

The Efficacy of E-Library for English Language Development In The Foundation Level

Dr. Romeo C.Castillo, Dr.LeovigildoLitoD. Mallillin
Lecturer-FFS Faculty of Foundation Studies Gulf College, Sultanate of Oman

ABSTRACT:-This paper endeavoured to find out how the incorporation of the technological process assumed the data scouring habitude of the Beginner and Pre-IFP students of Gulf College.The main respondents of the study were given the task to use the two methods of research: library resources, and the digital format .The modules in each learning area were assigned to different levels: Beginner,and Pre-IFP students of Gulf College. The result revealed a generally positive response for all aspects of the research enrichment activity. For precise concept definition, the students gave a collective rating of 4.54. For aid in students' understanding of scientific concepts, the activity garnered a total of 4.33. It also gathered a 4.34 rating in terms of adaptability to everyday situations. As for the enrichment of student creativity, as well as simplicity and measurability of the method, the enrichment exercise received a 4.36 and 4.25 rating, respectively. The Research Enrichment Activity has been concluded to be an engaging and efficient instrument in developing the students' skill in research, as reflected by their enthusiasm to participate in the activity, their understanding of the concepts introduced by the instrument, and the high effectiveness rating provided by the participants and student evaluators.

I. INTRODUCTION

The access of e-books and e-journals replaces the use of books, magazines and encyclopaedias in the library shelves. These materials bring quick access to information; making them ideal for educational consumption and cognitive development. Gulf College recognises this inherent need for knowledge and compensates for such by providing the most advanced technology available in the modern world. However, such resources will only be valuable if the students know how to utilise it. Furthermore, information available on digital platforms is not always reliable, as the speed and ease of access allows for editable content and less time or screening/cross-referencing. Thus, a school with a comprehensive and up-to-date e-library is highly necessary to further enrich the students need for reading and learning. Proper guidance and lack of professional person along with the inadequate collection in the material as well as insufficient networking computers has been the main drawbacks on students exploring the resources (Shrestha,2008).Students especially in the foundation level found many difficulties when it come to utilizing the electronic materials looking for pertinent information or data needed in their research.There are libraries which don't have the resourced persons to go with.The mere fact is majority of the learners' preferred traditional libraries where inadequate information abound.In today's fast paced world ,there is always the great need of the students to find a place for premium information that can be allotted in their research activities .They actually limit their actual use of the library by utilizing available books on the shelves without getting the availability of technology for a more substantial data .Upgraded information resources using the e-library leads to the achievement of knowledgeable situations to become more confident and competent .E Library has online cataloguing system which can subscribe different sites of journals and bibliographic indexes. It has adequate resources which could provide better materials in every module of study. This paper aimed at finding answers to the following questions:

1. Based on the Research Enrichment Activity, How do the students of the Beginner and Pre –IFP levels conduct research utilising the e-library and electronic information database using the following criteria :
 - a. Concept analysis
 - b. Innovation
 - c. communication skill level and
 - d. collaborative unity
2. How do the students determine the effectiveness of the e-library?
3. Are there significant differences on the ratings between oral and written research output of the Beginner and Pre-IFP students?

II. LITERATURE REVIEW

The E-library concept has been a massive digital revolution among academes in the past decade. The National Academies Press (2000) project on the development of the Digital Strategy for the Library of Congress believes in the immediate pursuance of this initiative, as it engages readers to expand their reading prowess due to the availability of resources. This kind of digital technology also ensures that all knowledge is consolidated into a single, performing body—one that can be revisited and utilised repeatedly for the continuing pursuit of further knowledge. Additionally, the National Library of New Zealand (c.o. 2016) continues to encourage schools to build a central database for all of their researches, as well as other unique information, ideas, and studies that were formulated and published within the institution. This not only ensures the preservation, organisation and safekeeping of the researches, but also simplifies the copyright and original publishing of the researches—a process that can often take months and years to accomplish without the presence of a formal database. Furthermore, this kind of “idea pool” prevents other individuals and companies from stealing the works of others and passing it of as their own. As such, many national libraries around the world have started implementing this scheme, across, America, Central Europe, and Asia (CERN-UNESCO, c.o. 2016).

The popularity of the e-library is mostly credited to its ease of information transfer and access. Initiatives like these contribute to resource development and sharing, as well as the utilization of various levels of research, implementation and application. Information professionals subscribe to e-journals, CD-ROM databases, online databases, web-based resources, and a variety of other electronic resources. They participate in library consortia and build digital libraries. However, these libraries have been hampered by many constraints to embark on successful application of information and communication technology (ICT) for their operations, resources, and services (Williams & Channaveeraiah, 2008).

Borrego, et al. (2007) observes that during the turn of the century, there has been a call for a central information database where all publications can be stored for future use. Additionally, there have been many studies of users of electronic resources in the professional literature in the last few years. In a recent exhaustive review of the literature on the subject, Tenopir (2003) analysed the results of over 200 studies of the use of electronic resources in libraries published between 1995 and 2003. The main conclusion of this review is that electronic resources have been rapidly adopted in academic spheres, though the behaviour varies according to the discipline.

There is also an increased focus on communication skills, with more players involved in the electronic information environment. Information professionals are being called upon to work closely with ICT users and providers (including IT staff) and to work in collaboration with others in the profession (Wittwer, 2001). Some groups of library user lack necessary IT skills to obtain quality information (Stubbings and McNab, 2001) and, therefore, information professionals will be called upon to act as both educators and intermediaries (Sharp, 2001).

E-Books: E-book has been described as a text analogous to a book that is in digital form to be displayed on a computer screen. E-books can be read just like a paper book, using dedicated E-Book reader such as *Gemstar eBook* or on a computer screen after downloading it. There are also some newer technologies developing such as electronic paper, which is much like paper, except that the text can be changed, and talking books in MP3 format. E-book offer advantages like portability, 24 hours access, text search, annotation, linking, and multimedia and self-publishing possibilities. Development of e-book is still in the infancy stage and issues like compatibility, e-book readers, availability and intellectual property rights are to be addressed before it can be implemented on large scale (Chauhan, 2004).

III. METHODOLOGY

Research Design

The focus of the study is to identify the efficacy and additional benefits of digital formats in conducting research. The research enrichment activity is therefore used as an instrument to encourage students to patronize Gulf College’s E-library and electronic information database. Each class was divided into research teams of 3-4 members each, and were tasked to conduct studies on their chosen fields using sources available in GC’s E-library and database. The finished output was then collated and submitted by each team to their respective instructor(s) for marking.

The teams were also tasked to present their research in front of peer evaluators (members of the class and other research teams) to analyse the submitted studies based on the following criteria: Concept Analysis (sound interpretation and presentation of data), Innovation, Communication skill level, and collaborative unity (clarity in the organisation of ideas and flow of presentation). The researchers were also asked to evaluate their experience in using the e-library and information database, to determine its efficacy.

A set of questionnaires consisting of ten (10) close-ended questions using Likert five-point rating scale (based on different scale indicators), were used to validate the content qualities of the output. Weighted arithmetic mean was used for data analysis.

This study attempts also to use the two methods of research: library resources (physical copies such as books and newspapers), and the digital format (this includes e-books, online articles, documents from online journals, etc.). The modules in each learning area were assigned to different levels: Beginner, and Pre-IFP students of Gulf College. Three (3) comprehensive activities for each group were created and performed by the students. After every activity, a relevant assessment or test construction was generated for each group. To add, reference/s will be indicated at the bottom for footnoting. References used will be checked according to the correct APA format.

Plan of Action

Activities to be undertaken:

Task Activities	Time Frame	Expected Outcomes
Secure Approval of Librarian	January 5, 2016	Approval
Briefing on the E-Library 's key specifications and proper usage	January 10-14, 2016	Lecture Taken
Research process using e-library	Oct 2015-Feb. 2016	At least ten (10) References checked
Consolidation of Activities and Construction of Assessment	January-March 2016	Output checked

Respondents

The respondents of this research are students from the Beginner and Pre-IFP levels of Gulf College for the academic year 2015-2016.

3.3 Evaluation Criteria:

The output was presented by the students to the class in PowerPoint format for critiquing. Rubrics were followed as criteria for rating the output. The other members of the class were given copies of the evaluation sheets with accompanying criteria to evaluate the works of the Presenting group. The evaluation form provided utilized the Likert scale in measuring efficacy and proper execution. The performing group was also given the chance to evaluate themselves. Lastly, the class was given the copy of questionnaire for reference.

IV. FINDINGS AND DISCUSSIONS

This chapter presents the findings and analysis of the study on the research enrichment activities of the students in the foundation level.

Table 1. Criteria for marking of peer evaluators

CRITERIA	SCALE INDICATOR				
	5	4	3	2	1
Collaborative/cooperative work	If all the members of the group cooperated and performing	If one member did not cooperate or perform	If 2-3 members did not cooperate or perform	If most of the members did not cooperate	No one in the group attempted to perform the activity. Only the leader performed the task
Accuracy in gathering data	If all the info/data are accurate	If 2 info/data are accurate	If 1 info/datum are accurate	If all data are not accurate	No data at all

<p>Communication skills</p> <ol style="list-style-type: none"> 1. Well-modulated voice 2. Clear presentation of ideas 3. Grammatically correct 4. All questions correctly answered 	Meet all the components	Missed any one of the 4 components	Missed two of the 4 components	Missed three of the 4 components	Did not meet of at least one of the 4 components
Quality of Inputs	Knowledge shared is accurate and broad	Knowledge shared is accurate but limited	Knowledge shared is somewhat accurate but limited	Knowledge shared is inaccurate but limited	Attempted to share knowledge

Table 2. Students' marking criteria for the effectiveness of e-library

CRITERIA	SCALE INDICATOR				
	5	4	3	2	1
Accessibility of the website	If the e-library is easily accessible via the web and opens quickly in any browser.	If the e-library is easily accessible via the web but delivers a few lags or delays upon opening	If the e-library is moderately accessible and delivers multiple lags or delays upon opening	If the e-library is difficult to access and runs very slowly	If the e-library is not accessible.
Credibility as information source	If all (100%) search queries and sources are available/ if all information provided come from credible sources	If most (70%-99%) of the search queries and sources are available/ if most of the information provided come from credible sources	If some (50%-69%) search queries are available/ if some of the information provided come from credible sources	If most (less than 49%) search queries are unavailable/ if some of the information provided come from unreliable sources	If the site displays no data/information
Efficiency	If the search engine responds quickly	If the search engine experiences some lags in display	If the search engine regularly lags in display	If the search engine is unresponsive	If the search engine is not displayed
Clarity	If the language and font used are easy to understand	If the language is mostly understandable and the	If the language and font used is bearable	If the language is not understandable but the font used is bearable	If the language and font is not understandable

		font used is clear			
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Table 3. Likert Scale used

SCALE	DESCRIPTION
5	Strongly Favourable
4	Favourable
3	Slightly Unfavourable
2	Unfavourable
1	Strongly Unfavourable

Table 4. Ratings for Written Research Output (Beginner)

CRITERIA	I-A	I-B	I-C	I-D	I-E	I-F	Ave
1. Created concepts are precisely defined	4.6	4.4	4.2	4.2	4.2	4.4	4.33
2. It leads students to simple but effective understanding of the concepts in Communication	4.8	4.8	4.2	4.4	4	4.4	4.43
3. Concepts presented are adapted to real life situations	4.8	4.4	4.2	4.8	4.8	5	4.67
4. It encourages students to think othercreative works	4.4	4.7	5	4.8	4.7	4.6	4.62
5. It emphasizes simplicity and measurability	4.6	4.8	4.2	4.6	4.6	4.2	4.50
6. Additional reading reinforced your skills and concepts learned	4.8	4.5	4.8	4	4.5	4.2	4.47
7. Critical thinking is purely developed	4.4	4.6	4.8	4.6	4.8	4.4	4.60
8. Materials in the activities are always available and easy to find	4.8	4.6	5	4.6	4.2	4.4	4.60
9. The learning process is entertaining and interesting	4.8	4.6	4.6	5	4.6	4.4	4.67
10. It allows you to work independently	4.8	4.6	4.2	5	4.8	5	4.73

Table 4 shows the accumulated ratings provided by peer evaluators on the written outputs of IA to I-F research teams from the Beginner Level. In terms of innovation (Items 3 and 4), teams from I-A, I-D, I-E, and I-F were given excellent ratings, thus contributing to the overall favourable average of 4.67 and 4.62, respectively, for all sections. This connotes the higher occurrence of advanced ideas being underlined by students in their research works. This also implies the students' desire to pursue out-of-the-box topics, as the modern ICT medium opens doorways for increased resource and the introduction of new, global theories and ideas.

For concept analysis, or the sound interpretation and presentation of data, (Items 1 and 7), teams from section I-A, I-C, and I-E exhibited high marks, with a general favourable feedback from evaluators. This marking proves that researchers were able to easily grasp the concepts provided by their online sources, and was thus able to translate this into a clear platform for the understanding and learning of their peers. For collaborative unity, (Item 6, 8, 9 and 10), teams from I-A, I-C, and I-D garnered the highest scores, while I-F and I-E received slightly lower ratings compared to their counterparts. These marks show that the researchers' depth of understanding of the material allows for a clearer and more logical presentation of the output. However the disparity in numbers also show the slight difficulties that researchers encounter during the arrangement of inputs, especially as team researches demand sharing or distribution of particular tasks and inputs needed to finish the study. Finally, the favourable ratings tallied for communication skill levels (Items 1 and 5) of researches suggest the researchers' strong grounding and proper use of the language. However, the average rating for the communication aspect (4.33 and 4.50, respectively) fared slightly lower than the other criteria being observed, thus suggesting that this aspect should be weighed upon in future studies.

Table 5. Ratings for Oral Presentation of Research (Beginner)

CRITERIA	SCALE INDICATOR						Average
	1	2	3	4	5	6	
Collaborative/cooperative unity	4.4	4	4.6	4.8	5	4.2	4.50
Accuracy in data	4.6	4.8	4.8	4.2	5	4.6	4.73
Communication skills	5	4.2	4.6	4.2	4.8	4.6	4.57
Quality of Inputs	5	4.8	4.6	4.6	5	4.8	4.8

Table 5 presents the accumulated ratings given by peer evaluators on the oral presentations of the research teams from the Beginner level. For collaborative/co-operative unity, I-E (5) received the highest rating, followed by I-E (4), at a 4.8 mark. Though the overall average for this criterion is highly favourable, at 4.50, the presence of slightly underperforming teams in I-B and I-F suggests a need for supplementary training in the public presentation and logical flow of ideas.

As for the data, the criteria for accuracy and quality inputs garnered the highest overall ratings, with 4.73 and 4.8, respectively. This implies that in terms of information resources, the GC E-Library delivered credible and favourable service to its users, and was utilised well for the purpose of research. For communication skills, the teams received a high rating of 4.57.

However, teams from the I-B and I-D sections still require additional mentoring to improve their prowess in the language

Table 6. Ratings for Written Research Output (Pre-IFP)

CRITERIA	I-A	I-B	I-C	I-D	I-E	Ave
1. Created concepts are precisely defined	4.75	4.75	5	4.74	5	4.85
2. It leads students to simple but effective understanding of the concepts in Science	4.25	4.75	4.5	5	4.75	4.65
3. Concepts presented are adapted to real life situations	4.5	4.75	4.75	5	4	4.6
4. It encourages students to think other creative works	4.75	5	4.5	5	4.25	4.70
5. It emphasizes simplicity and measurability	4.25	5	4.25	5	4.75	4.65
6. Additional reading reinforced your skills and concepts learned	4.25	4.5	5	4.75	5	4.70
7. Critical thinking is purely developed	5	4.75	5	4.75	4.25	4.75
8. Materials in the activities are always available and easy to find	4.75	4.25	4.5	4.75	4.5	4.55
9. The learning process is entertaining and interesting	5	4.5	4.25	4.5	4.25	4.50
10. It allows you to work independently	5	4.5	4.5	4.5	4.75	4.65

Table 6 lists the accumulated ratings provided by peer evaluators on the written outputs of IA to I-E research teams from the Pre-IFP level. For the Innovation criterion (Items 3 and 4), the I-B and I-D team received the highest ratings, with I-D garnering perfect scores for both items.

Furthermore, the other teams also received strongly favourable scores from the evaluators, with the exception of I-E which only rated favourable on the scale.

The high overall index for innovation proves the researchers' desire to pursue studies that are practical, applicable, and in direct response to society's concerns. With regards to concept analysis, (Items 1 and 7), teams from section I-A, I-C, and I-E garnered the highest scores, with I-C receiving perfect scores for each item.

This shows the researchers' better understanding of the concepts, as aided by the technology provided by the E-library. For collaborative unity, (Item 6, 8, 9 and 10), teams from I-C and I-E received strongly favourable remarks. The other teams also fared remarkably well, with an average of 4.50-4.75. This shows the student researchers' logical and systematic approach to their outputs, which in turn proves their clear grasp of

the concept and the information presented to them by their sources. Lastly, all teams received favourable ratings for their use of communication skills, though teams I-A and I-C need supplementary training in order to fully master the details of the language.

Table 7. Ratings for Oral Presentation of Research (Pre-IFP)

CRITERIA	SCALE INDICATOR					Average
	1	2	3	4	5	
Collaborative/cooperative work	4	4	4	4	4	4
Accuracy in gathering data	4	5	5	4	5	4.6
Communication skills	4	5	5	4	5	4.6
Quality of Inputs	5	4	4	4	5	4.4

Table 7 presents the accumulated ratings given by peer evaluators on the oral presentations of the research teams from the Pre-IFP level. The teams scored very well in terms of accuracy, which further demonstrates the effectiveness of the e-library in providing credible and ample information.

The teams also garnered a high average rating (4.6) for demonstration of communication skills. For collaborative/co-operative unity, all teams received equal scores (4), which ranks as favourable on the scale. However, this rating suggests that logical unity should be another priority for students pursuing studies in the field. Finally the quality of inputs from each reporter garnered an overall rating of 4.4. Though this rating is highly satisfactory, additional trainings in public speaking and presentation is recommended.

Table 8. Ratings for the E-Library

CRITERIA	SCALE INDICATOR				Average
	Beginner Level (I-A to I-C)	Beginner Level (I-D to I-F)	Pre-IFP Level (I-A to I-C)	Pre-IFP Level (I-D to I-E)	
Accessibility of the website	5	5	4.7	5	4.9
Credibility as information source	5	5	5	5	5
Efficiency	4.3	4.7	4.7	5	4.7
Clarity	4	4.3	4.3	4	4.2

Table 8 lists the accumulated ratings of the student researchers on their experience with the use of GC’s e-library. The e-library marked high on credibility, garnering a perfect score among researchers. This shows the technology’s efficiency in providing the most credible and accurate data available for its users. The e-library also taps into internationally-published and thoroughly-reviewed academic journals, and the researchers have remarked on the usefulness of this feature especially during evaluation and critiquing of their own finished studies. Accessibility and efficiency of the website also received strongly favourable remarks from the users. This exemplifies the adept efforts applied by the IT team to ensure the maximum technical capabilities of the database; which includes the smooth functioning of the search engine and the organisation of files. The clarity criterion received the lowest rating, at 4.2. Though the score still qualifies as favourable, the researchers recommend a more straightforward approach to the labelling of the website’s pages, a more understandable vocabulary for explanations and options, and larger font for the website’s home page.

V. ANALYSIS

On average, the students’ evaluation revealed a generally positive response for all aspects of the research enrichment activity. For precise concept definition, the students gave a collective rating of 4.54. For aid in students’ understanding of scientific concepts, the activity garnered a total of 4.33. It also gathered a 4.34 rating in terms of adaptability to everyday situations. As for the enrichment of student creativity, as well as simplicity and measurability of the method, the enrichment exercise received a 4.36 and 4.25 rating, respectively. The summaries of each value fall under the favourable to strongly favourable equivalents on the Likert scale. This indicates the high effectiveness of the instrument, as determined by the students from the

Beginner, Pre-IFP, Semester 1 and 2, and PSIP students who a) personally participated in the activity, and b) assessed the output and performance of fellow partakers.

VI. CONCLUSIONS

The Research Enrichment Activity proved to be an engaging and efficient instrument in developing the students' skill in research, as reflected by their enthusiasm to participate in the activity, their understanding of the concepts introduced by the instruments (as seen during recitations), and the high effectiveness rating provided by the participants and student evaluators. All in all, the introduced activity is deemed an academic success. This method is highly recommended for all educators, as the popularity and need for electronic educational resources is vastly increasing. These types of modern information gives guarantee the accuracy and innovation of the concepts provided.

Additional research and testing of this method is advised to further prove its credibility as an academic instrument, Also, concept-building, as well as the preparation of topics and subjects for the individual lessons is highly encouraged, to ensure that knowledge used for each session is accurate, credible, easily-understandable, and regularly updated. The researcher has realized the importance of introducing new methods of teaching and instruction to younger students, as they are extremely adaptable to new modes of technology, but have shorter attention spans and patience for the traditional styles of teaching. Similarly, the researcher acknowledges the value of peer-to-peer education; as such a technique opens additional doors for information exchange, as well as improves the communication and camaraderie between the students and their instructor.

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