A Study on Learning Perceptions among Computer Science and Engineering Graduates

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Abstract:
In today’s world the professor role is to teach students the art of computer programming language, where students has to learn and execute programs in their laptop or systems. The professor has to manually prepare program code and ask the students to execute the code in their laptops. The professor has to teach students with the talk and chalk methodology in the class and giving program demo in the lab sessions. The advances in the field of Information and Communication Technology has penetrated the academic levels to reach globally, where in the professor can write / edit the teaching material sent to the students through mail or by any learning tools which are available with the professor. The trends in the field of information technology where learning content can digitized, stored and sent to the students at any point of time. Keeping this in mind a software is developed to upload the learning content by the professor wherein the students can download the content and read the material. The software developed is known as knowledge learn.

Keywords — ICT, Knowledge Learn, Learning Content.

INTRODUCTION
This paper analyzes the learning perceptions among computer professional students. The professor teach students the computer concept by traditional method of talk and chalk methodology. The professor delivers the programming techniques by inducting the programming language by giving examples and illustrations which are expressed by the way of talk and chalk methods. The drawback in traditional method of teaching and learning works only with the students with knowledge capability and students with less capability of knowledge could not able to understand the concepts of programming knowledge. Keeping this in mind the learning tool was developed known as “Knowledge Learn”. Administrator can install Knowledge learn by using easyphp which is available as open source. The advantage of using knowledge learn is to create online materials using PowerPoint, Interactive Flash Content redistribute intranet-based course content by using scorm methodology. The software helps to keep track of students learning progress and if problem is faced by the student in reading the learning material, the learning tool will inform the professor and the professor will interact with the students online. The learning tool displays the grades.
and assess student’s performance. The students were giving the individual login-id and password

**Literature Review**

Tyan Nguyen[1] has studied about the effectiveness of e-learning he highlights on brick and mortar classroom, his study examines the evidence of the effectiveness of online learning by organizing and summarizing the findings and challenges of online learning into positive, negative, mixed, and null findings. Attention is paid to the meta-analyses on the effectiveness of online learning. Eiman Abdel Meguid and Mathew Collins[2] has highlighted on traditional learning and student centered activities R.K.Kavitha and W.Jaisingh[3] has students experiences in blended learning environments and they have applied learning analytics in their and they inferred that the results analyzed blended learning is more beneficial to the students.

Liliana Cuesta Medina[4] has analyzed on blended learning environments evolving the concept of strategy, delivery mode and opportunity in pedagogical approach. Amosa Isiaka Gambari[5] has investigated the effectiveness of blended learning for undergraduates in Kwara State, Nigeria. Data collection was made. It is found that enhanced mode in the blended learning method.

**Statement of the Study Problem**

In Classical learning method of teaching, professor takes the major role of addressing the students. Students are the recipient of information and gain knowledge. The drawback of the classic learning is that the content is cyclostyled for the students. Keeping in mind the above mentioned aspects into consideration Knowledge-learn was developed to supplement the need of the students.

**Objectives of the Study**

1. To study the interaction between teaching and learning process.
2. To create or edit the learning content online.
3. To measure the professor performance by viewing the students feedback online.
4. To measure the student academic performance with regards towards online and traditional learning methods.

**Scope of the Study**

The study titled learning perceptions among computer engineering students covers the aspects of teachers and students who are using the learning tool “Knowledge learn” with regards to students learning methods towards online learning.

**Materials and Methods**

![Figure-1: Knowledge Learn System](image-url)
1. Student: Student’s can type their respective login-id and password to enter into the learning tool. He/She no longer have to wait for the professor to give extra information in a particular topic. Student can access the learning tool to get extra information on the topic. Student can participate with experts and teachers in a distributive environment at any given point of time.

2. Teacher: Teacher interacts with students in classroom environment. Teacher designs the material and upload the learning content.

3. Place: Classroom restriction is avoided rather it is extended to virtual classroom where learning takes place synchronous mode of communication between learners, experts and other academicians.

4. Time: Time is considered to be an important variable in a traditional lecture method. In the case of distributed learning environment, time is not an important constraint wherein the learning activity is explored and expand based on the student’s interest and knowledge.

7. Data Analysis and Interpretation

7.1 1 Demographic Profile

Around 100 student 64% of the respondents belong to engineering category and 36% of the respondents belong to master of computer applications category. 60% of the respondents belongs to male category, 40% of the respondents belongs to female category. 64% of the respondents belong to BE (CSE) category, 26% of the respondents belong to MCA category and 10% belongs to MCA (Integrated) category. 44% of the respondents belongs to urban category, 28% belongs to rural category and 28% belongs to semi urban category.

Table-1: Opinion about Classical Learning Course:

<table>
<thead>
<tr>
<th>Factors</th>
<th>Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>Course Objectives</td>
<td>2.48</td>
</tr>
<tr>
<td>Student Expectation</td>
<td>2.46</td>
</tr>
<tr>
<td>Course Arrangement</td>
<td>2.48</td>
</tr>
<tr>
<td>Student Viability</td>
<td>2.32</td>
</tr>
<tr>
<td>Content Duration</td>
<td>2.40</td>
</tr>
</tbody>
</table>

Source: Primary Data

Fig-1: Factors which influence Traditional Learning Course

Opinion about the Online Course

Table-2 shows the factors relating to online learning which consisting of objectives, that the Unit arrangement and Objectives were strongly related to each other. It was also found that the Expectation (Mean 2.46) is closely related to Objectives and Unit Arrangement.
It is observed from Table-2 that the Online Course Objective with mean value of 2.62 states that the students extremely enjoying online learning methods Online Learning Objectives with mean value of 2.52 and online expectation of the course with mean value of 2.56 and online unit arrangement of the course with mean value 2.56) suggests that students prefer online course

<table>
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</tbody>
</table>

CONCLUSION
Through Questionnaire data was collected and analyzed, presented the results. It is evident that Online Learning is better than Classical Learning in the context of web based courses.

References

Classical Learning Method: It is evident from the facts that in traditional learning methods the course objective with mean value is 2.48 and student expectation is 2.46 and course arrangement is 2.48 and student viability is 2.32 and content duration is 2.40

Online Learning Method: It is evident from the facts that Online Course Objectives is 2.52, Online Expectation is 2.56, Online Unit Arrangement is 2.56, Online viability is 2.32 and Online course duration is 2.62.

Inference: It is from the conclusion that Classical Learning Method with mean value is 2.42 and Online Learning Method with mean value is 2.51. Hence it is evident that Online Learning is better than Classical Learning Method.