectations and a master plan'. The mentors asked the students to respond the questions will help them to better understand their values, motivations and passions.

The Second Phase of the Program: Students' Growth and Development

This consequence highlights the value of the mentoring process from both the students and alumni mentors prospective, in particular how the process impacted participants' growth and development, as well as the connections made to career skills. The mentors helped the students to broaden their horizons and creatively

and realistically about they want to do, where they want to go, and why. They explored on 'portfolio of options' and ideas to investigate. The students should think about high risk/high reward options, as well as some big aims, the mentors suggested. They had a brain storm session on career choices and job titles and their pros and cons. In which career the students can excel and how do they differ from professional and personal perspectives. They encouraged evaluating themselves about their needs, plans and executions.

Third Phase of the Program- College to Corporate

The mentors invited the engineering and management students to one of their workplaces and Human Resource professionals of the industry were requested to interact with the students on industry's expectations, job interviews, selection procedures, and corporate culture. Their views are consolidated and given as follows:

The mentors expect their future colleagues to possess the following skills

- ♦ Ability to communicate
- ♦ Problem solving skills/critical thinking
- ♦ Leadership/team building skills
- ♦ Interpersonal skills
- ♦ Current trends/innovation
- ♦ Self-motivation and discipline
- ♦ Negotiation/persuasion skills
- ♦ Willingness/desire to learn
- ♦ Ethics/values
- ♦ Self-esteem/multi culture awareness

METHODOLOGY

Participants

In this study, 15 students of final year bachelor of engineering and 10 students of final year management were participated. All the engineering students were from various branches like Mechanical Engineering (4), Civil Engineering (4), Computer Science Engineering and Information Technology (3) and Electronics and Electrical Engineering (4), and Business Management Administration (both Human Resource and Finance Management Courses) participated in this study. There were 55% male students and 45% female students put together from Engineering

and Management College of a popular technical university in South India. Five of alumni mentors who graduated from the same college took part in this study. Three mentors have engineering background and 2 mentors have Human Resource and Finance Management course's background. Pseudonyms were assigned to maintain confidentiality. All the mentors who studied in the same college and who were working for Industry with businesses in India and abroad with 3 to 5 years of work experience accepted for the mentoring program.

Instrumentation

Over 40 students of the college of a popular technical university in South India and 10 mentors were invited to their mentoring relationship program through e-mail communication and open invitation during alumni meet. Student mentees and alumni mentors were finalized in the Odd and even semesters of 2013-14 through a selection process based on for example, what are your professional interests or objectives? Why do you desire to be students and mentors? Describe the strengths you believe would bring to a mentoring relationship program and how do you enhance the skills? The director, training and placement department, dean, student affairs and placement professional of the college served in the roles of mentor advisers and student counselors. The advisers and counselors facilitated the program and presented the session on the expectations, principles and mode of the mentoring program at the beginning of the semester. They shared a brief overview of the role and responsibilities of the students and mentors. They discussed about the modules of professional skills, delivery through online and offline once in a way. An exclusive online resource like video clippings, audio files, power point presentations and e-materials were provided for the students and mentors by the advisers and counselors.

All participants were invited to participate in the feedback and evaluative study. All the students and mentors were divided into five batches with 5 students each. To collect the data, the researchers conducted a survey using a 5 point Likert Scale from 1-5, ranging from (1) strongly disagree to (5) strongly agree separately for students and mentors. The researchers conducted series of two semi-structured interviews in person with each of the participants (at the begin-

ning and the conclusion of the program). Besides, reflective interviews were allowed for an exploration of students' perceptions of the mentoring program and process, and the narrative data contributed to a deeper understanding of their experiences (Rossman and Rallies 2003). All interviews were recorded and transcribed. Students were communicated through e-mail and its copy of their interview transcript for review and feedback in a member checking process (Maxwell 2013). NVivo software was used to qualitatively code and analyze all of the case study documents (applications and transcripts). As the researchers read through the documents, the researchers made notes and identified an initial categorical coding scheme, but allowed for additional codes to emerge while looking for patterns of connectivity between codes (Corbin and Strauss 2008). Codes were grouped into descriptive categories, and then organized into themes representing the over-arching outcomes of the mentoring program, answering the research questions set forth by the case.

FINDINGS

This study intends to find out how the professional students enrich career skills, what are the motivations and what are the expectations of the mentors. The researchers conducted a survey on the methodologies of career skills development with the faculty members of technical English and communication skills laboratory and placement and training professionals of engineering colleges of a popular technical university in South India. The results revealed that coaching and mentoring were one of the highest priorities among ten methods of development of career skills (Table 1).

Table 1: The highest priorities among ten methods of development of career skills

<i>S. No.</i>	<i>Methods</i>	<i>Percent</i>	<i>Rank</i>
1.	Real life examples	84	I
2.	Brainstorming sessions	76	II
3.	Role plays	72	III
4.	Seminar skills	70	IV
5.	Projects	68	V
6.	Video/Audio listening	64	VI
7.	Coaching and mentoring	62	VII
8.	Visuals	54	VIII
9.	Student collaboration	52	IX
10.	Mock interviews	50	X

The placement professionals have given priority for real life examples (84%), brainstorming sessions (76%) and role plays (72 %) when they want to develop career skills. Seminar skills, projects and video/audio listening methods were their next main concerns. Sixty-four percent of the Faculty members and placement professionals have mentioned coaching and mentoring methods will enhance career skills. Mock interview was the last one.

Inspiration for Participation

The engineering and management students in this study described several specific reasons they desired a mentoring relationship program. The advisers and counselors motivated on enhancing professional and personal skills and those motivating sessions made them to involve in the program, many students pointed in the feedback form. Most of the students have indicated that the mentoring relationship is helpful to acquire guidance and support from the alumni mentors, to have the industry exposure and structure working culture for learning. The interaction is supportive for beneficial and honest feedback from the external evaluators, for searching related to good/bad experience during the placement and to evaluate competence. Further the students stated that mentoring program facilitates to provide the appropriate knowledge base for engineering and business interventions, for questioning and for protection from meager practice. To build confidence, learn about the industry and business requirement and keep own skills and knowledge up to date the program is beneficial. Some students reported that the program is useful for linking theory subjects to practice, developing one's work skills and structured learning programs during practice placements. A majority of the students accepted that the mentoring program assisted in the improvement of one's self, to share experiences, in the appreciation and to build up innovative ideas. They would to hear for honest opinions and views from the mentors. The students treated mentors as their role models and may be a parent figure, etc. for socialization; and for support and guidance.

The mentors in this study prominent some definite reasons they anticipated a mentoring relationship: To motivate to inspire the students; to build trust; to offer marginal perspectives;

and to encourage self-directed reflection, analysis and problem solving.

Experiences of Students

For example, student said: *The mentoring program is admirable to speaking mentor with an unbiased view to help with work problems of the future. Other student established: The program is a very different way of learning than before. I'm looking for new ideas and someone to share their experiences. I expect students will want to be kept on the right trail and will be looking for ideas and examples further. I expect to share learning. And I like considering others views.*

For instance a student of Information Technology department said: *"I'm learning from my mentors experience on how to transaction with some of my career development issues. I'm learning all about a company and how they are managed. My mentor can see me receiving more confident and I'm possibly enjoying my career a bit more. I used to be frightened at the thought of going to meetings but I'm getting more used to that now. I feel a lot more confident in speaking to my professors and trainers in my own group. I feel that I'm a lot more positive with them as I'm a lot more confident now. I've made lots of clarification about myself and it's learning how to put them into practice. The program is helping to boost my coolness and my self-esteem on a very personal level".*

For case, student from the management administration department said: *"The mentoring relationship program is helping me organize my studies around my college life. It's giving me advice on how to balance things. In terms of early prospect was quite specific about which mentoring skills: I'd like to improve my questioning and listening skills. I'd like to understand the students need but also gain fresh skills and techniques. Student belonged to electronics department said: I'm learning when to stop talking and when to carry on after this program. I'm learning how to ask questions that release some different thinking. Up course, one mentor in relation to listening skills mentions as 'I'm still learning about corporate communication constructively".*

During oral feedback session some of students shared their experiences at the end of the mentoring program as follows:

- Mentors advised and assisted us on academic questions, career options, life beyond college, and more
- They helped us how to access to our professional network and networking opportunities
- Their speech on opportunities to practice and strengthen professional communication and presentation skills is valuable
- They provided us hands-on learning opportunities and access to professional resources
- They helped us in defining personal and professional goals and the strategies to achieve them
- Their ideas on internship, industrial visit and job opportunities are unique
- They provided many friends and connections in the industry and the business world

The Experiences of Mentors

Whereas each experience will be different, this reflection from the alumni mentors provided perception into the prospective rewards of the program, including a sense of satisfaction, inspiration, and delight for student. A mentor said: *"I have been a mentor of five students for the past ten months, all of whom are graduating in June. I am very proud of all of them! I am ready to extend this mentoring program whenever it's needed by the college. Certainly! If you are wondering why, I can condense it in two words: encouraging and rewarding. It is really encouraging. These students are bright, energetic and enthusiastic to make a difference. It is so refreshing to meet prospective engineers and management administrators that are excited about their future and wanting to find a career in which they can fulfill their goals but at the same time contribute to upcoming generations".*

The other mentor stated: *"It is very rewarding. I got to know both of my students and learn about their welfares and passions and discuss possible career opportunities. I was also able to connect them with other individuals in the industry friends, enabling each of them to secure internships during their final year. Not only was this rewarding for me and my students, it was rewarding for the industry and businesses that they are working for".*

Table 2 shows the mean scores and standard deviations for career skills construct. With

Table 2: Mean scores and standard deviations for career skills construct

<i>Items</i>	<i>Mean</i>	<i>SD</i>
<i>First Phase – Personal Development</i>		
1. I am able to set goals of short term and long term and define 'measurable steps'	2.34	0.75
2. I have identified my biggest fear and I learned how I should overcome now?	2.35	0.77
3. I am able to understand about the achievements of the personalities and I can imbibe them in my professional and personal life	1.95	0.77
4. I am able to assess, aware, motivate, regulate, discipline, and direct myself	2.02	0.75
5. I developed the value of interpersonal and intrapersonal skills	2.58	0.88
<i>Second Phase- Career Development</i>		
6. I am able to build my career with the expectations of my alumni mentors	2.35	0.86
7. I am able to understand about current trends in the industry and I can prepare to cope with the expectations of industry	2.96	0.89
8. I am able to balance my academics and as well training activities and personal life	2.84	0.94
9. I am able to know about the networking skills to do internship program successfully	2.38	0.83
<i>Third Phase- Professional Development</i>		
10. I am able to communicate professionally	2.51	0.99
11. I am able to put my efforts in solving the problems	1.92	0.82
12. I am able to appear psychometric test and succeed	2.45	0.96
13. I am able to explore my ideas during seminar presentations, group discussions and interviews		
14. I am able to adapt myself with multi- culture environment	2.16	0.93
Total mean score	2.34	0.86

a total mean score of 2.34, the students, in general, could be considered as having considerably high performance levels regarding their career skills. Looking at, each item's mean score, however, seems to indicate that students have slightly higher performance in their understanding about the current trends. Students appear to believe that they do not have much problem of professional speaking and are highly motivated to speak.

Table 3 shows the mean scores and standard deviations for mentors construct, with a total mean score of 2.30, the alumni mentors, in

general, could be considered as having considerably high coaching and mentoring program regarding their career skills. Looking at, each item's mean score, however, seems to indicate that mentors have a slightly higher contribution in their effort to refresh the students. Mentors appear to believe that they encourage their students who are bright, energetic and enthusiastic to make a difference.

Mentors also provided feedback about the students as well how far they contributed to the program. They have more satisfaction in guiding the students. This program helped them to

Table 3: Mean scores and standard deviations for mentors construct

<i>Items</i>	<i>Mean</i>	<i>SD</i>
1. I have a sense of satisfaction, inspiration and delight of my students	2.11	0.93
2. It is really encouraging as my students are bright, energetic and enthusiastic to make a difference	2.32	0.88
3. It is so refreshing to meet my prospective engineers and management administrators that are excited about their future	2.32	0.88
4. It is very rewarding as I got to know of my students and learn about their welfare and passions	2.20	0.93
5. I am able to connect them with other individuals in the industry friends, enabling each of them to secure internships	2.54	1.02
6. I am able to train the professional skills and give overview picture of industry and business	2.31	0.95
Total mean score	2.30	0.93

Note: Scale: 1–5, ranging from (1) strongly agree to (5) strongly disagree.

refresh their technical and soft skills and in turn they demonstrate to their students. They are happy in making a friend circle of industry and institution.

DISCUSSION

The primary objective of this study was to gain a better understanding of alumni mentoring and students' mentees relationship program and how the program enhanced the career skills. Indeed there does seem to be a huge amount of personal learning across the various learning outcome categories, for both mentees and mentors. The learning was much greater than projected at the outset for both parties. Knowledge and skills were the areas where mentees and mentors expected to gain the most learning but the deeper more personal learning was greater in scope than was expected. Mentees did not have any expectations about social networks and making new connections but this has been an area of learning for them. It seems mentors did not expect to learn so much about other departments and other areas, nor perhaps so much about their interpersonal skills and their own mentoring skills too. Both parties did expect to improve their listening skills and self confidence and there are many examples of where mentoring has delivered to these expectations.

Students are not alone benefiting from mentoring programs but alumni also contribute an important opportunity to reconnect with their college. Frequently, alumni want to become involved in activities that further promote and serve their alma mater, and being a mentor allows them to become involved. The college also acquires the rewards of establishing student/alumni mentoring programs. These programs are excellent recruitment and retention tools for colleges. Additionally, colleges are able to strengthen ties to alumni. Engaging alumni in this type of program may lead to future financial investments in the colleges. Kerry and Sarah (2014) found that mentees felt better prepared regarding their future career or goals, expanded their network, and made 'real world' meaning of their leadership education through mentoring program. Placement professionals need to actively pursue the development of a student/alumni mentoring program within their premises. Working with the alumni association, placement professionals can build a program that provides

unique mentoring opportunities. Many placement professionals are receptive to this type of program because alumni often ask how they can volunteer. Placement professionals are also a vital resource for the mentors because they are familiar with the professional accomplishments of alumni. In addition, if their association employs a career counselor on staff, it would be advantageous to involve him/her on this project. Career counselors can provide additional insight into particular businesses, employment trends, and job requirements.

One of the utmost reasons for advisers to be involved in the mentoring program is that mentors can make mistakes. Mentors often do not have the background to make accurate judgments on students' abilities, so they may misperceive a student's potential and set goals too high or low. They habitually favour their area of expertise over other areas, influencing a student's career choice as well as creating pressure to focus on that area, regardless of the student's interest. Mentors can also provide inaccurate academic advice, not realizing that graduation requirements have changed since they left campus, especially in regard to general education requirements. From a social exchange theory perspective, these relationships have been maintained despite internal and external pressures, as the benefits or learning outcomes to both mentee and mentor are perceived to outweigh the costs in effort and time to meet up (Baranik et al. 2010). Truly, mentoring is a powerful tool for career development, as Serrat (2009) explains: Good coaching and mentoring schemes are deemed a highly effective way to help people, through talking, increase self-direction, self-esteem, efficacy and accomplishments.

Alumni mentors can consider the placement development activities: Role-play-challenging conversations; team dynamics, job requisites; resume critique; mock interview; group discussions; stage presentation; read and discuss a book, review, or journal paper; social network and its pros and cons; and informational interview with peers. Mentors need to give constructive feedback about the students and their performances. They should help in setting goals and assesses the students' strengths and weaknesses. The mentor need to facilitate problem-solving and utilize active listening skills. Demonstrating good time-management and leadership skills will be valuable and the mentors need

to encourage appropriate clinical decision-making and evidence-based practices.

CONCLUSION

The present study attends an evaluation of an academic year mentoring relationship program between engineering and management students of a college of a technical university in South India and alumni of the same college who are working in the industry and businesses. The mentoring program is useful in developing professional and business awareness amongst the final year and the researchers now see this as a key part of our strategy of developing career skills for the professional students. The researchers' study exemplified a formal process for mentoring between professional students and alumni for the purpose of enhancing career skills and career development preparation. The use of qualitative research methods provided a prospect for participants to make meaning of their experience, and resulted in rich description by which the researchers and program advisers could understand and assess the mentoring process and outcomes.

It was initiated that the students in this study wanted to be mentored, and that program alumni were to be mentors. Through one-on-one interactions, participants developed individually and professionally. Students felt better prepared regarding their future career or goals, expanded their network, and made 'real world' meaning of their professional education. Mentors also observed growth in them and found satisfaction in the opportunity to 'work for the alma-mater'. Giving expression to the participants' experiments and recommendations allows advisers and counselors to be spontaneous and promotes growth and sustainability of the mentoring program. These results have already informed program organizers as they continue to make connections and communicate with new participants.

It is concluded that the mentoring relationship program supports the mission of the college of a technical university of South India to develop future professionals. Additionally, the mentoring relationship program developed between current students and alumni expands the reach, form, and value of the learning community and enhances the placement training activities. Hence, it is important to continue expand-

ing the understanding of the mentoring relationship in order to develop the future professionals.

RECOMMENDATIONS

This study shows the key characteristics of successful mentoring schemes across the engineering and management students. This is extremely important because in the current economic climate, roles are changing due to industrial and business re-structuring and there is more pressure to meet managerial targets by developing high performance employees. To ensure the success of mentoring programs, a number of recommendations have been made by the alumni mentors that participated in the study:

- ♦ Have trained mentors with the experience to provide realistic advice to solve problems
- ♦ Ensure the college is committed to the long-term development of mentoring relationship programs
- ♦ Provide networking opportunities for students -mentoring programs so they can share experiences and practice newly acquired skills.
- ♦ Provide support and administration so mentors can continue to seek advice for their own personal development.
- ♦ Develop an effective matching process to ensure the mentoring relationship is successful.
- ♦ Ensure that mentoring sessions have clear objectives that will produce actionable outcomes
- ♦ Have an assessment process in place to confine the benefits of the program and ensure there is a clear industry case to persist.

REFERENCES

- Aggarwal Himanshu 2014. National Employability Report, Engineering Graduates, Annual Report 2014, Aspiring Minds. From <http://www.aspiringminds.in/researchcell/whitepapers/national_employability_report_engineers_annual_report_2014.html> (Retrieved on 27 October 2014).
- Anderson EM, Shannon A L 1988. Towards a conceptualization of mentoring. *Journal of Teacher Education*, 39(1): 38-42.
- Andreas Blom HS, Hiroshi Saeki 2011. Employability and Skill Set of Newly Graduated Engineers in India. *Policy Research Working Paper 5640*. Washington, D.C.: World Bank.
- Bandura A 2011. Social Cognitive Theory. In: AW Kruglanski, ET Higgins, PAM Van Lange (Eds.):

- Handbook of Theories of Social Psychology*. London: Sage, 1(0): 349-373.
- Baranik L E, Roling E A, Eby L T 2010. Why does mentoring work? The role of perceived organizational support. *Journal of Vocational Behavior*, 76: 366-373.
- Boehle S 2009. Millennial mentors. *Training*, 46(6): 34-36.
- Butterworth-Heinemann, 2014. Mentoring and Diversity- An International Perspective. New Wales Public Service Commission. 'Mentoring' From <http://www.eeo.nsw.gov.au/guides/diversity_delivers/developing_staff_in_a_diverse_workplace/mentoring> (Retrieved on 27 October 2014).
- Buell C 2004. Models of mentoring in communication. *Communication Education*, 53(1): 56-73.
- Caffarella RS 1992. *Psychosocial Development of Women: Linkages of Teaching and Leadership in Adult Education*. Columbus, OH: ERIC Clearinghouse on Adult, Career and Vocational Education. (ERIC Document Reproduction Service No. ED 354386).
- Caruana S 2011. Accreditation of Soft Skills in Higher Education using ICT. Soft Skill Accreditation. From <<http://eaitm.org/confpro/Simon%20Caruana%20paper.pdf>> (Retrieved on 27 October 2014).
- Chartered Institute of Management Accountants (CIMA) 2008. *Mentoring and Coaching*. London: CIMA.
- Chartered Institute of Personnel and Development CIPD 2012. Factsheet: Coaching and Mentoring, CIPD, London. From <<http://www.cipd.co.uk/hr-resources/factsheets/coaching-mentoring.aspx>> (Retrieved on 27 October 2014).
- Cox E, Bachkirova T, Clutterbuck D 2014. Theoretical Traditions and Coaching Genres: Mapping the Territory. *Advances in Developing Human Resources*, 12(2).
- D'Abate C, Eddy E, Tannenbaum S 2003. What in a name? A literature-based approach to understanding mentoring, coaching and other constructs that describe developmental interactions. *Human Resource Development Review*, 2(4): 360-384.
- Daloz L 1986. *Effective Teaching and Mentoring: Realizing the Transformative Power of Adult Learning Experience*. San Francisco: Jossey-Bass.
- Demasi B, Gibson 2006. Review of literature from 2000 to 2006: Engineering students' preparedness for communication in the workplace. *Journal of Human Capital Development*, 3(2): 27-40
- Falchikov N 2001. *Learning Together: Peer Tutoring in Higher Education*. New York: Routledge Farmer.
- Green SG, Bauer TN 1995. Supervisory mentoring by advisers: Relationships with doctoral student potential, productivity, and commitment. *Personnel Psychology*, 48(3): 537-561.
- Jenni Jones 2012. An analysis of learning outcomes within formal mentoring relationships. *International Journal of Evidence Based Coaching and Mentoring*, 10(1): 57-72
- Kechagias K 2011. MASS Measuring and Assessing Soft Skills. MASS Project September 2011. From <http://www.mass-project.org/attachments/396_MASS%20wp4%20final%20report%20part-1.pdf> (Retrieved on 27 October 2014).
- Kerry L Priest, Sarah Donley 2014. Developing leadership for life: Outcomes from collegiate student-alumni mentoring program. *Journal of Leadership Education*, Summer: 107-117.
- Kerry T, Mayes AS 1995. *Issues in Mentoring*. London: Routledge.
- Kram KE 1985. *Mentoring at Work: Developmental Relationships in Organizational Life*. Glenview, IL: Scott, Foresman and Company.
- Lee T, Fuller A, Ashton D, Butler P, Felstead A, Unwin L, Walters S 2004. *Workplace Learning: Main Themes and Perspectives, Learning as Work Research Paper*. Leicester: The Centre for Labor Market Studies No. 2.
- Lyons W, Scroggins D, Rule PB 1990. The mentor in graduate education. *Studies in Higher Education*, 15(3): 277-285.
- Messmer M 2003. Building an effective mentoring program. *Strategic Finance*, 84(8): 17.
- Miller JE, Groccia JE, Miller MSE 2001. *Student-assisted Teaching: A Guide to Faculty -Student Team Work*. Bolton, MA: Anker.
- National Board of Accreditation (NBA) 2012. Manual for Accreditation UG Programs. New Delhi. From <<http://www.nbaind.org/files/engineering-programs.pdf>> (Retrieved on 27 October 2014).
- Peena Thanky 2014. Importance of English and communication skills for technical professionals. *International Journal of Scientific Research*, 3(4): 211-212
- P'Rayan A, Shetty RT 2008. Developing engineering students' communication skills by reducing their communication apprehension. *English for Specific Purposes World*, 7(4): 20.
- Rankey R 1994. Reflections in a rearview mirror-revising the O'Bannon Model. *NACADA Journal*, 14(2): 39-42.
- Rao MS 2010. Employability Skills, Where knowledge is wealth. From <<http://profmsr.blogspot.in/2010/04/employability-skills-profmsr.html>> (Retrieved on 27 October 2014).
- Rhodes JE 2002. *Stand by Me: The Risks and Rewards of Mentoring Today's Youth*. Cambridge, MA: Harvard University Press.
- Riemer MJ 2007. Communication skills for the 21st century engineer. *Global Journal of Engineering Education*, 11(1): 89-100.
- Rossman GB, Rallis SF 2003. *Learning in the Field: An Introduction to Qualitative Research*. 2nd Edition. Thousand Oaks, CA: Sage Publications.
- Schlee R 2000. Mentoring and the professional development of business students. *Journal of Management Education*, 24(3): 322-337.
- Serrat O 2009. *Coaching and Mentoring*. Mandaluyong City: Cornell University. From <<http://www.adb.org/publications/coaching-and-mentoring>> (Retrieved on 27 October 2014)
- Sita Rekha 2014. Communication skills and regional dimensions: A study on engineering students. *American International Journal of Research in Humanities, Arts and Social Sciences*, 6(1): 90-94
- Smith JL 2011. Mentoring improves organizations. *Quality*, 50(4): 14.
- Storrs D, Putsche L, Taylor A 2008. Mentoring expectations and realities: An analysis of metaphorical thinking among female undergraduate protégés and their mentors in a university mentoring programme.

- Mentoring and Tutoring: Partnership in Learning*, 16(2): 175–188.
- Teresa M Moon 2014. Mentoring the next generation for innovation in today's organization. *Journal of Strategic Leadership*, 5(1): 23-35.
- The India Skills Report 2014. From <[https://wheebox.com/logo/Summarized Version.pdf](https://wheebox.com/logo/Summarized%20Version.pdf).> (Retrieved on 27 October 2014).
- The Merriam-Webster Dictionary* 1994. Springfield, MA: Merriam-Webster.
- Wong AT, Premkumar K 2007. An Introduction to Mentoring Principles, Processes and Strategies for Facilitating Mentoring Relationships at a Distance, Mentoring/Mentoring at a Distance Module. From <<http://www.usask.ca/gmcte/drupal/?q=resources>> (Retrieved on 27 October 2014).
- Wright CA, Wright SD 1987. The role of mentors in the career development of young professionals. *Family Relations*, 36(2): 204–208.
- Wright SC, Smith DE 2000. A case for formalized mentoring. *Quest*, 52(2): 200-213.
- University of Wolverhampton Business School 2010. *A Managers and Mentors Handbook on Mentoring*. Wolverhampton: University of Wolverhampton.