

Implementation of E-Mentoring System

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Abstract: Mentoring and Counseling are considered an important part of student's education in today's competitive world. The education system is designed typically to impart academic education and expertise to the student. It generally does not consider the diversity that exists between the students coming from different strata of society. So, mentoring is considered an efficient way to rift the gap between the students (mentee) and the faculties (mentor) that enables the mentor to understand the needs of mentee better. The task of mentoring involves a level of extra effort from the mentors, so a software solution can definitely prove a helpful proposition in this case. A mentor usually handles about 6-8 mentee typically apart from his daily duties, so the system can also double as a full time virtual assistant to the mentor and can improve his productivity thus helping mentee improve their productivity as well. These systems can also help in breaking certain forms of formalities or presumptions mentee might have while approaching the mentor in person. With a layer of software between student and staff, the communication can be improved to a greater degree and can be a useful ice breaker for mentee.

Keywords: anger, stress, addiction, android, remedies

1. Introduction

Mentoring is a valuable strategy to provide students with the emotional and instrumental support students need to achieve the goal of a college degree. By providing information, guidance, and encouragement, mentors can play an important role in nurturing students' college aspirations, helping them prepare for higher education and, advising them on how to make successful transitions from college to the job or even some different goal. In addition, mentoring for students in college helps students to feel more connected and engaged on campus, which can ultimately improve student outcomes. The prevalence and positive impact of mentoring has generated a large body of social science research on its various dimensions. This brief distills and synthesizes scholarly research specifically as it pertains to the role of mentoring to promote college access and success, with an emphasis on implications for practitioners. It strives to serve as a tangible resource for practitioners seeking to ensure that their efforts—are based in research and targeted in ways that will produce the most positive outcomes for students—particularly given limited program resources.

Mentoring [1] serves different purposes, especially based on the individual's age and needs. For example, most mentoring for middle and high school students focuses on developing the knowledge, competencies, and confidence needed to

successfully undertake their responsibilities. Mentors also help students cope with challenges such as absentee parents, an unstable home situation, or lack of familiarity with the world outside their immediate community. By contrast, mentoring for students in college is directed toward helping them feel connected to the campus community for improved student outcomes. Mentoring relationships thus involve the provision of career, social, and emotional support in a safe setting for self-exploration that results in positive academic and personal outcomes for students. The software system or the proposed system here aims at building a system which can efficiently bridge the gap between students and the teachers [1]. In a college environment, the complexity and time constraints do not allow the teacher to interact and pay equal attention to all the students. This leads to a phenomenon where some students with better resources or motivation [4] outperform the ones who lack them. So, having a regular assessment of student's capabilities is essential. Also, if some students need extra help it can be provided. A mentor can also guide the student to create a better learning environment for him. In the latter stages of the college tenure, students require help when they are going to face campus interviews and need some exposure to the real world.

Characteristics like depression, anxiety and poor impulse control. In a 2015 study on the effects of Facebook use on mental health, researchers at the University of Missouri discovered that regular use could lead to symptoms of depression if the site triggered feelings of envy in the user. So it becomes necessary to curb social media addiction.

2. Literature Survey

The existing problems in the mentoring process were identified by studying the existing mentoring methodology. The problems identified were as follows:

- *No defined protocol:* There is no protocol being followed for mentoring which essentially meant the student is not completely aware of the things he can approach the mentor for.
- *Reluctance at student level:* The students were identified to be reluctant to approach the mentor unless specifically asked by the class teacher for mandatory mentor mentee meetings according to guidelines. But apart from that the students very rarely approach the mentor.
- *No progress tracking:* Currently, there exists any progress tracking mechanism for the mentor to track the progress of

his mentees. Also, the mark sheets or any relevant data is not available with the mentors.

- *Very less communication:* The communication between the mentor and mentee is the key of a successful mentorship. In current trends it is visible that there is a lack of essential communication so the relation is not developed beyond basic formality.

1. According to Jeon, J., & Lee, J. (2015, September), Implementation of mentoring system in college for smooth transition to work. In Interactive Collaborative Learning (ICL), 2015 International Conference on (pp. 1181-1183). IEEE. This paper which is categorized and published under Interactive Collaborative Learning provides the following important inference which was a very useful marker for our implementation: "If many colleges formalize and operate mentoring programs on the basis of the program and demand analysis implemented and suggested in this study, it will contribute substantially to the smooth career transition of students to vocational world." In this paper the author highlighted this:

- E-mentoring should have no temporal and spatial limitations while a link between mentors and mentees satisfying the needs of various participants is easy and it can provide a variety of mentoring environments.
- "Vocational training or career guidance service in the college is poor, and thus colleges cannot play its right role in the transition of college students to the professional stage after graduation. Therefore, it is considered that college graduates generally cannot meet the demand from industry. "according to Kang, S. W et al (2000).
- Competency model in which a mentor helps a learner preparing for the assessment of a particular criterion, reflective model in which a mentor helps a learner reflect on a cognitive aspect of the self-development.

2. According to Rowland, Kimberly Nicole. (2012). E-Mentoring: An Innovative Twist to Traditional Mentoring. Journal of technology management & innovation, 7(1), 228-237. In this research paper some useful insights and guidelines are highlighted for the betterment of mentoring system:

- "Telementoring involves more experienced individuals sharing experiences with younger or less experienced protégés with the mission of helping the protégé achieve a goal and or gain entry into the mentor's world" according to Adams and Crew (2004).
- Through e-mentoring knowledge transfer can facilitate employee learning by allowing the employee to grow and respond to market changes and technology. In other words, knowledge transfer can have an impact on employee learning, employee adaptability and job satisfaction, which ultimately will impact innovation and productivity in the work place.

- According to Harris and Rae (2009), "Web 2.0 technologies encompass a variety of different meanings that include an increased emphasis on user generated content, data and content sharing, collaborative effort, new ways of interacting with Web-based applications, and the use of the Web as a social platform for generating, repositioning and consuming content"

3. Implementation of E-Mentoring System

Here is implementation of various modules in website:

Administrator Module: The administrator manages mentor and student details who register with the system, by creating their profiles. Based on profiles, mentors are assigned to students. Administrator also manages details of countries, universities and colleges involved in the system. Administrator also maintains domains or areas and along with course details. Administrator will generate reports with appropriate details, as and when necessary.

Registration Module: Mentor and Mentee both have to register to access E-Mentoring system.

Mentors Module: Mentor must register E-mentoring system to communicate with the mentee and access information. A mentor can post meeting schedule, response mentee queries, grade mentee based on their progress, provide counseling if mentee is in need.

Mentee Module: A student must register and complete admission formalities before one can begin accessing the information. A student can update and view one's personal details. A student can interact with the assigned mentor, participate in forums, post and view success stories, take tests and post and view achievements.

Reports Module: Administrator can generate various reports like view mentors, list out students under mentors, view success stories and view certifications, colleges and courses details.

Updates and meeting scheduler Module: Mentee will get informed about the meetings that are scheduled.

Query Module: Mentee can post queries.

Handover module: In case if any of the mentor is unavailable during a period, then a mentee under that mentor can be handed over to another mentor who can be provided with access of that mentee's progress history

Grading System Module: Mentee is graded based on overall performance (interaction with mentor).

Weightage Module: The Admin can change the weightage of the parameters (Attendance, Exam performance etc.).

Progress module: The progress of a mentee can be graphically visualized based on past mentoring history.

Temporary Reference Module: If a new fresher wants knowledge about a particular field then he will be assigned to the mentor who has an experience or knowledge about that field

Counseling Module: In case if any of the mentee is observed to be in depression or requires critical care for personal development, then a mentee is sent to counselor through

recommendation by mentor

Mentor policy and guidance Module: How to be a good mentor and Display of mentoring policy like experience, not current class teacher etc.

4. Proposed system

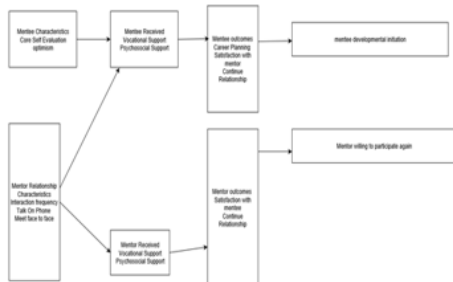


Fig. 1. Block diagram of the proposed system

5. Conclusion

This paper presented implementation of e-mentoring system.

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