Using Online Learning Resources: A Self Learning Tool

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Abstract

The current educational system requires different teaching, learning and assessment strategies and tools. In particular, the technological development has made the learning processes significantly high comfortable dimensions. But, using the online resources in educational processes requires most critical thinking with respect to searching and evaluation. The abundantly available resources shall not be useful until proper processes have been followed to link the resources with respect to the required outcomes. The current education system needs more self-learning processes in order to gain the required knowledge. In this paper, we would like to discuss the different types of learning resources and utilizing them optimally with respect to the learning requirements. Apart from this, we have provided methodologies and steps to use the resources meaningfully in knowledge acquisition, accumulation and storing. Also we have suggested some basic ideas to use the available learning resources as a self-learning tool.

Keywords: learning processes; learning resources; learning tools; knowledge acquisition; self-learning.

1. INTRODUCTION

The technological developments and day-to-day changes in the resources availability have amplified the teaching and learning processes to higher degrees. The technology has changed the educational processes to develop and use innovative and contemporary methodologies. The learning processes have become easier due to this development. The resources are available abundantly in the internet. Many resources shall be accessed freely and referred for teaching and learning purposes. The Wiki's and Blogs contain optimum information pertaining to educational needs. But, how to use them in correct direction is the major concern in the educational processes. The developed nations have proper systems and policies to use these resources in knowledge acquisition and capture. Some developing and under developed nations need to concentrate on developing such policies and strategies in order to use the full potentials of the internet resources. In particular, Middle East countries are in considerable development and improvement stages of internet resource usage.

The study on using the technology in educational processes has been started in last decades itself

and due to which the hypermedia technology has tremendously improved. The teaching and learning processes require this technology in developing contemporary methodologies. The online resources are developed to reach the people in any corner of the world. The technology has enhanced the required educational resources to be available at our door steps 24 hours a day and 7 days a week. The learning process has been extremely simplified due to this development. The knowledge acquisition and sharing became a most important issue in this environment. The open source and knowledge bases are developed in order to provide sufficient knowledge not only to the learners but also to everyone.

This abundantly available resource requires critical evaluation and thinking strategies to optimally utilize in correct direction. Information seeking, search and retrieval are the potential terms in this technological world to achieve the desired knowledge. The available resources need to be properly collected and referred in knowledge management processes. They have to be linked to the learning processes in substantial ways to acquire the knowledge. The current learning processes require various self-learning tools. Self-

motivation needs to be increased and promoted with the help of such self-learning tools.

In this paper, we have discussed the various learning resources which are beneficial in self-learning. Also, we have discussed different methodologies and steps in using the online resources constructively in self-learning processes. We have suggested some ideas to optimally use the internet resources in knowledge acquisitions. The paper concentrates the processes and usages of the resources with respect to learning processes.

1.1. Statement of Problem

The technology has developed various gadgets and tools to assist the educational processes. The major developments are in internet resources. The learners need to use the full potentials of the resources by applying critical thinking and selective methodologies. Due to various reasons, the internet resources could not be used fully in learning processes. The innovative and constructive search techniques could not be clearly understood by the learners to use the internet resources in their learning processes. The developed nations are clearly guiding the students to utilize the online resources from school level itself. But, the developing and underdeveloped nations are lacking at some point with respect to the utilization of these resources in educational processes, in particular, learning processes. The paper identifies the gap between the potential requirements, availability and utilization of the internet resources in learning processes with respect to Middle East countries. The learners do show very poor interest in using the internet resources constructively in their learning processes. The paper identifies the major reasons for this short falls.

1.2. Research Questions

- 1) What are the learning resources that shall be potentially safe to use in educational processes?
- 2) What are the flaws in utilizing the full potentials of the internet resources in learning processes?

2. LITERATURE REVIEW

Using the online resources in educational processes had started in early 90s itself. Various studies were conducted in this area. We studied numerous research articles on this issue. MacDonald. C.J., Stodel. E.J., Hall. P., & Weaver. L [7] had conducted a study on the impact of online learning resources to increase palliative care. Faux and Hughes [3] conducted a study to determine the

effectiveness of using the internet as a primary teaching method. They found that the students preferred internet instruction and they performed better than the traditional teaching style.

As Lu. J., Yu. C.S. & Liu. C (2003) in [6] said that the graduate students pursue learning in an impersonal environment due to their mental maturity, rich experience and higher reading level. As they discussed WebCT has become an important IS applications for higher education. They have quoted the general belief that WebCT is believed to support development of problem solving and critical thinking.

Coates. H., James. R. & Baldwin. G. (2005) [2] studied the impact of learning management system on learning experience. They suggested that the decisions about the teaching and learning should not be restricted to checklist evaluations. According to Tunji et al (2011) [9], the students and staffs need to be adequately trained to use ICT.

Geith and Vignare in [4] examined the open educational resources and online learning growth to address the global educational gap. They tested the funding and financial sustainability for online learning. As White & Manton [8] said, overall use of digital resources to support teaching and learning in higher education is widespread. The reusing and repurposing of online resources should be both simpler and safer.

Bond. C.S., Fevyer. D. & Pitt. C. (2004) referred in [1] had conducted a study to identify the resources available to help students to utilize optimally the internet resources by developing the necessary skills and to identify the study guide elements to help the students to select the appropriate sources guidance. They found that the focus group students felt the internet resources were outside of their own comfort zone.

As Khalifa & Lam (2002) in [5] said, educators have witnessed proliferation of web based learning applications in their educational processes. According to the authors, web learning environments have made learning more convenient by stretching the spatial and temporal barriers.

Hughes (2013) studied the use of online internet resources by international students. He found that the international students' experiences an array of difficulties and strengths. He found that there were some imbalances between information skills and information use.

3. RESEARCH METHODOLOGY

For this research purpose, both qualitative and quantitative analyzes were conducted. For

qualitative analysis, different literatures related to online resource usages were studied intensively. The research outputs were analyzed as considering the internet resources as learning tool. Various secondary data available in the internet were analyzed thoroughly. For primary data purposes, a focus group study was conducted. 94 students of Sur University College studying Artificial Intelligence at bachelor level and Mathematics for IST at diploma level were observed in the classroom for their various learning processes. The students were clarified that the study is only for research purposes and no one was compelled to participate in the study to maintain academic integrity. All the 94 students were given an assignment on referring online resources for the answering purposes. The answers were analyzed for their internet usage, potential utilization of online resources and learning pedagogies. 42 students were taken to computer labs and given an assignment to refer the online resources. Their learning resource searching techniques were observed and analyzed with respect to specific resource usages.

3.1 Demographic Analysis

The student's profiles were analyzed for the demographic analysis. Out of 94 students, 15 students were male and 79 students were female. 12 students were studying bachelors and 82 students were studying diploma. Table 1 shows the age profile of the students. Out of 42 students taken to lab, 12 students were from bachelor and 30 students were from diploma.

Table 1: Age Profile

Age Class	No of Students	% to Total
16 to 20	62	66%
21 – 30	28	30%
Above 30	4	4%
Total	94	

Figure 1 shows their place where they originally live in.

Fig 1: Place of Living

Figure 2 shows the mode of study of the students.

Fig 2: Mode of Study

3.2. Analysis and Interpretation on Utilization of Online Resources

For the analysis purposes, the students' assignment was assessed for 5 marks. Table 2 shows the marks obtained by the bachelor students in the particular assignment out of 5. The following criteria were assessed in the assignment with 1 mark for each criterion: Correct Answer, Strong Understanding, Proper Interpretation, Suitable Resource and Clear Representation. From the table, it is evident that the bachelor level student could use the online resources at least up to some extends.

Table 2: Marks Scored by the Bachelor Students

Marks	Number of Students	%
5	2	16.7%
4	3	25%
3	3	25%
2	4	33.3%
1	0	0%
0	0	0%
Total	12	

Table 3 shows the number of bachelor level students scored marks under each criterion selected for the research purposes.

Table 3: Number of bachelor students scored marks in each criterion

Criteria	Number of Students	%
Correct Answer	10	83.3%
Strong Understanding	12	100%
Proper Interpretation	7	58.3%
Suitable Resources	7	58.3%
Clear Representation	6	50%

From the above table, it is clear that the bachelor students could understand the contents clearly. But, the results show that the only 58.3% of the students could get the suitable resources and only 50% students could make clear representation.

In the same way, the assignments of the diploma students were also assessed and the marks scored by them were shown in Table 4.

Table 4: Marks Scored by the Diploma Students

Marks	Number of Students	%
5	6	7.3%
4	11	13.4%
3	14	17.1%
2	20	24.4%
1	22	26.8%
0	9	11%
Total	82	

From the above table, it is clear that the diploma level students could not able to refer the online resources properly and to match for their requirements. Around 37% of the students could not able to refer to the proper online resources to find a solution. Table 5 shows the number of students who obtained marks under each criterion.

Table 5: Number of diploma students scored marks in each criterion

Criteria	Number of Students	%
Correct Answer	38	46%
Strong Understanding	32	39%
Proper Interpretation	27	33%
Suitable Resources	14	17%
Clear Representation	28	34%

From the above table, it shall be interpreted that less than 20% of the diploma level students could search for the suitable resources. Apart from that only 46% of the students could write the correct answer for the assignment.

Analysis on Lab Observation

The students were given an assignment to work in the lab and they have been observed and assessed for their search techniques and resource identification. The students were assessed with 5 marks with following 5 criteria as 1 mark for each criterion: Appropriate Keywords, Quick Resources Identification, Suitable Resource Selection, Clear Interpretation and Correct Answer. Table 6 shows the marks scored by the students in lab observation.

Table 6: Marks Scored by the Students

Marks	Number of Students			
	Bachelor	%	Diploma	%
5	2	16.7%	5	16.7%
4	2	16.7%	4	13.3%
3	3	25%	4	13.3%
2	5	41.6%	6	20%
1	0	0%	6	20%
0	0	0%	5	16.7%
Total	12		30	

From the above table, again it is clear that the bachelor level students could utilize the maximum potentials of the online resources. But in contrary, more than 55% of the diploma students could able

to use the online resources properly. Only 16.7% of the diploma students could able to use the online resources with its full potential.

4. FINDINGS & DISCUSSION

The students observed in the classroom for their learning processes clearly showed a significant difference with various factors. The students were observed with 5 point Likert scale where 5 had the maximum and 1 had the minimum for awareness and potential utilization.

1. More than 80% of the bachelor level students could use online resources better than diploma level students.
2. Nearly 70% bachelor level female students could utilize the optimum potential of the online resources than the male students.
3. Nearly 56% of the diploma level students could utilize the maximum potential of the online resources compared to male students.
4. Hardly 10% of the students at bachelor level were aware of importance of the referencing of the resource.
5. None of the diploma level students were aware of referencing and plagiarism.

It was very clear that the diploma level students were not showing much interest in using online resources for the learning purposes. This is may be due to lack of motivation to use the online resources. Though, the instructors tried to use different teaching methodologies such as classroom discussions, informal debates etc., to motivate the students to use the online resources in their learning processes, 75% of the bachelor level students could benefit out of it. Less than 20% of the diploma students could understand the necessity and emergence of online resources. This may be due to lack of understanding of internet technology.

4.1. Online Resources as Self-Learning Tool

The students should be aware of the various online resources related to the courses that they study. The instructors shall assist the students in this regards. The instructors shall discuss and distribute the related online resources at the beginning of each chapter rather than just adding it into the course outlines. The following ideas shall be applied which may help utilize the online resources optimally.

1. Be specific in search terms.
2. Be clear in selecting the proper search engines.
3. Select the resource only after examining randomly regarding the contents.

4. Check the currency and update of the materials.
5. Check the corresponding book publisher website for the detailed resource availability.
6. Improve vocabulary skills which will benefit to select the search terms.
7. Consult with the senior students and friends to identify the apt resources.
8. Discuss with the instructors to understand the main contents on the subject matters.
9. Do not hurry in selecting the resources.

5. CONCLUSION

The major negative factor of using the online resources as self - learning tool is lack of interest, motivation and understanding. The students need to be properly guided by the instructors to use the online resources in their learning processes. The online resources availabilities should be clearly advised to the students. The academic libraries shall help the institutions in these processes by conducting several workshops and seminars to the students. The academic libraries should maintain a clear database regarding the famous and the related online resources addresses in order to assist in the educational processes. The students should also show proper interest in understanding the requirements of online resources in their learning processes. As many online resources like Wiki are free of cost, the students should understand the cost effectiveness of the online resources. Apart from these, online resources are available 24 hours a day at their door steps. Thus the potentials of the online resources shall be utilized by proper guiding and assistance.

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