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Perceptions of Computer Graduates about Employability Efforts Done by Private Institutes in Punjab

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I. INTRODUCTION

A primary concern of the technical education is to equip students with market ready skills. Students are getting degrees and not getting employment skills. There is an urgent need to explore whether students are getting their required skills from Institutes and universities or just passing and adding themselves into list of unemployment

II. CASE OF IKG PUNJAB TECHNICAL UNIVERSITY KAPURTHALA

I.K.Gujral Punjab Technical University (PTU) was established by an Act of State Legislature on 16th January, 1997, to promote technical, management and pharmaceutical education in the state at degree level and above. The University has the mandate to set up centres of excellence in emerging technologies and for promoting training, research and development in these areas. Presently University has 121 AICTE and 65 UGC institutes affiliated with it. University started its journey with 09 Engineering & 05 Management colleges. IKGPTU provides a platform to its students to get them acquainted with the industrial needs by providing them industrial training throughout the year. The job fairs are organized regularly. The university also participates in different industrial fairs as well as in trade expo. The university has signed MoUs & other collaborations with various national & international companies. IKG PTU is always concerned about the training & placement of its students. Faculty Development Programs have been regularly organized to provide the best faculty by calling resource persons from IITs, IIMs & NITs. Despite of this big structure of education system, there are several big problems such as the education system does not entail any prediction about fail or pass percentage based on the performance. The system doesn't deal with dropouts. There is no efficient method to caution the student about deficiency in their performance during their study in institutes. One of the common problems in colleges and university is that many students feel lost in the crowd. Whether they're struggling to find help with coursework or having difficulty choosing the courses they need. When students enter in the corporate world it becomes very difficult for them to adjust and find a suitable job for them. The main reason is that the productivity of individual may be reflected in employment rates, quality of employment, job satisfaction or employability across jobs or industries and may be the young generation is not ready for that. What about the students who are paying huge amount of fees to Institutes and still not getting employment after completion of their degrees. Surprisingly that list is going on and on day by day. Now a day's company's not only look for knowledge they look for various other skills such as soft skill. This study aims to study perceptions of BCA and MCA students affiliated to PTU about their employability skills.

In today's academic environment, due to increased participation of private institutions, it has become necessary to meet the growing demand & supply of technical education. Most of the professional educational institutions imparting technical education in the state of Punjab are primarily focusing on maximizing the effectiveness of the institutions in terms of quantity of education. Quality is very crucial for student satisfaction, maintaining standards and finally surviving in competitive world. Even after completing the degree from professional institutes and from universities, students may have number of queries in their mind about the sufficient skills to get job, institute's capability to equip them with required skills and do they need further studies. Do they need to spend again for IT certifications which make them employable? In IT field specifically. The challenge for government is to develop and encourage institutional arrangements that establish and maintain the capacity of government, employers, workers, schools, training institutions and universities to respond effectively and play a strategic role in facilitating technological environment. The basic aim of getting technical qualification in the field of computers is not only gaining theoretical knowledge about various IT and CSE subjects but also to have employability skills which employers look amongst fresh graduates too. Fresh graduates are either not getting a good job or getting an under paid job and struggle in market for years to come.

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III. REVIEW OF LITERATURE

Lorraine Dacre Pool and Peter Sewell Centre of UK explained the concept of practical model of Employabilityin their paper “The key to employability: developing a practical model of
graduate employability Lorraine” that allows the concepts to be explained and can be used a framework for working with students to develop skills for employability. This model was developed from the existing research articles on the same issue on employability and from the authors personal experiences. Author has concluded that employability is a lifelong process and noone is ever perfect there is always an improvement scope. Author has mentioned that degree, subject knowledge, understanding and skills are necessary components of employment. It is further found in their research that employers will judge graduates on the basis of their successful completion of degree and how well they can present themselves. They proposed career edge as their Employability Model.[1] Bangsuk Jantawan, Cheng-Fa Tsai from Taiwan presented a paper on "A Classification Model on Graduate Employability Using Bayesian Approaches: A Comparison". A graduate employability model was presented using Bayesian Method to find the most important factors of graduate employability. They compared six algorithms on graduate data sets with some parameters.[2] A paper was presented on " Graduates‟ Employability Skills: Evidence from Literature Review" by Susima Samudrika Weligamage from Sri Lanka Author has said that enhancing graduate employability skills is considered as an important task within the SriLankan Community. Their review findings revealed that skills, definitions, employer expectations and requirement differ capabilities should be taken into formulating the future skills assessments. The authors proposed a model and identified that there is a mismatch between courses offers and expectations of learners. Universities are incorporating extracurricular activities into their study programme and changing their subject to develop specific skills through specialist modules. We also need to identify the skill set that will best serve the future labor market.[3] Dipawalee Santosh Mishra from India published a paper on "Engineering Employability Skills Required By Employers in India" As he says that in Today's scenario placement is a buzzing word. Parents and students both are actually woried about their placements. Author has studied the perception of employers and employees both. According to author Employability skills can also be termed as soft skills. Soft skills such as Effective Communication, Inter personal skills, Personal presentation skills, Technical knowledge, Leadership skills, Self assessment, Goal setting. Students put more efforts to learn technical knowledge whereas it is considered as entry level from employer’s point of view. The studies suggest that the engineering graduates should opt and demonstrate a set of basic skills such as Communication skills, Strong basic, Interpersonal skills, problem solving and good Presentation skills.[4] Canadian council of learning has given this report on “The Impact of Experiential Learning Programs on Student Success" and has discussed that how experiential learning can help students to understand the concept n better way. They have concluded a few points like placement for placement’s sake is not advisable, inappropriate placements. They have proposed the idea of having a dedicated coordinator who oversees all aspects of the program is fundamental to the success of these programs. And of course students must be well prepared. They have said that in addition to academic preparation we need to put in efforts on career preparation also. [5] Azeez Nureni Ayofe from fountain University Osogbo presented a paper on “Exploration of the Gap between Computer Science Curriculum and Industrial I.T Skills Requirements" and suggested the various possibilities to find new role played by universities and employers. Their major focus was on to blend the academic stiffness with industrial relevance. Their study highlighted that over a period of time it has been recognized that industries are continuously broadening and knowledge given by universities is also becoming complex. They have recommended that Institutes should teach industry oriented curriculum. Study shows that computer science curriculum is static in nature whereas industry needs dynamic syllabus. Universities are not ready to train their staff. There is lack of technical expertise and costly IT equipments which also becomes a main hurdle. Paper concludes that students should find a good training company where they may need to spend less but more knowledge should be provided. Proper Planning should be done before career is started.[6] The authors Denise Jackson and Phil Hancock of the university of Western Australia published a paper on " Non-technical Skills in Undergraduate Degrees in Business: Development and Transfer" and found that to get an employment now a days it is not only necessary to have discipline specific skills and knowledge but in addition to this having generic skills is also equally important. Stemming from this, considerable effort and resources have been placed on the successful development and assessment of these skills; catalyzing a growing trend towards the more competency-based and outcomes-focused learning programs traditionally associated with the vocational education sector.[7] Gaby Atfield and Kate Purcell from Institute for Employment Research, University of Warwick presented a paper on " Graduate labor market supply and demand: Final year students’ perceptions of the skills they have to offer and the skills employers seek ". These authors have surveyed the perceptions of skills 3rd year students have to offer and the skills employers seek. Research highlighted that apart from all good points in graduates after completing their education they lack some capacitates such as business awareness and capacity for self management. When compared to the factors like knowledge, critical analysis, logical thinking, inter personal skills, problem solving skills etc. students rated ability to use data

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and entrepreneurship skill as the lowest one. Whereas from student's point of view what employers look for are communication skills and work ethics as highest capability. Only ten percent students admitted that the skills which they developed during their education had not made tem employable. [8] Denise Jackson from The University of Western Australia presented a paper on " An international profile of industry-relevant competencies and skill gaps in modern graduates" has favored that instead of blaming the soft skill deficiencies and making policies to implement generic skills, industry should favor industry relevant competencies for graduates. The paper has explored various business needs form today's/ graduates and depicts the graduate skill gaps. Author has compiled various skills required by a graduate under different heads such as task requirements, decision making, problem solving, ethics and responsibilities, written communication and many more. [9] Venetia Saunders & Katherine Zuzel worked on a paper titled as "Evaluating Employability Skills: Employer and Student Perceptions". They studied the employability skills of graduates of bimolecular science and their employers. Study rated new graduates vey low as compare to experienced. Student self assessment of their skills and employability skill profile was compiled. They concluded as By introducing the profile at level 1 in degree programs, students have been encouraged to forward plan for employment and embark on decision-making processes from an early stage.[10] Ying-Ju Pana, Lung-Sheng Lee published a paper on "Academic Performance and Perceived Employability of Graduate Students in Business and Management – an Analysis of Nationwide Graduate Destination Survey". Authors of Taiwan have studied on perceived employability of graduates in Management field at national level. They founded 4 employability skills which were associated with academic publications such as "foreign language ability", "computer literacy", "application of theory to work", and "stability and pressure resistance". Their findings clearly states that employability is not only the process after completing their courses rather it is also related to academic publication of work that provides potential benefit to enhance employability.[11] Dimitra Petrakaki, Tony Cornford, Ralph Hibberd, Valentina Lichtner, and Nick Barber did their research on " The role of technology in shaping the professional future of community pharmacists: the case of the electronic prescription service in the English NHS". Authors did research on the role of technology in shaping the professional future of pharmacist. Their paper considered that how ICT helps in shaping the professional future of community pharmacists. The results showed that technology has the potential to centralize and decentralize, automate and information practices and processes, generate new information, mediate communication and render outputs visible. [12]

Sanja M. from University of Rijeka presented a paper on "An Overview of Computer Programming Teaching Methods". Authors have done research on different computer programming teaching methods for higher education courses. As computer programming is one of the major subject and need to be concentrated and focused to get and effective results authors Croatia have shown that it is difficult to grasp and therefore an appropriate teaching methodology should be adapted to teach programming. Teachers task is to select an appropriate teaching method, or a blend of methods, to devise as- assignments for students accordingly, and after presenting the concepts in the way he/she has chosen, to shift the focus on students, motivating them to engage in assignments he has devised.[13] Anthony S. Bieda from US presented a report on "Closing the Gap between Career Education & Employer Expectations: Implications for America's Unemployment Rate" author tries to find out the relationship between the unemployed and the availability of skilled workforces. Who are willing to move from place to place to get an employment? Unfortunately availability of qualified workers is deficient, either due to lack of appropriate skills, lack of physical proximity to the communities where the job openings exist, or both as per report. The employment skill gaps are increasing unemployment. [14] A paper titled "Critical success factors for software projects: A comparative study" was presented by Mohd Hairul Nizam Nasir and Shamsul Sahibuddin from Malaysia. In their study they found Twenty-six critical success factors to be related to software project success. Their study was based on critical success factors responsible for software projects in industry form the available literature from reputed journals.[15]

Students Perceptions about Employability of Institutes and Course Curricula

IV. RESEARCH METHODOLOGY

As a part of research and to have a clear picture of the activities organized by the institutes specifically for the students to enhance their skill set, a self-designed questionnaire (using likert scale of 5) was prepared and students were asked to fill data. So a survey was conducted among students in their fourth and sixth semester of MCA. Some students filled data very seriously and gave a genuine feedback whereas a few just copied the answers and did not attempt it carefully. Upon looking at the data filled by students, it was observed that a majority of the students gave suggestions to improve the courses of BCA and MCA also. Nearly 300 students of different Institutes of Ludhiana (Punjab India) Region participated in this survey. Data was collected through Google docs as well as manually. Then data Pre processing was done to maintain the uniformity in data. Using SPSS tool analysis is done.

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V. ANALYSIS AND RESULTS

The analysis of the perceptions of students about activities conducted throughout semesters which plays an important role in getting employability have been discussed in this section of the study.

A. Activities Organized by Institutes to Enhance Students' Skills

There were several activities being organized by the institutes to enhance the skills in students. These activities include Guest Lectures from professors of other Institutes and Universities, Guest Lectures from Industry experts, Industrial Visits, Subject wise Presentations, IT Workshops, Debugging of codes, Implementation of various Software Testing Techniques, Installations of Software by students, IT Quiz, IT Certifications, Semester wise Additional Projects, Workshops on latest technologies, Subject wise Online Test, Online Assignment Submission, Time bound Assignment, Personality Development workshops, Literary activities such as debates/extempore/turncoat/dec, Problem Solving discussions, Logical Reasoning Tests, Host Inter college functions, Participation in National level competitions in IT Competitions and Teaching Foreign Language.

The students were asked to register their level of agreement on various activities organized by the institutes to enhance the skills of students. They responded in terms of 'strongly disagree', 'disagree', 'neutral', 'agree' and 'strongly agree'. These responses assigned score in the respective order of 1, 2, 3, 4 and 5. The mean scores were calculated to assess the overall level of agreement of the students as a whole. The results so obtained have been presented in Table 5.1.1

A perusal of Table 5.1.1 shows that the students agreed on 3 of 22 (13.64%) activities, which were Subject wise Presentations with mean score of 3.67, Installations of Software by students (3.54) and Guest Lectures from Industry experts (3.50). The mean scores were nearer to 4 and hence the students expressed agreement on these activities.

Students could not depict any definite position on 18 (81.82%) activities. These activities included Semester wise Additional Projects (3.45), Guest Lectures from professors of other Institutes and Universities (3.45), IT Workshops (3.43), Debugging of codes (3.36), Host Inter college functions (3.35), Time bound Assignment (3.33), IT Quiz (3.30), Workshops on latest technologies (3.29), Personality Development workshops (3.28), Problem Solving discussions (3.27), Implementation of various Software Testing Techniques (3.24), Literary activities such as debates/extempore/turncoat/dec (3.20), Logical Reasoning Tests (3.20), IT Certifications (3.19), Industrial Visits (3.13), Online Assignment Submission (2.98), Participation in National level competitions in IT Competitions (2.94) and Subject wise Online Test (2.74). All the mean score were nearer to 3. /hence the students neither agreed nor disagreed on these activities and they could not take any position. This showed that could not get the desired benefits from these activities. The students disagreed on the activity of Teaching Foreign Language with mean score of 2.40. The variation in mean scores ranging from 2.40 to 3.67 was significant as indicated by the calculated F-ratio of 5.98.

Table 5.1.1: Extent of agreement among students on different activities organized by the institute

Activity Organized	Mean	SD	Mean%	Overall
1. Guest Lectures from professors of other Institutes and Universities	3.45	1.00	69.04	N
2. Guest Lectures from Industry experts	3.50	1.07	69.92	A
3. Industrial Visits	3.13	1.21	62.65	N
4. Subject wise Presentations	3.67	1.01	73.36	A
5. IT Workshops	3.43	1.18	68.64	N
6. Debugging of codes	3.36	1.24	67.12	N
7. Implementation of various Software Testing Techniques	3.24	1.30	64.90	N
8. Installations of Software by students	3.54	1.26	70.80	A
9. IT Quiz	3.30	1.14	66.08	N
10. IT Certifications	3.19	1.15	63.84	N
11. Semester wise Additional Projects	3.45	1.10	69.07	N
12. Workshops on latest technologies	3.29	1.16	65.76	N
13. Subject wise Online Test	2.74	1.26	54.88	N
14. Online Assignment Submission	2.98	1.19	59.60	N

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15. Time bound Assignment	3.33	1.14	66.56	N
16. Personality Development workshops	3.28	1.11	65.68	N
17. Literary activities such as debates/extempore/turncoat/dec	3.20	1.11	64.08	N
18. Problem Solving discussions	3.27	1.26	65.44	N
19. Logical Reasoning Tests	3.20	1.08	64.00	N
20. Host Inter college functions	3.35	1.24	66.96	N
21. Participation in National level competitions in IT Competitions	2.94	1.25	58.88	N
22. Teaching Foreign Language	2.40	1.31	47.92	DA
Average	3.24	0.77	64.78	N
F-ratio	5.98**			

'DA' stands for 'disagee', 'N' for 'neutral' and 'A' stands for 'agree'.
'**' stands for significant at 1% level
The overall mean score came to be 3.24, nearer to 3 i.e. neutral position. Thus, the students were of the opinion that they could not get the desired benefits from different activities. In other words, the activities organized in the institutes could not help enhance their skills, which in turn may enhance the employability of the institutes and curricula. Therefore, keeping in view the opinion of the students, the target group of the study, effective modification should be made in the organization of these activities and also to organize additional activities in the institutes.

B. Factor Analysis of Activities Organized by the Institute To Enhance Students' Skills

The factor analysis was employed to determine the grouping of various activities on the basis of their nature. This was done through Principal Component Technique. The results of the analysis have been given in Table 5.2.1

Table 5.2.1: Factor analysis of activities organized by the institutions

Activity	Factor-1	Factor-2	Factor-3	Communality
1. Guest Lectures from professors of other Institutes and Universities	0.425	0.679	-0.009	0.64
2. Guest Lectures from Industry experts	0.455	0.649	0.056	0.63
3. Industrial Visits	0.637	0.299	0.295	0.58
4. Subject wise Presentations	0.743	0.296	-0.024	0.64
5. IT Workshops	0.600	0.127	0.367	0.51
6. Debugging of codes	0.082	0.844	0.150	0.74
7. Implementation of various Software Testing Techniques	-0.066	0.820	0.270	0.75
8. Installations of Software by students	0.169	0.779	0.099	0.65
9. IT Quiz	0.693	0.202	0.325	0.63
10. IT Certifications	0.207	0.439	0.519	0.51
11. Semester wise Additional Projects	0.473	0.326	0.248	0.49
12. Workshops on latest technologies	0.573	0.118	0.562	0.66
13. Subject wise Online Test	0.381	0.073	0.656	0.58
14. Online Assignment Submission	0.179	0.457	0.569	0.57
15. Time bound Assignment	0.646	0.096	0.257	0.49
16. Personality Development workshops	0.468	0.374	0.429	0.54
17. Literary activities such as	0.629	0.182	0.387	0.58

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debates/extempore/turncoat/dec				
18. Problem Solving discussions	0.625	-0.100	0.486	0.64
19. Logical Reasoning Tests	0.284	0.425	0.600	0.62
20. Host Inter college functions	0.685	0.070	0.281	0.55
21. Participation in National level competitions in IT Competitions	0.477	0.298	0.536	0.60
22. Teaching Foreign Language	0.261	0.021	0.813	0.73
Eigen Value	9.67	2.37	1.20	
% Variance	43.93	10.76	5.44	
% Cum. Variance	43.93	54.69	60.13	
KMO-MSA		0.922		
Bartlett's Test of Sphericity		3177.12		
d.f. = 231 sig. = 0.000				

Naming of factors

Factor	Name
F-1	Seminars/Workshops/Trainings
F-2	Lectures and practical
F-3	Internet usage

The KMO measure of sampling adequacy (KMO-MSA) worked at 0.922, which was significant at one percent level. This proved that the data set was fit for factor analysis. Similarly, the communalities ranged from 0.49 to 0.75, which were quite high. This indicated that there existed multiple correlations between different activities. Hence factor analysis should be run.

The Eigen value came to be 9.67 for factor-1, 2.37 for factor-2 and 1.20 for factor-3. Total variance explained by the three factors was 60.13 percent. Three factors came to be as under:

Factor-1 included the following 11 activities:

3	Industrial Visits
4	Subject wise Presentations
5	IT Workshops
9	IT Quiz
11	Semester wise Additional Projects
12	Workshops on latest technologies
15	Time bound Assignment
16	Personality Development workshops
17	Literary activities such as debates/extempore/turncoat/dec
18	Problem Solving discussions
20	Host Inter college functions

Factor-2 included following 5 activities:

1	Guest Lectures from professors of other Institutes and Universities
2	Guest Lectures from Industry experts
6	Debugging of codes
7	Implementation of various Software Testing Techniques
8	Installations of Software by students

Factor-3 included following 6 activities:

10	IT Certifications

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13	Subject wise Online Test
14	Online Assignment Submission
19	Logical Reasoning Tests
21	Participation in National level competitions in IT Competitions
22	Teaching Foreign Language

The factors were named as 'seminars, workshops and trainings', 'lectures and practical' and 'internet use'.

1) *Seminars, Workshops and Trainings:* These activities included Industrial Visits, Subject wise Presentations, IT Workshops, IT Quiz, Semester wise Additional Projects, Workshops on latest technologies, Time bound Assignment, Personality Development workshops, Literary activities such as debates/extempore/turncoat, Problem Solving discussions and Host Inter college functions.
2) *Lectures and Practical:* These activities included Guest Lectures from professors of other Institutes and Universities, Guest Lectures from Industry experts, Debugging of codes, Implementation of various Software Testing Techniques and Installations of Software by students.

3) Internet Use: These activities included IT Certifications, Subject wise Online Test, Online Assignment Submission, Logical Reasoning Tests, Participation in National level competitions in IT Competitions and Teaching Foreign Language.

C. Satisfaction among Students with Skill Development and Facilities Provided by Institutes

The management and technological institutes made efforts to develop the skills in the students and provided different facilities to the students. The skill development efforts included theoretical knowledge & basics of various subjects, practical exposure, overall development, knowledge on upcoming technologies in IT sector and extracurricular activities. The facilities provided by the institutes included books and journals etc., infrastructure of the institute, softwares and placement opportunities provided by the institutes. The students were asked to rate these efforts and facilities in terms of excellent, above average, average, below average and very poor. These attributes were assign score in the respective order of 5, 4, 3, 2 and 1 and the mean scores were worked out to estimate the overall rating given by the students. The results of the analysis have been presented in Table 5.3.1

Table 5.3.1: Rating score of skill development efforts and facilities provided by the institute

Measures Taken	Mean	SD	Mean%	Overall
Theoretical Knowledge and basics of various subjects given by Institute	3.97	0.94	79.44	AA
Practical exposure given by Institute	3.59	0.97	71.84	AA
Efforts put in by Institute on your overall development	3.53	1.06	70.56	AA
Knowledge on upcoming Technologies in IT sector	3.19	1.18	63.84	A
Extracurricular Activities conducted by Institute	3.40	1.16	68.08	A
Facilities such as books and journals etc provided by Institute	3.55	1.10	71.04	AA
Facilities such as Infrastructure provided by Institute	3.67	1.09	73.36	AA
Facilities such as Softwares provided by Institute	3.54	1.16	70.72	AA
Placements efforts done by Institute	3.20	1.16	64.00	A
Average	3.52	0.70	70.32	AA
F-ratio	4.87**			

'A' stands for 'average', 'AA' for 'above average' and ** stands for significant at 1% level

It is evident from the analysis that 6 out of 9 (66.67%) of the efforts and facilities were above average. These included Theoretical Knowledge and basics of various subjects given by Institute with mean score of 3.97, Practical exposure given by Institute with mean score of 3.59, Efforts put in by Institute on your overall development with mean score of 3.53, Facilities such as books and journals etc. provided by Institute with mean score of 3.55, Facilities such as Infrastructure provided by Institute (3.67) and

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Facilities such as Software's provided by Institute with mean score of 3.54. All the mean scores were nearer 4 and hence these efforts and facilities were above average.

The remaining 3 (33.33%) efforts and facilities were at the average level of performance. These included Knowledge on upcoming Technologies in IT sector with mean score of 3.19, Extracurricular Activities conducted by Institute with mean score of 3.40 and Placements efforts done by Institute (3.20). All the 3 efforts and facilities were nearer to 3 and hence these were just at the average level. The variation in mean scores ranging from 3.19 to 3.97 was found to be significant at 1 percent level as indicated by the F-ratio of 4.87.

It is highlighted by the analysis that none of efforts and facilities was excellent in students' perceptions. However, the overall level of these efforts and facilities were above average level of performance. Therefore it can be safely concluded that the efforts and facilities for the skill development of students was somewhat satisfactory. Even then there is a scope of 1.48 points i.e. about 30 percent of improvement in the efforts and facilities provided by the institutes. Therefore, in order to achieve the target of skill development for employability more efforts are needed.

D. Suggestions by Students undergoing BCA/MCA Courses

Data was collected from nearly 300 students and only 33 students gave suggestions as shown. And it is found that there is lot of grammatical mistakes which shows that students of BCA and MCA are not capable enough to express themselves and need to work more on their communication skills. Presentation skills are also considered important by some of the students as it builds confidence in them. Practical exposure was given highest weight and many have proposed to have more of hands on experience in computer field.

It may treat same as mba students	Practical knowledge should be increase.	Should be very update, précised, and thought practically rather than theoretically
Prepare the student as per the requirement of industries. And in masters prepare or get trained to students in one technology which he/she like.	More practical knowledge should be involved	More practical assignments.
Be practical more	Teachers should properly guide the students practically More than theoretically	Improves a lab classes and skills
Practical and industry standard education and courses	Increase programming ,live projects, increase using foreign languages in institute	Practical implementation should be compulsory in every institute and university. secondly study should be according to the industrial requirement not according to syllabus
Practical exposure	I think communication skills of I.T. students are weak then others. It should improve.	Try to be practical
Institute should work on Students requirements	Give live examples for practice	Excellent study and moreover presentations part is best as it enhances one confidence level
There should b oral viva exam for each subject either it's a practical subject or theory as this will help students in giving answers to the interviewer along with this it will boost their confidence as in interviews you are supposed to give crisp and clear answers not to beat abt d bush as we do in theory exams write 8 pages for 16 marks question	More group Discussions should be done	Must focus on aptitude (mental ability) tests and also must be focus on mobile app development
specific skill development classes should be targeted rather than overall computer knowledge	Try to take more presentations on different topics related to new technologies.....	made it mandatory for students to use Linux

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Student should share their code samples using a college based platform like github. Challenging one another can inspire them.	Practical exposure should be there	Industrial tours should be held

VI. CONCLUSION

Overall, the students were of the opinion that they may not get the desired benefits from different activities. Study shows that three factors which came out as result are more or less make students more employable such as Seminars/Workshops/Trainings, Lectures and practical, Internet usage because these kind of activities give computer students more and more chance to improve themselves and acquaint themselves with employable skills which are required in industry.

In other words, we can say that the activities organized in the institutes are not really helping 100 percent to enhance their skills, which in turn may enhance the employability of students in these institutes. The study also revealed that activities to improve the placement of students were not done frequently by the management and technology institutes. This might have adversely affected the placement of students and employability of the institutes. This again is a serious concern for the management of the institutes.

BIBLIOGRAPHY

[1] L. Dacre Pool and P. Sewell, "The key to employability: developing a practical model of graduate employability," Educ. + Train., vol. 49, no. 4, pp. 277–289, 2007.
[2] B. Jantawan and C. Tsai, "A Classification Model on Graduate Employability Using Bayesian Approaches: A Comparison," Int. J. Innov. Res. Comput. Commun. Eng. (An ISO Certif. Organ., vol. 3297, no. 6, pp. 4584–4588, 2007.
[3] S. S. Weligamage, "Graduates" Employability Skills: Evidence from Literature Review," Asaihl, pp. 115–125, 2009.
[4] A. Zaharim, Y. Yusoff, and M. Omar, "Engineering Employability Skills Required By Employers In Asia," Proc. 6th WSEAS Int. Conf. Eng. Educ. Eng., vol. 6, no. 9, pp. 195–201, 2009.
[5] C. Co. on Learning, "Programs on Student Success," vol. 2009, 2009.
[6] A. N. Ayofe and A. R. Ajetola, "Exploration of the Gap Between Computer Science Curriculum and Industrial I.T Skills Requirements," J. Comput. Sci., vol. 4, no. 1, p. 10, 2009.
[7] D. Jackson and P. Hancock, "Non-technical Skills in Undergraduate Degrees in Business: Development and Transfer," Educ. Res. Perspect., vol. 37, no. 1, pp. 52–84, 2010.
[8] G. Atfield and K. Purcell, "Graduate labour market supply and demand: Final year students' perceptions of the skills seek," Warwick Inst. Employ. Res., no. September, pp. 1–30, 2010.
[9] D. Jackson, "An international profile of industry-relevant competencies and skill gaps in modern graduates," Int. J. Manag. Educ., vol. 8, no. 3, pp. 29–58, 2010.
[10] V. Saunders and K. Zuzel, "Evaluating Employability Skills: Employer and Student Perceptions," Biosci. Educ., vol. 15, no. 1, pp. 1–15, 2010.
[11] Y.-J. Pan and L.-S. Lee, "Academic Performance and Perceived Employability of Graduate Students in Business and Management – An Analysis of Nationwide Graduate Destination Survey," Procedia - Soc. Behav. Sci., vol. 25, pp. 91–103, 2011.
[12] D. Petrakaki, T. Cornford, R. Hibberd, V. Lichtner, and N. Barber, "The role of technology in shaping the professional future of community pharmacists: The case of the electronic prescription service in the english national health service," IFIP Adv. Inf. Commun. Technol., vol. 356 AICT, pp. 179–195, 2011.
[13] S. Mohorovičić and V. Strčić, "An Overview of Computer Programming Teaching Methods," Cent. Eur. Conf. Inf. …, pp. 47–52, 2011.
[14] A. S. Bieda, "Closing the Gap between Career Education & Employer Expectations : Implications for America ' s Unemployment Rate," no. December, pp. 1–11, 2011.
[15] M. H. N. Nasir and S. Sahibuddin, "Critical success factors for software projects : A comparative study," Sci. Res. Essays, vol. 6, no. 10, pp. 2174–2186, 2011.

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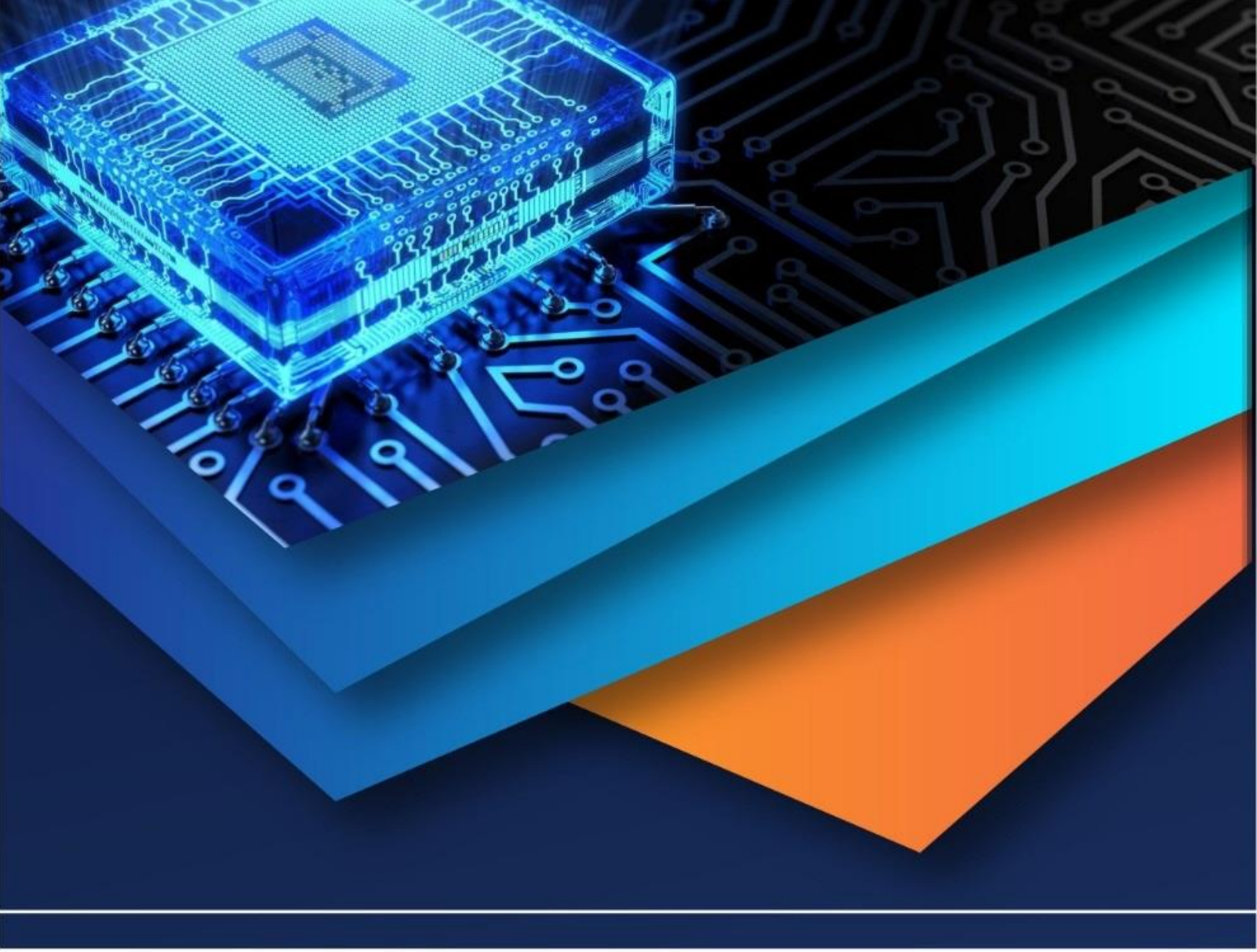

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