



# INTERNATIONAL JOURNAL OF ADVANCE RESEARCH, IDEAS AND INNOVATIONS IN TECHNOLOGY

ISSN: 2454-132X

Impact Factor: 6.078

(Volume 7, Issue 4 - V7I4-1278)

Available online at: <https://www.ijariit.com>

## Need for an Integrated Platform to Bridge the Gaps in Communication of Students & Faculties, at an Intra-College Level – A Survey Analysis

Akshat Mukhriya

[akshatmukhriya09@gmail.com](mailto:akshatmukhriya09@gmail.com)

IMS Engineering College, Ghaziabad, Uttar Pradesh

Achintya Jaiswal

[ajachintyajaiswal@gmail.com](mailto:ajachintyajaiswal@gmail.com)

IMS Engineering College, Ghaziabad, Uttar Pradesh

Deep Singh

[deepsingh11421@gmail.com](mailto:deepsingh11421@gmail.com)

IMS Engineering College, Ghaziabad, Uttar Pradesh

Abhishek Saini

[abhisheksainidmp2016@gmail.com](mailto:abhisheksainidmp2016@gmail.com)

IMS Engineering College, Ghaziabad, Uttar Pradesh

### ABSTRACT

*Being part of the scenario, we have faced and observed various challenges in the context of having a communication gap due to accessibility issues. In order to analyze the severity and minimize these gaps of accessibility in between the professional relationship of faculties & students outside the classroom, we have conducted a survey. This paper will present the review's analysis from the survey, in order to understand the need for an integrated platform. A platform that could be responsibly designed in order to shrink this void. It will conclude with the scope of an integrated platform that can be used to facilitate the needs of them both simultaneously.*

**Keywords:** Online Learning, Cognitive Presence, Online Modes of Education, ICT in Education, Competitive Competence

### 1. INTRODUCTION

A mind is an “open space” and “perpetuity thinking” is inherited. This is the reason how we could be able to better understand the problem in a space with no boundaries. Nowadays, as we are moving towards making the world a better place. To ease the way in between, generally, we try to find out or create the best possible options. In context to the kind of relationship, both students and faculty have to face several issues outside the classroom. After encountering several practical implications of being a student and as the result, we had a feeling of getting temporize and ignored. Students find a little hesitant to contact the respective faculty, in both scenarios (either inside or outside the classroom)[3].

Therefore, we mutually came up with the idea of designing a survey to get a closer view of the scenario. But the other challenge was that how would we able to pick up the other side (i.e. faculty's perspectives and challenges). To en-route that as well we had opted for conducting a combined survey for both of them, simultaneously. While designing the survey, we had curated all the possible aspects from both points of view. It was challenging though, but it was the most efficient way that we could reach out. There were very diversified responses that came up in the picture. That's why we decided to grind up for a more suitable reason as per our analysis.

### 2. MONITORED SURVEY

This survey includes a list of 14 questions, which are designed from observing the prior aspects of the existing situation. Several students and educators had been consulted while collecting these points, considered as most crucial task to initiate it on ground manner. This mixed-methods research study focused upon the implementation of Improvement Plans. Students and Faculties across the state were surveyed using an online instrument regarding their perceptions[2][6].

#### A. Design Ideas

Ten Colleges in seven districts agreed to participate in the survey; including 88 Faculty and 17 Student participants. Students and Faculties had responded to a 14-item survey. This survey has mainly explored 8 themes in general : (1) Improvement Plans, (2) Clear Interaction, (3) Accessibility Culture, (4) Existing Strategies, (5) Professional Development, (6) Data/Monitoring, (7) Community Involvement, and (8) Overall Improvement. Participants responded to survey items using a five-point Likert scale that

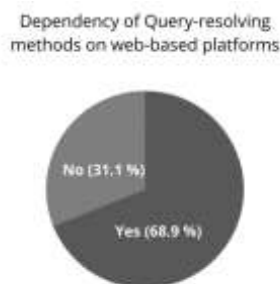
ranged from 5 (strongly agree) to 1 (strongly disagree) and with a simple ‘Yes’ (Agree) or ‘No’ (Not Agree). Analysis of variance was used to compare mean scores of the survey data. The 57 reliability statistic (Cronbach’s Alpha) for this instrument was .971 for Students and .975 for Faculties. Second, open-ended interviews were conducted with Students and Faculties in six public Colleges in five districts. Detailed perceptions were collected using an interview protocol that gathered qualitative data. These six interview College sites were selected based on geographic area, district Free and Reduced Lunch (FRL) rate, and student ethnicity. Twenty-two (22) individual interviews were conducted statewide during the spring of 2021. The interview protocols were structured around the same eight themes used to structure the survey. Additionally, five new themes emerged from the interviews: (1) Leadership Supervision and Faculty Evaluation, (2) Parent and Student Expectations/Goals, (3) Consultant Support, (4) Faculty Leadership, and (5) Student Engagement. The interview protocol asked for participants’ demographic information and posed nine questions about their perceptions of their College’s culture Improvement Plan. Interviews were conducted with Students and Faculties in elementary and secondary settings in five public College districts. A minimum of four interviews were conducted in each district. Probes were identified for use with each question. Interviewers were provided a volunteer statewide for the Accountability of Interview Manual and received training prior to conducting interviews. Quantitative data was disaggregated into a percentage of Learners, free and reduced lunch rate, mobility, and type of College[4][1]. For these categories, Faculty and Student response rates are combined. Mobility rate refers to the rate at which “students move in or out of a College”[5]. In this study, data is disaggregated to compare Colleges with a mobility rate of less than 25% with those Colleges with a rate of 25% or higher. The average mobility rate for the state is 12% only one participating College reported a mobility rate lower than the state average. The final type of disaggregated data is by level. Responses from both Faculties and educators who identify an elementary College as their primary work location are compared to those who identify a middle or high College as their primary location.

**B. Responses**

Responses received by our us were both shocking and interesting at the same time. Both the Faculties and Students had vanished our prior expectations in some aspects and on the same time, in concern to the other ones we got a tremendously amazing agreements. But surprisingly, in few contexts like asking about their existing relationship with each other we have got a blurred and an unbiased response. By offering, e.g., mixed-initiative dialogues, a two-way communication can take place between the faculties and the students, when solving a problem. Through a mixed-initiative dialogue both the user and the system can control the interaction. Thus, this kind of ‘co-operation’ between the student and the system encourages and supports active learning. It is, therefore, important that the knowledge in the system is transparent. If it is not, the user will have to put more effort into finding the appropriate knowledge instead of concentrating on solving the current problem.

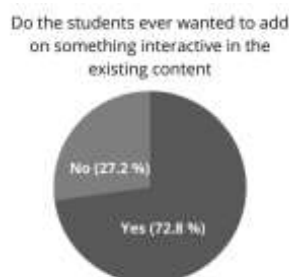
**C. Analysis**

As per the responses we had received after conducting this survey against all the on-ground hurdles. Finally, it was the time to review and analyze them thoroughly. There was a challenge that ‘Do we need to analyze the responses category wise (i.e. both Faculties and Students respectively)?’ or ‘Should we combinedly do the same?’. After looking back to questions asked to them simultaneously, we had decided to analyze the survey in a combined manner. The reason behind performing this was, we had framed the most practical aspects of the situation in a generalized way; so that they both can relate them simultaneously. As an outcome, we have shrunk the observations because it was not feasible to display all the strands concurrently. That’s why we have plotted the responses using a pie-chart in order to get in-depth scanning of all the plots.



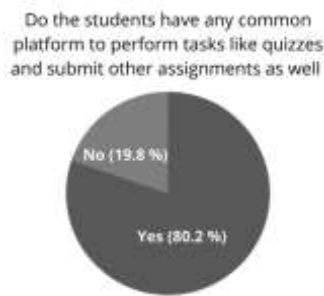
**Fig. 1: Combined plot for the response on ‘Dependency of Query-resolving methods’**

1) In Fig. 1, This is the combined plot for the responses of Faculties and Students on 'Dependency of Query-Resolving methods on the web-based platforms' should be applied, as the majority 68.9% responses are in the favour of this and only 31.1% responses are against it.



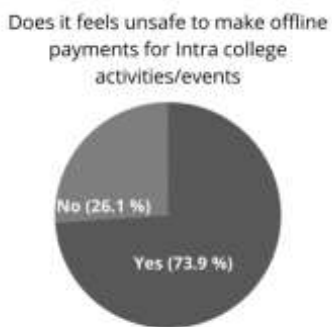
**Fig. 2: Combined plot for the ‘wish to add on something interactive in the existing resources’ regarding informational purposes**

2) In Fig. 2, Again a combined plot for the responses of faculty and students on 'do the students ever wanted to add on something interactive in the existing content' show the positive interest with 72.8% conveying that yes students are interested in adding something interactive and only 27.2% didn't support it.



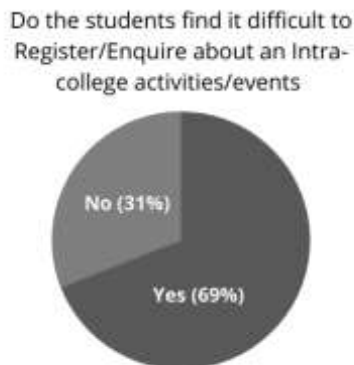
**Fig. 3: Combined plot for the ‘need of a common platform for classroom activities’**

3) In Fig. 3, According to this, the students do need a common platform for classroom activities because the responses from the faculty and students are in favour of it with 80.2% positive responses and just 19.8% negative ones.



**Fig. 4: Combined plot for the ‘chances of feeling unsafe to make offline payments for Intra-college activities’**

4) In Fig. 4, It is clearly shown that yes it does feel unsafe to make offline payments for Intra college activities/events because majorly faculty and student’s responses are supporting it with 73.9% in favour responses and 26.1% are still against it.



**Fig. 5: Combined plot for the ‘difficulties in registering/enquiring about Intra-college activities’**

5) In Fig. 5, Registering/Enquiring about Intra-college activities is difficult for students according to the above chart as the faculty and students responded in the agreement of it with 69% positive and 31% negative response.

**D. Other Inferences**

1) By offering, e.g., mixed-initiative dialogues, a two-way communication can take place between the faculties and the students, when solving a problem. Through a mixed-initiative dialogue both the user and the system can control the interaction. Thus, this kind of ‘co-operation’ between the student and the system encourages and supports active learning. It is, therefore, important that the knowledge in the system is transparent. If it is not, the user will have to put more effort into finding the appropriate knowledge instead of concentrating on solving the current problem.

2) The feedback is provided upon request from the student to avoid disturbing students when they are working with the simultaneously and also to avoid controlling the learning activities. The feedback is presented in various representation forms considering student’s individualized ways of learning. As a help for those students who are not yet able to take responsibility for their own learning the system offers a guided tour, which will give them a path to follow.

3) These responses ensured us to develop knowledge-based hypermedia systems that support students’ active and

individualized way of learning, when pedagogical aspects are considered.

4) Such web-based knowledge systems can serve as knowledge-management systems through the act of sharing and creating new knowledge between an organization's members and in this way, enable them to deal with present day demands more effectively.

5) It is also possible that Faculties create new knowledge when applying different teaching strategies outside the classroom. This new knowledge can then be captured and stored in mentor role, for subsequent sharing with other faculties and students. This means of capturing and enabling access to knowledge gained through a lifetime's teaching experience could be the most valuable tool in any Faculty's armory. Therefore, Mentor can be seen as a useful knowledge-management system.

### **3. CONCLUSION AND FUTURE SCOPE**

It has been perceived that there are lots of pragmatic hurdles in the communication meanings between faculties and students at an Intra-college level. Overall journey, from getting the idea to examine this situation (which covers several innumerable aspects in itself also) to conducting a survey and analyzing it was a bizarre experience for us. We have narrowed our observations and brought out the most climacteric inferences, as shown below :-

- They preferred a query based platform to get their doubts resolved and the logs for the same.
- They are feared about their credentials & info. on existing platforms, for security reasons.
- They encounter having an uncomfotability, while making payments to the unreliable sources in a college.
- Problems like plagiarism, fake context promotions, redundancy, objectionable content were observed to be happened, very often.

While concluding all of these points, the existing situation has made obvious to tender the need of a web-based integrated platform, in order to curtail this communication cum accessibility gap between the faculties and students, at an intra-college level.

### **4. ACKNOWLEDGEMENT**

We have completed this work under the guidance of Prof. Atul Kumar (Associate professor), Department of Computer Science and Engineering at IMS Engineering College, Ghaziabad, Uttar Pradesh. We would like to express our special thanks to our mentor for inspiring us to complete work and write a paper. Without his active guidance, help cooperation & encouragement, We would not lead way in framing this paper. We are extremely thankful for her valuable guidance and support in the completion of this paper. We extend our gratitude to "IMS Engineering College, Ghaziabad, Uttar Pradesh" for giving us this opportunity. Any omission in this brief acknowledgement does not mean a lack of gratitude.

### **5. REFERENCES**

- [1] Sun, A., & Chen, X. (2016). Online education and its effective practice: A research review. *Journal of Information Technology Education: Research*, 15, 157-190. Retrieved from <http://www.informingscience.org/Publications/3502>
- [2] Claiborne, L., Morrell, J., Bandy, J., Bruff, D., Smith, G. & Fedesco, H. (2020). *Teaching Outside the Classroom*. Vanderbilt University Center for Teaching. Retrieved [today's date] from <https://cft.vanderbilt.edu/guides-sub-pages/teaching-outside-the-classroom/>.
- [3] Jody C. Isernhagen, Jackie Florendo, "Bridging the Gaps to Improve Teaching and Learning", Nebraska Statewide Title I Accountability Research, October, 2012, [https://cdn.education.ne.gov/wp-content/uploads/2017/07/2012\\_Bridging\\_the\\_Gaps\\_Studies](https://cdn.education.ne.gov/wp-content/uploads/2017/07/2012_Bridging_the_Gaps_Studies).
- [4] Williams, K.C., & Williams, C.C. (2011). Five key ingredients for improving student motivation. *Research in Higher Education Journal*, 12, 1-23.
- [5] Hughes, M., & Zachariah, S. (2001). An investigation into the relationship between effective administrative leadership styles and the use of technology. *International Electronic Journal for Leadership in Learning*, 5, 1-10
- [6] Mayiwar, N. (2005) Aspects of Consideration when Designing Educational Knowledge Based Hypermedia Systems. *Proceedings of Knowledge-Based and Intelligent Information & Engineering Systems, the 9th International Conference, KES'2005, LNCS/LNAI, Springer-Verlag, Heidelberg, Germany, ISBN:3-540-28894-5, LNAI3681-II, pp. 393- 402.*