

AN E-APPROACH TO REPORT WRITING

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Abstract. *The concept of computer-assisted language learning has been said to inject a new vigor into learning methodologies and it is with this in mind that this paper discusses an e-approach to the written component of a research project of academic nature carried out by students in their final course in the Foundation English Language Program at Sultan Qaboos University, Oman. The aim of this approach is to endeavor to address the contradictions which are present in the context of low performing language learners required to achieve relatively higher order language and study skill learning outcomes through the electronic medium of an e-report. The paper gives a brief overview of some of the literature in the area of learning psychology; outlines the instructional design of the e-report; describes the teachers' and students' roles; validates the design of the e-report against established criteria; and finally presents the results from a student perception survey.*

Key words: *strategy development, collaborative learning, learning for digital age, e-report, critical thinking skills*

1. INTRODUCTION

The Foundation English Language Program curriculum at Sultan Qaboos University is part of a larger foundation program curriculum which is learning outcome-oriented and is built on strategies and skills that students should develop by the end of their courses. According to the Foundation Program English Language Curriculum (2014) document, by the end of the high level English courses of the Foundation Program students should be able to “produce a written report of a minimum of 500 words showing evidence of research, note-taking, review and revision of work, paraphrasing, summarizing, use of quotations and use of references” (p.52). However, the 500-word report based on academic research evokes mixed feelings among teachers and students alike; and even after a few years, it is not a part of the course students and teachers enthusiastically look forward to. One main reason is that a highly vigorous project consisting of some elements of research and report writing is carried out in a static, enclosed environment of the book medium extremely limiting in presenting a clear overview and guiding the student through the length and breadth of the processes involved. A dynamic project that involves research and report writing needs an equally dynamic approach. This paper aims to present one such approach to interface the learner with the course objectives through a framework firmly grounded in laboratory/workshop like conditions in mediating this practical skill through electronic tools. The readership will first be familiarized with the existing framework

with a view to show a need for a new and fresh approach and then looks to the virtual learning environment in the creation of e-report using Google Docs a Google App to supplement classroom instruction and learning materials. Finally, the design will be tested for pedagogical value and student worthiness.

2. CONTEXT

2.1. The curriculum

The primary focus of General Foundation Programs in Oman is to provide a set of learning outcomes for the students entering higher and post-secondary education to help them prepare for their further studies. While the overall outcomes are explicitly stated by the Oman Academic Council's (2008) academic standards for General Foundation Programs (GFPs) which include the four areas of English, mathematics, information technology and study skills, for the present context, it is relevant to examine the English language and study skills components. One of the requirements of the national academic standards for the English language and study skills is writing a 500-word report based on research in a specific area of academic study that the Language Center, Sultan Qaboos University has implemented over the past few years in the Foundation Program for English Language (FPEL). In the absence of suitable commercial materials available to carry out the instruction, in-house materials were produced with an eye on learner needs. The teaching and training resources thus produced must address a variety of issues to fill in the gaps effectively to enable the student placed in the FPEL to achieve the learning outcomes of such a course.

For the purposes of this article, it is important to look at the three important key players - the learner, the content and the medium in the context of report writing and teaching (O'Malley & Chamot, 1990).

2.2. The student

The average level of English of an FP student is insufficient to enable him to perform such a task of an academic nature that, in addition to good reading and writing skills, calls for higher order thinking skills and well developed study skills. At this point, it is relevant to understand the FP student. His cognitive strategies are limited to translation, minimal note-taking and memorization while more sophisticated strategies of contextualizing, inference, paraphrasing and summarizing are not yet developed; meta-cognitive strategies such as preparing in advance, managing and evaluating are mostly absent. A few social and affective strategies such as cooperating with peers and empathizing do exist in learning, but group activities are not spontaneous. Asking questions does not come naturally, risk taking is minimal; tolerance to ambiguity is marginal - cutting off any forays into independent learning- and motivation is plainly limited to just fulfilling course requirements.

2.3. The course

The research report is a scholarly piece of writing that requires the student to locate information on a topic, take a stand on the topic and provide support for that position in an organized report with appropriate citations and references. Three learning outcomes can be enumerated. Firstly, by writing a research report on a subject, the student develops strategies and skills which have second language acquisition implications including, for

example, critical thinking skills. Secondly, report writing teaches the conventions of scholarly writing; for example, accepted styles of documentation, ethics of research, required for college education, etc. Thirdly, students develop their skills in using information and communication technologies, as well as the skills needed to effectively navigate, locate and share information on the Web. These outcomes are also shared by Winkler and Metherell (2011) who describe writing the research paper as an exercise in logic, information and common sense. They believe that while writing research papers students can learn many things, namely tracking down and organizing information, using the internet in research, discriminating between useless and useful opinions, summarizing, time budgeting, conceiving and managing a research project from start to finish.

2.4. The medium and the mediator

The existing course material resides in an “Academic Writing Book” which was produced by the Language Centre’s teachers and material writers. “Academic Writing Book” is a collection of units deemed necessary for guiding the students in report writing. The units broadly cover processes from the planning stage of the research to the formatting of the final report. In between they dwell on issues like working with sources, paraphrasing, summarizing and referencing while some of the study skills strategies, particularly meta-cognitive strategies, are loosely dealt with or not addressed at all for the following reasons. Firstly, it is not easy to teach these strategies from the pages of a book; secondly, if they are addressed, the book will read more like a manual; thirdly, presenting linear and nonlinear processes within a book can obscure clarity in presenting the whole. Thus, the book form has limitations and so needs to be supported by a framework that will present a more ‘learning by doing’ environment. It follows that there is a clear need for a more energetic and engaging framework with which the student will be able to interact because report writing is an active process and the resources facilitating this process should create a more dynamic learning environment.

The teacher plays a key role in organizing the learning experiences of the students. In the absence of a clear framework or structure for the ‘hands on’ practices and with only the printed book to guide, a lot is left to the instructor’s ingenuity. On one end of the continuum are teachers who plan and create ‘bite-sized’ resources to address the development of a series of strategies or sub-skills required as scaffolding for performing the big task, monitoring and giving feedback at every stage in order to lead the students - 20 of them - through the process; and on the other end, not rare, are the ones who set the assignment and turn the students loose in a library or on the internet and expect them to finish the task; and many instructors fall somewhere in between these two extremes.

The conclusion is, that the medium, namely, the book, is boring to an average student, rigid, unyielding, and very difficult for the student to interact with. It is also not very supportive to the teachers who want to make their students’ experiences meaningful and dynamic by creating learning environments active, flexible and adaptive to accommodate students’ diverse learning styles.

To sum up the context, the national standards and the curriculum developers introduced the learning activity of academic nature in the final phase of the General Foundation Program to equip students with the skills necessary for future academic study crucial for writing. It is also seen as providing the stages for cognitive ‘maturation’ in the words of Piaget (1966). The level of English of an average foundation year student is often not

enough to accomplish a task of high academic standards, especially in the absence of course materials, which at present is a single book - a little more than a ‘How to...’ manual. With the learning outcomes pitched at a high level and in the absence of supportive course material the mediators are put under a lot of pressure to bring about an equilibrium. Therefore, the need is very clear. The course needs a more supportive environment - both for the student and the teacher. The student should be able to interact with the course material with and without the help of the teacher; the teacher needs a more supportive framework that will help focus more on monitoring, giving feedback and mentoring leading and participating in a more interactive ‘learning by doing’ environment.

3. BRIDGING THE GAP

The obvious challenge is to lead students with an insufficient English proficiency level through the great divide to acquire the skill sets of an advanced nature within a short time.

3.1. Psychology of learning

Bruner (1960) contends that the “foundations of any subject may be taught to anybody at any age in some form” (p.12). In spite of the fact that, as indicated by research, there are different kinds of intelligences (Gardner, 1983; Vernon, 1964), intelligence is not something that is something ‘static’ or ‘fixed’, and people can become more intelligent (Sternberg, 1985). For example, as stated by Oxford (1990), cognitive and metacognitive skills are teachable. Such learning occurs through interaction with other people (Vygotsky, 1978; Feurstein et al., 1991) and is constructed through personal experiences (Piaget, 1967).

3.1.1. *Development of cognitive & meta-cognitive strategies*

The key is to empower the learner with cognitive and meta-cognitive skills. One of the solutions is to give students ‘authentic tasks’ in a ‘spiral curriculum’ (Bruner, 1960) where learning takes place in stages and experiences are revisited again and again through subsequent tasks until learning is assimilated, or, in the words of Piaget (1967), until students develop cognitive maturation and finally cognitive adaptation. This is echoed by Reid (1995), Brown (1994) and Kroonenberg’s (1995) belief that by developing compensatory strategies, students’ learning strategies and learning styles can be stretched to accommodate wider learning situations. All learners, no matter what style or level they come with, fit in this spiral framework somewhere, when learning is situated in ‘doing’, i.e. doing tasks that make sense to the learner.

3.1.2. *Interactivity and collaboration*

One factor to expedite learning is to develop cooperative learning. Learning happens more significantly with peers - Bruner (1960) calls them ‘the significant others’. Collaborative work adds richness to a learner’s sense making; and knowledge construction and reconstruction occur when outcomes of many but similar experiences are shared. The advantages of collaboration become even more apparent when the learner starts working with a more competent person and, thus, moves into the zone of proximal development (Vygotsky, 1978).

Writing of a report is one long authentic task consisting of at least seven individual stages or 'authentic tasks' (Bruner, 1960). These stages are separate, on the one hand, but connected in a long chain, on the other. They can be comparable to Bruner's (1960) 'spiral curriculum' - with each task developing a sub-skill or strategy related to the next stage in report writing. From the initial choosing of the topic on a subject, mentally exploring the scope of study of research and formulating research questions, finding reliable sources, weighing and collecting information, summarizing, paraphrasing, arranging information in logical order in an outline, producing initial drafts to the final product with citations and reference lists, is one long extended effort. The student is able to select, organize and integrate the knowledge, skills and strategies accrued from each micro-goal of a task for subsequent use in the long chain until the final outcome.

While interaction and collaboration is absolutely vital for the FP student for his learning, the question is how to shape and optimize his interactions. From the previous sections, one can surmise, that the book media can offer just one-way interaction; teachers and peer interaction can be limited by time and space even if he does break out of his usual non-collaborative style. The need thus is to find a networking option in which making connections will be easy and learning becomes seamless when all aspects of collaboration listed in the previous section become fully operational. For this, we need to look not very far.

3.2. The World Wide Web

In the twenty first century, the World Wide Web has become fundamental to the society. In education, it has become a place where "learning, working, playing co mingle" and afforded the match teachers "need between a medium and how a particular person learns" (Brown, 2000, p.12). According to Brown (2000), educators now "have a chance to construct a medium that enables all young people to become engaged in their ideal way of learning" (p.12).

Changing times lead to a shift in learning patterns and methods. George Siemens, author of connectivism in *A Learning Theory for Digital Age* (2004), points out that knowledge resides not just in human beings but also in nonhuman resources. According to Siemens (2004), personal learning occurs as connections are made between these entities forming a network. He believes that "know-how and know-what is being supplemented with know-where" (Siemens, 2004, p.1). Implications are that the meta-skill needed to evaluate the information existing in those connections must be developed. Additionally, students need to develop skills to effectively navigate in the 'ocean of available knowledge and information' Brown (2006, p.1).

3.3. Case for e-report writing

This section will argue for the advantages that teachers and students can have when using electronic reports (e-reports) delivered through the World Wide Web.

Firstly, there are obvious advantages for teachers. The immense information about the task to be disseminated to the learners at various stages of report writing can be off loaded to technology, freeing up teachers' time for quality engagement with individual learner needs in areas of motivation, feelings, attitudes, linguistic and other skills personalizing their learning experiences. The task components can be made interesting and dynamic because the World Wide Web has made it possible for teachers everywhere to apply more efficient instructional aides for teaching (Belz, 2003). For example,

teachers can incorporate a variety of multimedia features such as animations, videos and PowerPoint presentations for a deeper learning experience. In addition, changes can be easily made to instructional materials as and when necessary to adapt to changing situations. Moreover, teachers can constantly monitor students' progress and provide the feedback delivered immediately through the electronic highway.

Secondly, there are many advantages for the students. Their learning becomes more effective because of their deeper associations formed as a result of greater interactions with the instructional materials and other related resources on the web. Also, being afforded by virtual learning environment, their learning becomes more efficient because of their increased independence and interactions. Moreover, the World Wide Web gives students control over their learning, individualizes their needs, and connects them with the world (Dina & Cionei, 2013). Above all, today's youth are digital; they multi-process comfortably in that environment - they listen to music and work on computers while talking on their cell phones. Courses and curricula must be in line with the social and cultural milieu of our future work force generation to teach them skills for the 21st century digital age.

To conclude this section, the gap can be bridged by taking into consideration the psychological factors that unlock our students' potential and by empowering them with a range of strategies and skills - cognitive, meta-cognitive, and collaborative and information navigational - through learning processes supported by an online framework. Such framework will extend and support the classroom instruction and lead to a deeper and richer experience of learning. As a consequence, traditional roles of teachers as 'information givers' change to the roles of 'facilitators of the information processing' who mentor and guide students in making connections and building collaborations to form 'personal networks' for learning.

4. INSTRUCTIONAL DESIGN OF E-REPORT

This section will discuss the approach to designing e-reports that is currently in place at the Language Centre. Then it will evaluate the designed task's content, framework and technology involved.

4.1. The instructional approach, methodology

The instructional approach is outcomes based carried out in a blended learning environment - a combination of classroom instruction and computer mediated instruction. The online set-up is managed through Google Docs, a Google App, where the writer and the editor work in tandem - commenting, suggesting, correcting, revising, and framing multiple drafts of the written work. Face-to-face class time is mostly devoted for discussions and studying examples of paraphrasing, summarizing, note-taking and referencing. While there are many blends (Driscoll, 2003), the blend used in the Foundation English Language Program course is the one where weekly classroom instruction is supported by constant access to digital materials and online set-up.

The TPACK model (Mishra & Kohler, 2009) is representative of the nature of 'blend' used in the course. Technology integration is not random; it is done at multiple levels: theoretical, pedagogical and methodological. The e-report takes into consideration difficulties of certain concepts, such as, for example, writing research questions, etc., and

is designed with an understanding of how to present concepts through technology taking into account pedagogical affordances of the Web and Google Docs tools. Also, the design of the e-report draws on technology to redress interruptions caused by individual gaps and build on the existing knowledge to construct new knowledge or strengthen old knowledge (Koehler & Mishra, 2009).

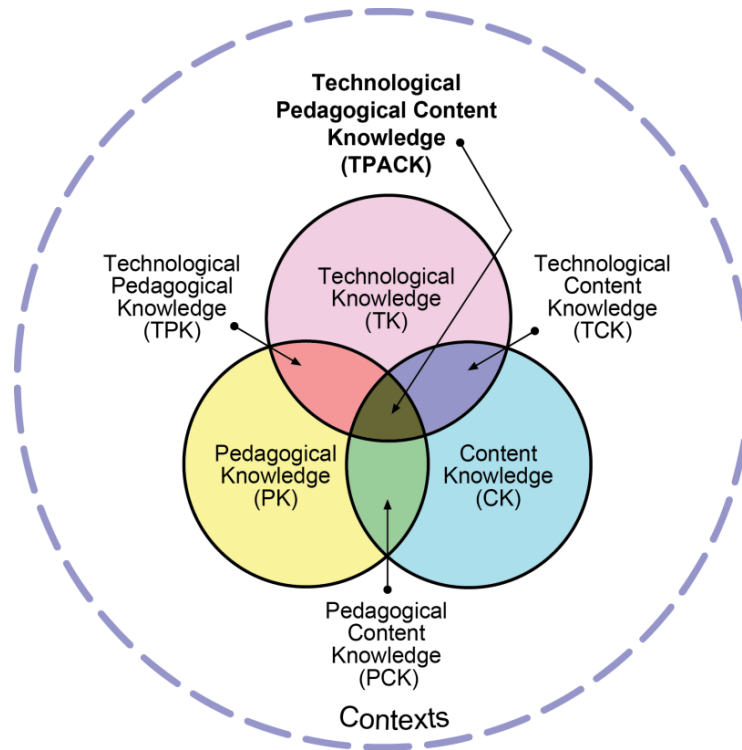


Fig. 1 TPACK frame work and its knowledge components

4.2. E-report - technology supported instruction

The writing process is clearly laid out systematically in chunks of activities. Each activity is clearly defined, explained and some modelled (through hypertext) to give students a 'doing and learning' experience. The students work on each segment on their laptops or computers in the computer labs sometimes during class hours, but mostly on their own. The following table presents the process and, the learning outcomes of each component and the cumulative outcomes in the production of the final report.

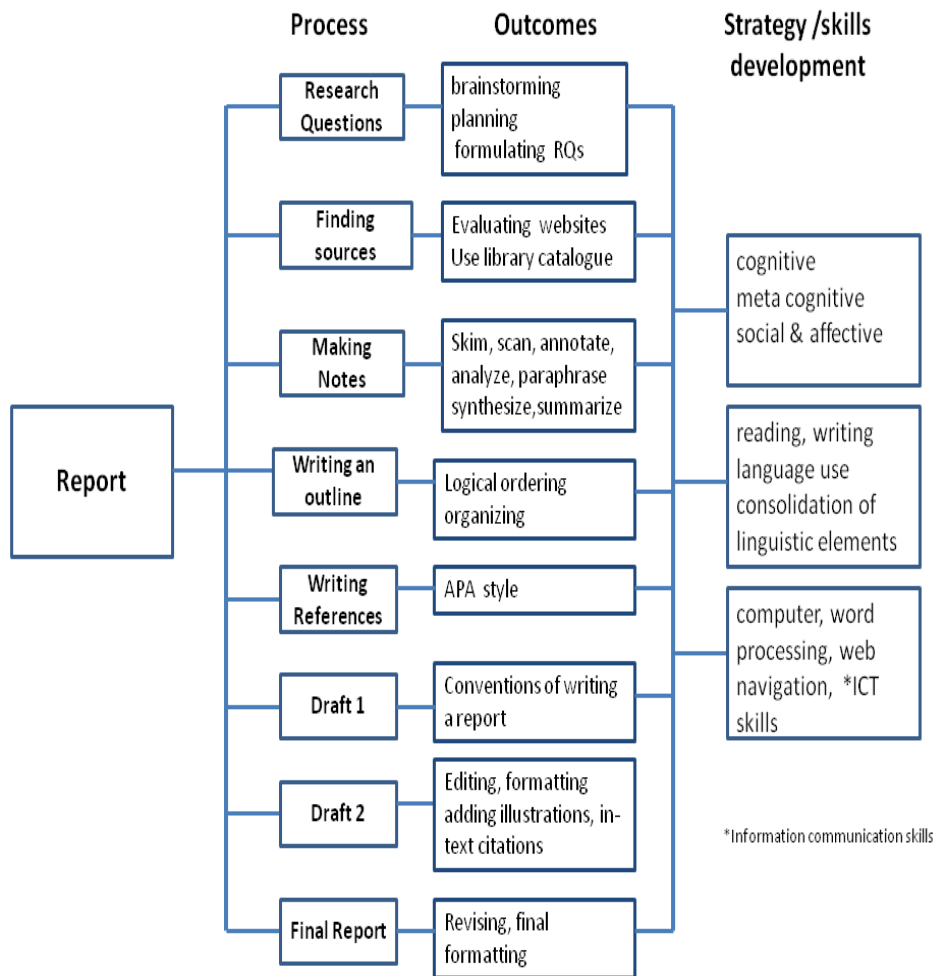


Fig. 2 Report process and outcomes

4.2.1. The online framework

E-report is one long document divided into sections each corresponding to a different stage in the process of the production of the final report. The process is presented in ten individual chunks or activities each dovetailing into the next until the last finished piece of writing is achieved. The student just has to scroll through the document to have an overview of the process.

Each activity is set with a clear goal. For example, the first step is writing 'Research Questions' the starting point of formal research. The means to achieve the goal are the following: brainstorming activity is presented, models of correct and incorrect research questions are hyperlinked, deadlines and points to be awarded are specified. Presenting these linear and nonlinear (supportive and affective) elements is possible through hyperlinking within an activity without disrupting the coherence of the task. The student

simply clicks on the link to have a better understanding of the task before he himself achieves the goal. Goal setting enhances students' attention and motivation and any interruption or breakdown (in achieving the goal) is taken care of - to an extent - through student interaction with the hyperlinked text providing an opportunity for self - correction and a modified output. Here, teacher's comments are very helpful. The student uses strategies necessary for discovery and acts with an element of risk - taking in an asynchronous, non-threatening environment of the electronic medium with complete independence; but with the support of the unobtrusive teacher. The development of these aforementioned strategies is the hallmark of using online tools.

The e- report document is not just a writing laboratory to the student. It also serves as his writing folder which stores and archives all of his writings ready to be accessed both by the teacher and by the student at any point in time and space through the internet.

4.3. Google Docs

The electronic document is powered by the versatile Google Docs - a Google App for computers, mobile phones, iPads and tablets. This App allows users to create documents which are automatically saved and stored to the drive, and edit them online while collaborating with other users in real time. This one notable feature makes it an excellent choice for the e-report blend. The success of the e-report is mainly because of the distinctive versatile features of Google documents. They are free, downloadable, easily accessible, and can be stored on personal computers for offline access (no internet connection). Students can work in class, at home, from any computer with an internet connection any time, share their documents that can be viewed simultaneously and discussed using chat, and receive immediate feedback. The result - students work better when they know someone is going to comment on their work and provide a personalized feedback. In addition, the 'research tool' feature of the Google Docs gives students access to several resources including dictionaries, quotes and allows for web search for articles and citations, as well as spelling and grammar check. Moreover, Google Docs provides students with opportunities to reflect on their learning and writing process using the 'revision history' feature that keeps track of all revisions made and records all modified output of the student throughout the process.

5. ROLE OF TEACHERS

Teachers have a crucial role in the blended approach. The successful use of e-report by students, hinges on the fact that teachers not only have the knowledge and expertise in content and pedagogy but they also represent a 'working knowledge' of computers and Google Docs while helping students to interact with the learning environment (Williams & Burden, 1997) and providing for their positive learning experiences. They are variously termed as 'mediators' 'guides', 'mentors' and 'facilitators' as opposed to the traditional notion of 'information disseminators'. Firstly, they set the online stage - or a 'learning ecology' to borrow George Siemens' (2004; p.4) words, interface students with the e-work, guide the process and facilitate learning outcomes. Secondly, they need to help student with navigational skills to find the information they need. Otherwise, huge amount of information existing on the net may lead to confusion, frustration and a poor choice of materials for the report. Thirdly, mediators are also assessors. There is formative and summative assessment.

The formative is an ongoing assessment of the process that the student and the teacher are in a position to continually check and monitor because the assessment document is hyperlinked to the e-report. This acts as a catalyst for better performance. Finally, one superior feature of the Google Doc is that it carries the teacher's presence with it and keeps communication open all the time. Teachers can identify significant student differences and need to be sensitive to their individual needs. Moreover, timely responses and useful feedback can help strike a chord within students, significantly lowering their anxiety levels and thereby increasing their self-esteem for a positive learning experience. Therefore, as stated by Williams and Burden (1997), "learner autonomy is more than the provision of self-access materials. The mediator needs to help the learner to interact with the material (and the learning environment) in various ways until he becomes self-directed" (p. 68).

6. ROLE OF STUDENTS

The students are the owners of their e-report document. The ownership of the work and students' individual responsibility needs to be established when they make copies of the shared documents and put their names on them, as well as each time when they log into the Google Drive and locate their document to work on it.

While working on their e-reports, students engage, explore, evaluate and explain their findings in the document and, as a consequence, develop as independent learners. In addition, they assume leadership in skills they know and direct others. In the process, strong students help weaker ones by giving their feedback and sharing tips and knowledge about using technology. A sense of community is established and one can see the concept of individual differences operational in this shared enterprise.

7. EVALUATION OF E-REPORT

Firstly, the e-report is evaluated against some writing beliefs set up by the National Council of Teachers of English (NCTE) (2004) and then as a computer-assisted language learning (CALL) task.

7.1. E-report and beliefs about teaching of writing

Table 1 NCTE Beliefs about the Teaching of Writing and E-Report

Beliefs	Paper- based report	Paper- based report
Everyone has the capacity to write and developing writers need support.	The support is verbal. In-class activities that utilize books, handouts and in-house materials	The process which has a visual layout is set up in terms of individual learning activities. Teacher's explanations, goals, deadlines and web resources are hyperlinked. There is constant accessibility to online materials and immediate feedback which provides a lot of support

Beliefs	Paper- based report	Paper- based report
The teaching of writing should be grounded in real-life experiences and for a variety of purposes. Teachers need to formulate lessons that are relevant to students' lives and their experiences.	Learning outcomes are skills required for academic life.	Training in the use of technology is an added benefit for real life purposes in addition to the general outcomes of the course.
Writing is a process that continually evolves; it is a recursive process	Students are trained in prewriting techniques, multiple strategies for developing & organizing information and writing multiple drafts, revising and editing.	The advantages of the e-report become apparent considering the opportunities afforded by the online system for continual feedback. In other words, the process is more closely monitored resulting in more student modifications compared to the paper-based version.
Writing is a tool for thinking.	Critical thinking is active from learning activity 2 – 'Brainstorming research questions' to the final draft of the report.	The length and breadth of critical thinking are more because of linear and nonlinear thought processes enabled by the online version.
Writing grows out of a purpose.	The purpose and the audience are clearly stated and therefore the register and physical format are clearly focused from the start.	Similar to paper-based report, the purpose and the audience are clearly stated and therefore the register and physical format are clearly focused from the start.
Conventions of finished and edited texts are important to readers and therefore to writers.	Conventions of grammar, spelling, and punctuation are manually addressed in context from brainstorming stage manually addressed in context from brainstorming stage.	These conventions are not only reinforced by the teacher, the system has in-built tools for spell check and grammar suggestions.
Writing and reading are related.	Report writing springs from reading. One vital support required from teacher is to train the students to choose the sources - internet/book - not only for content but also for correct readability level. There is no way of monitoring student choices until the printed source material is shown.	Checking student choices of web resources is made easy through the web links provided by the student on the e- document.

Beliefs	Paper- based report	Paper- based report
Writing has a complex relationship to talk.	Students make a five-minute presentation about their findings to their peers at end of their research.	Five- minute presentation about their research is made as a finale.
Writing is a social activity with writers talking about their writing with other writers in class.	Report writing is highly interactional. There is a sense of community and students often help one another with advice, suggestions, etc. There is also a high level of interaction with the teacher in real time.	Interactions with material (instructional and other) and teacher (feedback) through the E-version are much higher when compared to the paper version. Interactions with peers are also made possible through discussions about their work on the document in real time. E-version provides greater opportunities for peer review, corrections and modifications.
Multi-modal resources should be utilized in writing to include, but not be limited to word processing, video, print, still images, primary sources, mentor texts.	Resources are limited to printed texts and still images. Word processing is limited to the final draft. Web applications are limited to web search.	E-report accommodates a profusion of technology of the present digital age. Generic applications like Word processing, Presentation software, Computer Mediated Communication (CMC) applications, Web browsers, Web 2.0 applications are used in course of writing
Assessment occurs in a variety of informal and formal formats. They include student conferences, written and oral feedback, and portfolios.	Formative and summative assessments are the norm. For formative assessment, teachers devise their own methods/ criteria and keep record while a uniform criterion is used for summative one.	Record keeping is made easy online through a spreadsheet linked to the document. Notes and comments are inserted on continuous basis throughout the process. All actions on written and oral feedback during student conferences are taken into consideration. Student's modifications are recorded. Keeping to deadlines, student self-regulation and planning are taken into account for informal assessment. Evidence of all these are shown on the Document. Formal summative assessment occurs when the final report is submitted.

7.2 E- report as a CALL task

The evaluation criterion is situation specific to e-report. While CALL pedagogy includes all four language skills, the evaluation is selective and includes aspects relevant to writing skills. Evaluation is on such aspects as e-report CALL environment, software sustainability and e-report as a CALL task.

7.2.1. Evaluating e-report CALL environment

The pedagogical model underlying e-report environment corresponds to the Warschauer's (1996) Web-based CALL of integrative, socio-cognitive, socio-constructive CALL. It views language as developed through social interaction. The computer is a tool for 'authentic discourse' and the principal objective is 'agency' or learner independence in making choices and decisions in learning.

Table 2 Warschauer's web-based integrative, socio-cognitive, socio-constructive CALL and e-report

Integrative Web-based CALL	E-report
A. Computer Mediated Communication (CMC)	
CMC can be carried out in several forms; it can be one-to-one, one-to-many, or many-to-one. Student to teacher, teacher to small groups. It can be short messages or lengthy documents for collaboration	Communication is open and is as follows: student to teacher; student to student; one to many; many to-one.
CMC can be carried out in several forms; it can be one to one, one to many, or many to one, student to teacher, teacher to small groups. It can be short messages or lengthy documents for collaboration.	Communication is open and is as follows: student to teacher; student to student; one to many; many to-one.
B. The World Wide Web	
Students can search through millions of files around the world within minutes to locate and access authentic materials exactly tailored to their own personal interests.	Students access to a number of authentic articles and books on the web to extract information for their project is made easier through the online document.
Students can use the World Wide Web to publish their texts or multimedia materials to share with partner classes or with the general public.	Sharing is restricted only to 'student to teacher' as report writing is a highly individualised exercise. However, the processes are open for group members to comment on.

7.2.2. Software evaluation according to Chapelle (2001)

Chapelle (2001) believes that “evaluation is a situation specific argument” (p.52). Here, the Google Document App - basically a software - used for producing e-report is evaluated using Chapelle’s (2001) standards presented in the questions below.

Table 3. Software/app evaluation

Questions	E-Report
How much control is the learner allowed?	The learner is the owner of the document.
How interactive is the Document?	Highly interactive with Web 2.0 tools. Has unique features of file sharing, collaboration, and research tools.
What kinds of records does the software keep?	‘Revision history’ feature of Google Docs keeps all revisions made throughout the process. All records of student modifications can be accessed at any point in time.
Are quality and degree of feedback adequate?	While - to a small extent - non-human feedback is given through spell and grammar check, the strong point is the complex, informed feedback from teachers throughout writing process.
Practicality and ease of use and positive impact.	After the initial set-up, it is easy to use. Establishes a sense of accomplishment as each task is carried out and presented tidily on the document using technology. A feeling of confidence and self-worth is fostered throughout.

7.2.3. Evaluation of e-report as CALL Task

It is important to understand that E-Report is not a courseware (dedicated CALL), in other words, it is not a fully independent program such as, the widely popular program for developing listening skill, Randall’s Cyber Listening Café [www.esl-lab.com/]. Computer and web browser applications in e-report assume the role of ‘tool’ for learning as against a ‘tutor’ role in dedicated CALL programs. While Chapelle’s (2001) criteria for CALL task appropriateness is basically for dedicated CALL, it could nevertheless be used for judgmental analysis, situation specific to E-Report which contains a series of subtasks with different learning outcomes- separate but integrated into the final production of the report. What follows is the table that presents the judgmental evaluation of e-report.

Table 4 Judgmental evaluation of e-report

1. Language Learning Potential	
Do task conditions present sufficient opportunity for developing writing skills & conventions of Report Writing?	The centrality of writing skills, report conventions & language learning pervades throughout the assignment. Whatever the task, be it writing research questions, note-taking, summarizing, paraphrasing, outlining, drafts, editing, language is constantly focussed and consolidated.
Do task conditions present sufficient opportunity for beneficial focus on form? (Grammar & other linguistic conventions)	
2. Learner fit	
Is the difficulty level of the task appropriate for learners to increase their language ability?	The process is broken down to cognitively straightforward 'chunks' or activities/tasks to leverage students' writing to match the steep learning outcomes of the curriculum.
Is the task appropriate for learners with the characteristics of the intended learners?	Writing a research paper and the strategies and skills developed during the process has immediate value in academic settings and general uses in real life.
3. Authenticity	
Will learners be able to see the connection between the CALL task and tasks outside the classroom?	Writing a research paper and the strategies and skills developed during the process has immediate value in academic settings and general uses in real life.
4. Impact	
Will learners learn more about the target language and strategies for language learning through the use of the task?	1. Of 60 students surveyed 48 say that their writing and study skills improved through the task; 46 agree that the writing process through the google docs greatly helped their report writing
Will both learners and teachers have a positive learning experience with technology through the use of the task?	While 48 said their experience with technology was positive, 3 out of 5 teachers agreed so.
5. Practicality	
Are hardware, software, and personnel resources sufficient to allow the CALL task to succeed?	Google Docs education suite is freely available. Twelve of the sixty students whose experiences were negative had problems with internet connections in their villages or did not have personal computers.

8. STUDENT PERCEPTIONS: SUMMARY OF STUDENT SURVEY

Sixty students took the survey at the completion of the course. The summary of the students' responses is presented in the table that follows. Some statements were not identified by some students as negative or positive. These are marked with an asterisk (*) in table 5.

Table 5 Student Survey Summary

No.	Statement	Negative	Do not know	Positive
1	There was more independent work involved in this method.	8	8	44
2	Working with Google Docs greatly helped me in the report writing *process.	7	7	46
* 3	The system of working independently online with the document gave me more opportunities to develop my language than in the classroom.	9	9	40
* 4	My time in class with my teacher was more beneficial because of my online work.	8	16	35
* 5	The feedback from my teacher was quick and clear.	8	10	40
* 6	Finding out my errors and seeing my grades on my document motivated me to identify my weak areas and improve them.	4	6	48
7	My writing and study skills improved a lot through this method.	10	7	43
8	I had more communication with my teacher than I usually have in the classroom.	12	7	41
* 9	I could often discuss with my partner/ group by looking at each other's documents with teacher's comments in and outside the classroom.	7	16	36
*10	Generally, I liked using computers and technology for writing my report.	14	7	38

In open ended questions, 48 students out of 60 agreed that their experience with using technology and internet tools for their report was positive, and that they would like to use them again for future courses. This proves the positive effect of the chosen approach to teaching research skills and report writing.

Table 6 Summary of students' responses to open ended questions

Which one thing you liked best working with this method?	What are some things you did not like about using Google Docs for you report?
<p>1. <i>Organization</i>: 'more organized and faster', 'easier', 'no need to write on paper', 'do work anytime, anywhere, and finish work quickly'.</p> <p>2. <i>Communication with teacher</i>: 'It's online, so you can communicate with teacher to know errors faster'.</p> <p>3. <i>Editing and correction</i>: 'I am weak in spelling; using this method helps me in correcting my mistakes'. 'I discover my mistakes before I submit the report'. 'It is easy to correct my errors and edit work anytime'.</p> <p>4. <i>Other comments</i>: 'It is easy to move from the document to the internet' 'It is useful to deal with online search'. "I have learnt a lot of things using technology that I did not know before.' 'I can see my grades on the document'. 'We have example for everything- how we do the outline, notes and other things.</p>	<p>1. <i>Weak internet connections</i>: 'Sometimes document doesn't open'. 'I cannot connect, when there is no access - some computers cannot download Google docs'.</p> <p>2. <i>Repetitive</i>: 'There are many repeated steps'. 'It is waste of time'. 'There are many things to do on e-report and it takes a lot of time'.</p> <p>3. <i>Other comments</i>: 'I face difficulties when I insert pictures'. 'When teacher checks my report, I do not understand where and what the error exactly is'. 'I do not support this method because I do not have a laptop'.</p>

9. PROBLEMS AND SOLUTIONS

Many of the problems are internet access related. First of all, when both questions were asked, the students gave their positive opinions and then added their negative comments. There are more positive opinions than negative ones. Nevertheless, these issues have to be addressed. It is a fact that working between classes is not possible because of the overload on the existing computer labs. Secondly, students' Wi-Fi connection at home and in their villages is either weak or not available at all. Some students may not have their own devices and that makes the e-report totally impossible. The questionnaire was not clear about the 'computer' factor. How many owned a computer and how many did not own one; if they did, how often did they fail to connect and why? These questions would have shed a clear light on the magnitude of the problem. In any case, Google docs can be downloaded on the computer as a Chrome App that works offline, automatically synced when the internet is available. This feature largely mitigates the problem of intermittent access to the internet. The second problem is related to design - many steps being repetitive and a waste of time. It is not clear what steps are repetitive. Collating information is much easier than in the paper version using the copy-paste feature of word processing. Secondly, the student and teacher have a lot of flexibility in deciding how to go about the process. Some technical

functions such as picture insert and others are not to be perceived as difficulties but opportunities to learn new skills especially useful for later academic purposes.

10. CHALLENGES FOR SUCCESSFUL IMPLEMENTATION OF E-REPORT

The first challenge is the setting up of the group network and the initial protocols of working with Google Docs. Most instructors are not familiar with their use. For the students, it is their initiation. If handled without preliminary planning, proper orientation and preparation on the part of the instructor it can result in a 'make or break' experience for the instructor first and then the student. There is much to be gained from these tools pedagogically; and therefore with good planning and continued involvement through the phases of engagement many frustrations can be prevented before they may even occur. Secondly, technology, in spite of its profitability, can get in the way of successful outcomes. Instructors and students have to take this into account while working or planning to work with it.

11. CONCLUSION

This paper began with the view of the project being intimidating to instructors and students; but nothing could be more serendipitous in reconciling the learner needs and the course objectives. E-report is both a writing lab and a lab report that records all the activities from the conception to the realization of the research findings. It is a highly individualized activity reflecting the independent work of the student. The general framework is a resource to facilitate creative thinking and writing; but like any resource, it is inert until there is the intervention of a catalytic mediation characterized by enthusiasm, imagination and creativity. In the hands of an experienced mediator it can be truly transformational for the student as it develops all desirable skills - cognitive, meta-cognitive, social, linguistic and technological - in a natural learning setting. Indeed, "the Web will be as fundamental to the society as electrification" (Brown, 1995, n.p.). Creating and fostering new learning environments is then what should guide teachers to respond to this challenge and opportunity.

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