# Fronter: A Virtual Environment Tool in Pathway to Higher Education Business English Program

# Dr. Mona Ahmed Eid X-Visiting Lecturer, North Georgia University. Lecturer, Faculty of Education, Alexandria University. Lecturer, faculty of languages and translation, Pharos University

### **Summary**

# Fronter: A Virtual Environment Tool in Pathway to Higher Education Business English Program.

This paper aims at providing resolutions for the problems arising from the integration of "Fronter" which is the online virtual environment tool designed by Cambridge English Language Assessment to create a blended learning business English course and to upgrade the soft skills of socially underprivileged Egyptian students at Egyptian universities and graduates of Egyptian universities as an attempt to enable them to pursue their postgraduate studies and to find better jobs.

The statistical analysis of the frequency of using "Fronter" by the target population in the 50 hours that are designated for online learning in 2012 reveals a low level of participation and a high level of de-motivation. Accordingly, this research proposes a number of digital resolutions for the hindrances encountered in its application. The face book, for example, has consistently been implemented to communicate with other students and teachers in the same program instead of the chatting tool installed on "Fronter".

#### الملخص باللغة العربية

يهدف هذا البحث الى ايجاد حلول للمشكلات الناتجه من استخدام برنامج فرونتر و الذى أعدته وحدة الأختبارات في جامعة كمبريدج كجزء من المنهج المقرر لتعليم اللغة الأنجليزية للطلاب الغير قادرين مادياً ضمن برنامج الطرق المؤدية الي اكتساب المهارات المهنية. قد افادت النتائج الأحصائية الى انخفاض معدل الاقبال على استخدام هذا البرنامج من قبل دفعة ٢٠١٢ و لذلك فان هذا البحث يدرس هذه المشكلة و يقدم بعض الحلول لها. فقد تم استخدام الفاس بوك بدلاً من أداة التواصل في فرونتر.

This research focuses on studying the hindrances of 19 students enrolled in Pathway to Higher Education: Development of English Skills program in August 2012. This course was conducted for a whole month in an attempt to develop the business English proficiency level of the target population. The course which extended for 100 hour entails 50 hour online course available at the virtual environment Fronter, The objectives of the current paper are:

- 1. Specifying the problems witnessed by the target population in the implementation of Fronter
- 2. Analyzing statistically the coefficients of achievement of the target population in 50 hours of online tasks of Fronter and their the rate of progress in alternative collaborative online tasks such as Skype.

**Introduction: Pathway to Higher Education** 

In collaboration with the Centre for Advancement of Post-Graduate Studies and Research in Cairo University, Egypt (CAPSCU), Cambridge English Language Assessment and its local partner British Council-Cairo introduced a business English class component in the Pathway to Higher Education program in 2010. Pathway to Higher Education is primarily developed to upgrade the soft skills of socially underprivileged Egyptian students at Egyptian universities and graduates of Egyptian universities as an attempt to enable them to pursue their postgraduate studies and to find better jobs that cater for their social, professional, financial as well as psychological needs in their local milieus. Pathway to Higher Education is funded by the Ford Foundation and is managed by the Centre for Advancement of Post-Graduate Studies and Research in Cairo University, During the process of planning for the execution of the program 17 Arabic books and 16 English books were published in 2005 to be implemented as course material in the program. Analytical thinking written by Dr. Aymen Amer is a manifestation for the publications of Pathway to Higher Education. Targeting better employment and entrepreneurship opportunities, the students are granted scholarships to be enrolled in the following sessions:

- 1) Development of Thinking and Managerial Skills:
- 1. Managerial Approach
- 2. Behavioral Approach
- 3. Knowledge Approach
- 4. Development of English Skills
- 5. Enhancement of Entrepreneurship Skills
- 6. Enhancement of Teaching Skills
- 2) Online Training Programs:
- 1. Enhancement of Research Skills
- 2. Enhancement of Work Skills
- 3. Skills development for Participants in Student Activities
- 3) Pathways Special Training Programs:
- 1. Development of Leadership Skills
- 2. Electronic Media and Mind Mapping
- 3. Mind Building and Career Counseling
- 4. Development English Skills for VIP's (for blind students)
- 5. Special Training Programs

To sustain equality, Pathway to Higher education is conducted in Cairo, Ain Shams, Assiut, Helwan, Minia, South Valley, Fayoum, Beni-Suef, Benha, Sohag, Alexandria, Tanta, Mansoura, Zagazig, Minoufiya, Suez Canal, Kafrelsheikh, Port Said, Damanhour, Aswan, Al-Azhar and Damietta universities covering 81% of all the governmental Egyptian universities in Egypt. To standardize the criteria of evaluation in an attempt to accomplish high levels of validation and impartiality, the Common European Framework of Reference for Languages (CEF or CEFR) is implemented to evaluate the language proficiency skills of the target population. Developed by the Council of Europe to standardize the evaluation rubrics for language exams all over the world, Common European Framework of Reference for Languages entails six levels: A1, A2, B1, B2, C1 and C2 where C2 represents the level of revealing language proficiency potentials which are more advanced than

those of a native speaker. On the other end of the scale, A1 represents a level of language proficiency which reflects basic abilities to communicate and exchange information.

The Development of English Skills (DES) sessions which constitute a fundamental component of the first group of sessions. namely the Development of Thinking and managerial Skills are delivered through a 100 hour blended learning course (BLC) which is conducted in three consecutive phases. Phase 1 consists of 25 hours of face-to-face classroom teaching and interaction covering listening, reading, writing, language structures and vocabulary activities. This phase also attempts at familiarizing the target population with the concept of workplace English, blended learning activities, online virtual environments, self-study and the priviliges of autonomous learning. Phase 2 comprises 50 hours of self-study online activities included in Fronter which is an online virtual environment software that encompasses language modules for developing the listening, reading, writing and speaking skills of the target population. The third phase which consists of 25 hours of face-to-face teaching and interaction focuses on enhancing the productive skills of speaking and writing as well as on introducing to the target population the computer-based Business Language Testing service (BULATS) format to confirm the achievement of a high level of validating test scores and procedures. The target population are required to sit for this computer-based Business Language Testing service (BULATS) test by the end of the three consecutive phases to measure their language proficiency skills.

In the early stages of the Development of English Skills (DES) course, the target population was required to take the Cambridge Placement Test to measure the language proficiency skills of the target population prior taking the course and to select 93 students out of 181 to participate in the course. The results of the candidates in the Cambridge Placement Test (Khabbazbashi, Khalifa, Malarkey& Walker 2012, p.20) are indicated in figure 1 as follows:

40% 35% 30% 25% 20% 15% 10% 5% 0% Pre-A1 A1 A2 B1 B2 C1

Figure 1: Results of Cambridge Placement Test in December 2010

On the other hand, figure 2 displays the results of the target population in the BULATS test after they finished the three phases of the Blended Learning Course (BLC) in the Development of English Skills (DES) sessions (Khabbazbashi, Khalifa, Malarkey& Walker 2012, p.22).

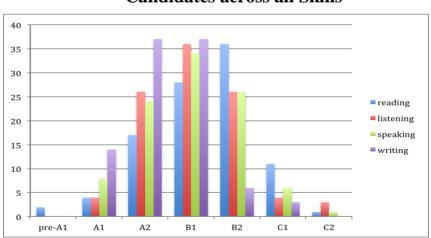


Figure 2: Band Score Distributions of BULATS Online Candidates across all Skills

From figures 1 and 2, it is evident that there is a substantial upgrade in the language proficiency level of the target population as far as the four language skills are concerned.

In spite of the positive attitudes of both the teachers and the students which are witnessed through all the surveys conducted concerning the Blended learning Course (BLC), a number of recommendations are suggested concerning the implementation of Fronter in the online self-study phase. (Khabbazbashi, Khalifa, Malarkey& Walker 2012, p.7) Both students and teachers agree about the reduction of the duration of time devoted to online provision and the extension of that of the face-to-face interaction. This proposal demonstrates a high level of demotivation concerning the implementation of Fronter. The issue of technical support is also raised as students demanded more technical assistance while using Fronter as well as more training concerning the implementation of online materials specially in the areas of uploading their assignments and accessing the shared resource area in Fronter. Evidently, raising the motivation of students to access online sessions is one of the concerns that appears in the results of the surveys. The rate of participation in online interactive activities reveals the fact that more than half of the target population did not appear online in the times scheduled for their activities. More motivated students proposed that an action plan should be set up by both teachers and students prior the exploitation of online activities. The plan should entail a scheduled arrangement of the most appropriate method of integrating the 50-hours online training.

## **Computer Mediated Language Instruction**

"The evolution of internet and computer-mediated communication (CMC) has transformed the face of learning, making web-based environments a common choice in education." (Mahalingappa, Mancilla & Polat, 2013, p. 57) With the rising number of the installments of computer labs in different Egyptian colleges, computer-assisted language learning activities through blended learning virtual environments has increasingly become accessible and feasible. On the other hand, in the United States of America, online learning and particularly asynchronous discussions in online forums have become part of the national instructional paradigm implemented not only by universities but also by high

school practitioners. (Mahalingappa, Mancilla & Polat, 2013, p. 57) "Cyber schooling" (Mahalingappa, Mancilla & Polat, 2013, p. 57) which is a virtual environment platform where students are required to take all their courses online is a case in point. In addition to the increasingly extensive realization of computer-mediated instruction in both universities and schools, research has consistently proven the efficiency of such instructional digitized web-based applications in teaching English as a second/foreign language. Mahalingappa, Mancilla & Polat (2013) state that learners who participated in asynchronous forum discussions scored higher results in vocabulary acquisition activities than those who did not, in their attempt to examine the "relationship between participation in asynchronous discussions and success in L2 vocabulary learning".(p.64)

Computer-assisted language learning has also been immensely witnessed through the expanded integration of the Smart Board or the Interactive White Board in an attempt to create more communicatively collaborative teaching/learning milieus.

It is widely used in the primary schools in the United Kingdom "for interactive whole-class teaching in the context of a general push towards socio-constructivist pedagogies, emphasising active learners in an interactive classroom." (Schmid & Whyte, 2012, p. 68) Video conferencing as in Skype and project-based learning as in Wikis are illustrations of the functioning of the interactive white board for the processing of the cognitive socio-constructivist potentials of learners of English as a second/foreign language:

Figure 3: Smart Board or Interactive White Board



The constant boost in the incorporation of computer-assisted language learning is not only observed in automated essay evaluation as the Writer's Workbench which performs "proof reading"" (Burstein & Chodorow, 2010, p. 530), "stylistic analysis" (Burstein & Chodorow, 2010, p 530) and pragmatic integration of lexical items but it is manifested also in language teaching "interactive tutorial programs" (Chapelle, 2010 in Kaplan p. 539), "electronic communication tools" (Chapelle, 2010 in Kaplan p. 539), websites and wikis. Recent studies have also focused on the formulation and analysis of computer learner corpora databases collected from both synchronous and asynchronous computerbased communication. Carot-Sierra, García-Carbonell MacDonald (2013) investigate the inter-language error in both synchronous and asynchronous communication through IDEELS (Intercultural Dynamics in European Education through on-Line Simulation). The results of this research confirms that " more errors were found in the synchronous mode of communication than asynchronous ."(Carot-Sierra, García-Carbonell MacDonald, 2013, p. 36) "These digital tools are, of course, central in what I would argue is the established and recognized field of computer assisted language learning (CALL)." (Motteram, 2013, p. 5) which has been recurrently assimilated in English language teaching practices. Neither the teachers nor the internet has remained the source of information input for learners who passively used to receive data from different sources.

"In the past, technology has predominately been used to source and consume information, whereas today's learners have become particularly adept at creating and collaboratively developing content for a wide variety of purposes, for example so-called Web 2.0 tools such as blogs, forums and wikis." (Pim, 2013, p.20)

The integration of collaborative digital virtual learning environments enhances the potentials of the learners to participate critically and creatively in online social interaction as they are not only searching for data or studying the content of a webpage, but rather developing WebPages or blogs and/or contributing in an online discussion forum. In addition, research confirms that even blogs which do not include a chatting or a social interaction option enhance the rate of autonomous and intercultural

learning.(Lee,2011) As the learning process becomes more self-centered, the learners participate in setting objectives, decision making, selecting and modifying content, reviewing their content and performance, exchanging cross cultural perspectives as well as consolidating their potentials of self-expression. Accordingly, learners grow to be the leaders who are accountable for constructing knowledge and developing cognitive skills in both synchronous and asynchronous communication rather than receivers of data which should be stored as it is in their schemas as in traditional lecturing milieus.

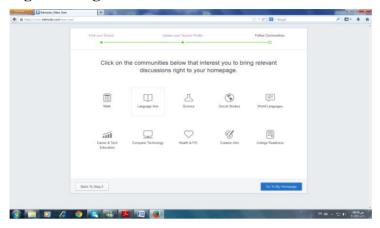
For grammar classes, teachers might need specific input that includes a high level of occurrence of the grammatical item in question and this could not be feasible in some virtual environment tools as Edmodo because the online software automatically installs and upgrades the virtual community input to the learners without being modified by the teacher. In addition, the procedures of updating data is performed instantly because new communities are enrolled into the learners' accounts every second. However, teachers can always specify a number of texts to the learners to read or can adapt the available textual input and save it in the assignments or test sections in their virtual class. To ensure a high level of structured redundant input that augments the stimuli for the learners, the teachers can make "an item more perceptually salient to learners by presenting the item and its exemplar in a color different from the color of its surrounding context." (Collentin, 1998) In addition, virtual communities allow for the accessibility of hypertexts or hotlinks which can also be available in "Wikis, Blogs and Scavenger hunts"(Eid, 2011); however, such a digital option does not exist in Fronter. Edmodo does not only provide for the creation of hyperlinks, but it also automatically links its users to existing online textual and audiovisual materials that are related to their field of specialization or career.

Figure 4: The hyperlinks available in the posts of participants in one of the forums on Edmodo:



Accordingly, when a teacher starts signing up for creating a new Edmodo account, he/she is required to select from a number of options entailing different careers and fields of study. When users of Edmodo sign up, they select a number of communities so as to install discussion forums in their Edmodo classes. The virtual communities offered by Edmodo entail math, languages, arts, science, social studies, technology education, computer technology, careers, health, physical education, creative arts and college readiness. Such communities provide the learners with multi-layer input including audio-visual and textual language input which enhances the motivation of the learners and eventually the language acquisition process.

Figure 5: Digital communities available in Edmodo



Technically, Edmodo software browses for all the obtainable links that revolve around this particular topic that the user selects and provides a hyperlink to them posted to the forum of the account; and, consequently, a teacher of English will be provided with hyperlinks about her/his profession. This online facility entails links to articles, journals, videos, full-text books as well as other Edmodo accounts that share the same profession or field of specialization.

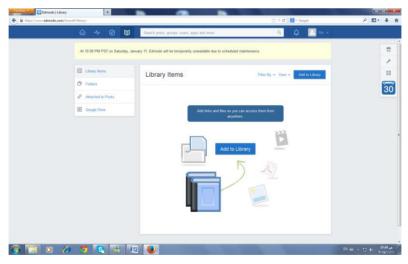


Figure 6: The library option accessible in Edmodo.

Blended learning has consistently been recommended by English language teaching practitioners and researchers because "encouraging and supporting the self-directed use of technology outside language classrooms is essential to maximizing the potential of technology for language learning." (Lai, 2013, p. 100) Blended learning facilitates the implementation of project-based and task-based techniques outside the language classroom fostering all language skills as shown in digitized databases which make full text, updated, authentic references accessible to learners. Though Fronter does not have a library option where books and periodicals can be stored in a digitized database as in Edmodo, it has the Handin section where teachers can upload materials for users including references and handouts.

As it is clear in the previous paragraphs, special focus has been placed on Edmodo primarily because it represents the most recent virtual learning environment and because it can be compared to the virtual environment tool implemented in the English sessions of Pathway to Higher education program, namely, Fronter.

Online forums, web pages and virtual environment techniques enhance the process of peer evaluation of the written performance of learners. The implementation of webpage design at the blogger developer www.wix.com helps in publishing the written production of learners allowing for peer correction which is specifically constructive in the development of writing skills. In a case study including 50 EFL college students at National Yunlin University of Science and Technology as the target population, it has been proven that peer correction of " the less-proficient students enhanced their language awareness through reading the texts, detecting and correcting online local and global errors, and finally providing their peers with useful suggestions explanations to clarify their writing problems." (Meng & Yang, Though the study of the influence of peer correction in writing tasks is out of the scope of the current research, it is observed that 10 incidents of peer correction have occurred in the discussions that took place in the forum of Fronter in 2012 where the target population corrected the spelling and vocabulary mistakes of their peers. Adopting such methodology, the target population should be permitted to read the written performance of their colleagues in the BULATS self-study writing section conferring their feedback to each other.

### **Theory**

The theoretical foundation for the integration of blended learning courses in language learning milieus is explained through the merge of two theories of language acquisition. The first theory is the theory of planned behavior which "posits that human behavioral intentions are predicted by three key constructs: (a) an attitudinal component; (b) a perceived behavior control component; and (c) a social influence component" (Lai, 2013, p. 101) Applying such theory to the implementation of blended language learning courses, the process of developing language skills through the online course is primarily dependent on students' motivation and their cognitive potentials of self-directed learning because it entails a high level of autonomous learning that requires a positive and highly motivational attitudinal component to achieve the online tasks. Consequently, the success of the process of language acquisition in blended learning programs relies principally on the following components:

- 1. a belief in the usefulness of such methodology
- 2. a conviction of the worth of technology in the process of learning
- 3. confidence in the adaptability of blended learning to the learners' approaches of learning as well as to their expectations and objectives.

On the other hand, the second theory is socio-cultural constructivism which is fundamentally based on apprenticeship and autonomy. In collaborative computer assisted language learning tasks in general and in virtual environment tools in particular, knowledge is cognitively processed either in socially authentic situations as in reaching a consensus regarding a certain issue in an online forum and/or video conferencing or in a simulation of missions that are performed in reality as in customizing characters' speech and appearance through avatars. Whether simulated or real, all tasks necessitate a high level of self-directed and autonomous learning on one hand and the exploitation of meta-cognitive thinking skills on the other. In addition, blended learning environments create opportunities for developing the socio-cultural constructivist cognitive skills of learners as they learn through

interaction with other learners and teachers in different social situations as in a chatting room or in a forum. Applying the theory of situated cognition on language acquisition through computer mediated instructions can partially account for the process of learning but it seems limiting to explain the theoretical basis of computer-assisted language learning tasks, because blended learning generates learning environments allowing for both experiential learning and apprenticeship on the one hand and cognitive learning or mind-centered learning on the other. In fact, blended learning tasks provide learners with authentic input with high rate of exposure to the target language through "multiple layers of data about a new phenomenon" that "can yield an effective learning environment if the application designer limits the number of layers to a select, relevant few. ".(Collentin, 1998, p. 9) Virtual environment web tools such as Edmodo supply learners with consistently recurrent opportunities of accessing and mentally processing linguistic items contextualized in their authentic milieus. The forum option available in Edmodo offers learners the opportunity of expressing their ideas using the target language and communicating with other people. In addition, Edmodo makes authentic materials and resources in the field of study of the learners accessible. Creative and critical thinking skills are constantly integrated to perform tasks as making interviews through video conferencing; in addition, reflective thinking and self-evaluation notably appear in the editing and reviewing stages of the projects and research papers uploaded on the wikis or virtual classrooms. Accordingly, learners are not only developing their linguistic competencies incorporating their phonetic, phonological, morphological, syntactic, pragmatic and semantic skills, but also their communicative competencies entailing their mental skills for "possibility, feasibility, processing appropriateness (Cook, 2003, p.42), on the one hand, attestendness" paralinguistic, audiovisual and typographical realizations which are partially or totally devoid of verbal mediums, on the other hand. In computer mediated instructions, learners are sometimes required to construct meaning entirely from pictures, music, facial expressions, body movements or gestures as in some advertisements or commercials. The following figure encompasses the various

theoretical foundations accounting for the integration of computer mediated instructions:

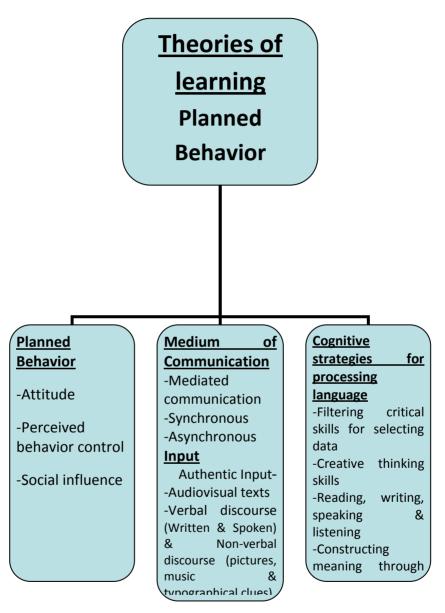


Figure 7: Theory-based validity for the Integration of Fronter, Skype and Emails.

computer mediated collaborative In virtual learning environments, there is a vast authentic unexpected textual linguistic input which entails wrong and correct data. The processing of such input by learners of English as a foreign/second language requires the functioning of micro-thinking skills such as understanding new lexical items from context as well as macro-thinking abilities as critical thinking skills for filtering such diverse input to select highly academic, genuine and original data. Texts available online are not limited to multimedia or audiovisual corpus, but they transcend such discoursal mediums to include hypertexts and verbal discourse. When the learner encounters any type of text for the first time, he/she relies on processing his/her autonomous learning strategies to construct meaning. Processing such vastly diversified input depends on socio-cognitively oriented theories such as situated cognition.

#### **Fronter**

As a virtual environment tool that caters for the online course of the blended learning pathway business English program, Fronter (Appendix 1) is advantageous for the following reasons:

- 1. Forums as tools for computer-mediated communication enhance the interactive collaboration of the target population through both written and spoken interface as well-as their self-expression which they have consistently asked for. Throughout the 100 hours of the pathway Blended Learning English course, the target population has constantly shown a genuine need for self-expression as they have always asked for opportunities where they can talk about social as well as personal subjects. Hence, both the asynchronous forum as well as the speech recognition interactive options accessible through Fronter provide multiple sources for both synchronous and asynchronous communication with other students and with instructors.
- 2. Since the fulfillment of the activities available on Fronter is not subject to time as compared to classroom instructional achievement, the target population acquires various linguistic taxonomies at their own pace diminishing the affective levels of anxiety and enhancing autonomous learning.

- 3. As far as the motivational effect of anonymity in both synchronous and asynchronous communication is concerned, research conducted by Mahalingappa, Mancilla and Polat (2013, p. 65) studying the coefficient of motivation in relation to the level of participation in anonymous versus nonanonymous asynchronous discussions indicates that nonanonymous forum communication reveals significantly higher levels of participation than anonymous interaction. This issue of anonymity is totally resolved in both the asynchronous and synchronous communication tools installed in Fronter because the name of the user is shown in all mediums of interaction.
- 4. Like both online virtual environments as Edmodo and offline computer-mediated collaborative tools as NetMeeting Sessions, Fronter introduces a Web tool for developing the critical thinking skills of EFL learners through its software potentials which are the chatting option as well as the video and audio conferencing allowing for the communication of thoughts, beliefs and cultural perspectives. Like NetMeeting Sessions, Fronter "caters for differentiation as it allows different thinking abilities to negotiate meaning and to collaborate to reach a consensus without excluding learners with lower competencies." (Eid, 2011, p. 439)
- 5. It is not expensive as internet connection is now available in most universities in Egypt.
- 6. Unlike in collaborative synchronous or asynchronous online tools where English orthography and numerical symbols are implemented to write in Arabic for communication and networking interaction, in Fronter all participants integrate the English orthography and English numerical system to communicate using the English language. The target population is always aware that there is consistent supervision and that the use of such socially compiled system of communication is not allowed. However, in social network online collaboration as in Facebook, Twitter or What's App., this language combining the English orthography and the Arabic morphology, phonology, syntax and semantics is frequently used because it is easier in accessing and processing such online tools as well as it yields faster results in constructing meaning through online social networking communities. Nevertheless, this compiled language mixing first language and second/foreign

language is a total deviation from the process of second/foreign language acquisition since the phonological, morphological, syntactic, semantic as well as pragmatic dimensions of the English language are not processed.

#### Methodology

Since the objective of this research is to study the obstacles encountered by the 19 students enrolled in Pathway to Higher Education: Development of English Skills program in 2012 in implementing the online course available at the virtual environment Fronter, the methodology of this research is conducted through two different channels:

- 3. Identifying the obstacles encountered by the target population throughout their coursework in Fronter
- 4. Analyzing statistically the rate of progress of achievement of the target population in 50 hours of online tasks of Fronter and comparing it to the rate of progress of achievement of the target population in alternative collaborative online tasks: i.e. comparing the performance of the target population in their achievement of the required tasks in Fronter to that of their achievement of tasks in Skype and online forums.

In spite of the high level of computer competency of the target population and in spite of the fact that all of them use both synchronous and asynchronous web tools for social communication, 19 students demonstrate dissatisfaction with the online part which arise from the following factors:

- 1. Students are not used to self-regulatory and self-directed learning. Accordingly, more hours have been allocated for teacher supervision in Fronter.
- 2. Though highly academic, the typography formats and layouts implemented in the design of Fronter is not as motivating for the target population as that available in other social media communication tools like Face book. Accordingly, logistics interaction has been fulfilled through the face book created for this group.
- 3. The technical difficulties specially arising in the video conferencing tool available in Fronter constitute a serious

hindrance for its implementation and consequently it has been replaced by Skype.

4. Time constraints comprise a recurrent barrier as these students are either university students who have academic obligations or graduates who have their careers to pursue. Consequently, the time of interaction through Fronter is allotted from 8:00 pm till 12:00 pm for four days a week. This means that I, as their online instructor, have had to be present in Fronter for 16 hours a week.

Being their teacher in the 50 hours face-to-face interaction and their supervisor in the 50 hours online course, I had to search for resolutions for the hindrances encountered through the use of Fronter to enhance the rate of their attendance in this virtual environment and to motivate them to accomplish their assignments installed on Fronter. Accordingly, Skype has been used instead of the video conferencing tool accessible in Fronter, the Face book has been implemented for scheduling appointments and other logistics work, the online version of the Time magazine has been implemented as a source of authentic texts for reading, writing and speaking tasks.

Using the forum option available in Fronter, the students are provided with a topic for discussion. They are required to go to www.time.com and search for all the articles and videos that tackle this topic, and then discuss the content of these articles and videos in the forum of Fronter with the other students and me. Such discussions are also held using Facebook forum. After the written discussion in the forum, the students are required to discuss the content of these articles orally with me via Skype. Finally, they are asked to write an essay concerning the topic in question and send it to my email. After marking the essays, students receive the feedback via the email or on facebook. This online instruction unit has been recurrently taking place twice a week.

#### **Results and Discussion**

The following table explains the statistical results of students' frequency of implementation of Fronter in 2012 as well as the rate of achievement of the tasks in Fronter for each student in the target population, which consists of 19 students either just graduated or in the fourth year of college. This population has attended a 50 hours online course in a blended learning business English session as part of Pathway's Development of English Skills program. (Appendix 1) The online course encompasses tasks to develop the following language skills:

- 1. BULATS self-study listening and reading
- 2. BULATS self-study writing
- 3. BULATS self-study speaking

Table 1: Rate of progress of achievement of the online course in Fronter & the time spent in Fronter by each student

| Students | Course  | Status | Progress | Time<br>Spent | Date       |
|----------|---|--------|----------|---------------|------------|
| 1        | 2BULATS Self-<br>study Listening<br>& Reading | Active | 3%       | 20:08:53      | 04/11/2012 |
| 1        | BULATS Self-<br>study Writing                 | Active | 5%       | 09:55:36      | 02/11/2012 |
| 1        | BULATS Self-<br>study Speaking                | Active | 3%       | 00:00:29      | 28/10/2012 |
| 1        | BULATS Self-<br>study Speaking                | Active | 1%       | 24:14:10      | 15/09/2013 |
| 2        | BULATS Self-<br>study Speaking                | Active | 1%       | 19:01:13      | 08/11/2012 |
| 2        | 2BULATS Self-<br>study Listening<br>& Reading | Active | 21%      | 23:18:31      | 09/12/2012 |
| 2        | BULATS Self-<br>study Writing                 | Active | 20%      | 07:34:37      | 23/10/2012 |

|          |   |        | ı        |               | 1          |
|----------|---|--------|----------|---------------|------------|
| Students | Course  | Status | Progress | Time<br>Spent | Date       |
| 2        | BULATS Self-<br>study Speaking                | Active | 3%       | 00:38:32      | 08/11/2012 |
| 3        | 2BULATS Self-<br>study Listening<br>& Reading | Active | 9%       | 35:15:36      | 10/11/2012 |
| 3        | BULATS Self-<br>study Writing                 | Active | 14%      | 13:10:50      | 11/11/2012 |
| 3        | BULATS Self-<br>study Speaking                | Active | 2%       | 06:15:26      | 11/11/2012 |
| 3        | English<br>Grammar                            | Active | n/a      | 00:00:01      | 13/09/2012 |
| 3        | BULATS Self-<br>study Speaking                | Active | 5%       | 12:52:42      | 26/10/2012 |
| 4        | BULATS Self-<br>study Speaking                | Active | 45%      | 14:00:55      | 07/11/2012 |
| 4        | BULATS Self-<br>study Writing                 | Active | 39%      | 13:25:27      | 09/11/2012 |
| 4        | BULATS Self-<br>study Speaking                | Active | 1%       | 16:33:05      | 07/11/2012 |
| 4        | 2BULATS Self-<br>study Listening<br>& Reading | Active | 61%      | 19:27:36      | 09/11/2012 |
| 5        | 2BULATS Self-<br>study Listening<br>& Reading | Active | 1%       | 00:00:16      | 05/11/2012 |
| 6        | BULATS Self-<br>study Writing                 | Active | 7%       | 08:39:15      | 02/11/2012 |
| 6        | BULATS Self-<br>study Speaking                | Active | 14%      | 18:26:39      | 11/11/2012 |
| 6        | BULATS Self-                                  | Active | 11%      | 02:10:55      | 12/10/2012 |

| Students | Course  | Status | Progress | Time<br>Spent | Date       |
|----------|---|--------|----------|---------------|------------|
|          | study Speaking                                |        |          |               |            |
| 6        | 2BULATS Self-<br>study Listening<br>& Reading | Active | 1%       | 16:48:52      | 06/11/2012 |
| 7        | BULATS Self-<br>study Writing                 | Active | 14%      | 03:56:57      | 11/11/2012 |
| 7        | BULATS Self-<br>study Speaking                | Active | 11%      | 01:26:52      | 10/11/2012 |
| 7        | BULATS Self-<br>study Speaking                | Active | 7%       | 00:53:38      | 10/11/2012 |
| 7        | 2BULATS Self-<br>study Listening<br>& Reading | Active | 3%       | 24:08:19      | 11/11/2012 |
| 8        | BULATS Self-<br>study Speaking                | Active | 2%       | 00:00:23      | 28/11/2012 |
| 8        | BULATS Self-<br>study Writing                 | Active | 16%      | 01:15:12      | 25/11/2012 |
| 8        | English<br>Grammar                            | Active | n/a      | 00:00:01      | 12/10/2012 |
| 8        | BULATS Self-<br>study Speaking                | Active | 14%      | 00:28:58      | 28/11/2012 |
| 8        | 2BULATS Self-<br>study Listening<br>& Reading | Active | 10%      | 76:40:01      | 12/11/2012 |
| 9        | 2BULATS Self-<br>study Listening<br>& Reading | Active | 4%       | 30:04:58      | 11/11/2012 |
| 9        | BULATS Self-<br>study Speaking                | Active | 22%      | 03:38:43      | 11/11/2012 |
| 9        | BULATS Self-                                  | Active | 47%      | 46:34:29      | 10/11/2012 |

|          |   |                         | ı        |               | 4          |
|----------|---|-------------------------|----------|---------------|------------|
| Students | Course  | Status                  | Progress | Time<br>Spent | Date       |
|          | study Speaking                                |                         |          |               |            |
| 9        | BULATS Self-<br>study Writing                 | Active                  | 18%      | 13:06:40      | 10/11/2012 |
| 10       | BULATS Self-<br>study Writing                 | Active                  | 9%       | 03:04:42      | 24/09/2012 |
| 10       | 2BULATS Self-<br>study Listening<br>& Reading | Active                  | 4%       | 03:21:46      | 07/11/2012 |
| 11       | BULATS Self-<br>study Speaking                | Active                  | 7%       | 00:54:31      | 09/11/2012 |
| 11       | BULATS Self-<br>study Writing                 | Active                  | 25%      | 02:07:12      | 10/11/2012 |
| 11       | 2BULATS Self-<br>study Listening<br>& Reading | Active                  | 9%       | 11:41:43      | 10/11/2012 |
| 11       | BULATS Self-<br>study Speaking                | Active                  | 7%       | 00:52:17      | 10/11/2012 |
| 12       | English<br>Grammar                            | Active                  | n/a      | 00:00:01      | 5/10/2012  |
| 12       | BULATS Self-<br>study Speaking                | Active                  | 5%       | 00:19:02      | 16/10/2012 |
| 12       | BULATS Self-<br>study Speaking                | Active                  | 14%      | 08:15:36      | 21/11/2012 |
| 12       | BULATS Self-<br>study Writing                 | Active<br>Comp<br>leted | 100%     | 06:10:11      | 26/11/2012 |
| 12       | 2BULATS Self-<br>study Listening<br>& Reading | Active                  | 34%      | 10:05:42      | 25/11/2012 |
| 13       | BULATS Self-                                  | Active                  | 1%       | 05:18:59      | 10/11/2012 |

| Students | Course  | Status | Progress | Time<br>Spent | Date       |
|----------|---|--------|----------|---------------|------------|
| 13       | study Speaking  2BULATS Self- study Listening & Reading | Active | 1%       | 15:49:14      | 11/11/2012 |
| 13       | BULATS Self-<br>study Writing                           | Active | 50%      | 10:05:36      | 10/11/2012 |
| 13       | BULATS Self-<br>study Speaking                          | Active | 9%       | 06:56:12      | 03/11/2012 |
| 14       | 2BULATS Self-<br>study Listening<br>& Reading           | Active | 1%       | 00:45:57      | 29/8/2012  |
| 15       | BULATS Self-<br>study Speaking                          | Active | 35%      | 06:49:16      | 03/12/2012 |
| 15       | BULATS Self-<br>study Writing                           | Active | 23%      | 05:36:15      | 03/12/2012 |
| 15       | BULATS Self-<br>study Speaking                          | Active | 3%       | 00:00:35      | 03/12/2012 |
| 15       | 2BULATS Self-<br>study Listening<br>& Reading           | Active | 5%       | 07:30:10      | 03/12/2012 |
| 16       | BULATS Self-<br>study Speaking                          | Active | 15%      | 00:57:22      | 03/12/2012 |
| 16       | English<br>Grammar                                      | Active | n/a      | 00:00:01      | 13/9/2012  |
| 16       | 2BULATS Self-<br>study Listening<br>& Reading           | Active | 2%       | 08:28:43      | 03/12/2012 |
| 16       | BULATS Self-<br>study Writing                           | Active | 11%      | 00:46:03      | 03/12/2012 |
| 16       | BULATS Self-  | Active | 3%       | 01:23:10      | 03/12/2012 |

| Students | Course  | Status | Progress | Time<br>Spent | Date       |
|----------|---|--------|----------|---------------|------------|
|          | study Speaking                                |        |          |               |            |
| 17       | 2BULATS Self-<br>study Listening<br>& Reading | Active | 4%       | 09:19:03      | 02/12/2012 |
| 17       | BULATS Self-<br>study Speaking                | Active | 3%       | 00:00:13      | 28/11/2012 |
| 17       | BULATS Self-<br>study Writing                 | Active | 9%       | 05:05:23      | 03/12/2012 |
| 17       | BULATS Self-<br>study Speaking                | Active | 2%       | 00:27:17      | 02/12/2012 |
| 18       | 2BULATS Self-<br>study Listening<br>& Reading | Active | 26%      | 10:26:49      | 03/11/2012 |
| 18       | BULATS Self-<br>study Speaking                | Active | 17%      | 00:28:41      | 27/10/2012 |
| 18       | BULATS Self-<br>study Writing                 | Active | 7%       | 04:16:58      | 03/11/2012 |
| 18       | BULATS Self-<br>study Speaking                | Active | 14%      | 01:32:23      | 31/10/2012 |
| 19       | 2BULATS Self-<br>study Listening<br>& Reading | Active | 1%       | 00:01:37      | 29/08/2012 |

Figure 8: Progress rate of achievement of listening & reading tasks in Fronter

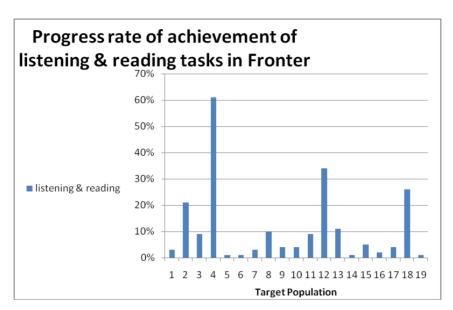


Figure 9: Progress rate of achievement of listening & reading tasks on www.time.com



Figure 10: Progress rate of achievement of writing tasks in Fronter

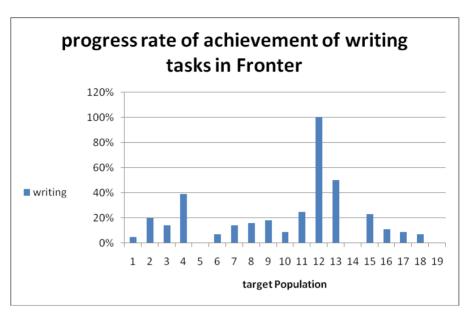


Figure 11: Progress rate of achievement of writing tasks in Fronter Forum and essays via the email.

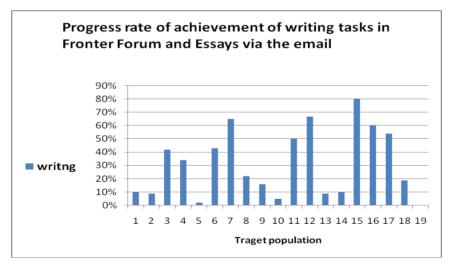


Figure 12: Progress rate of achievement of speaking tasks in Fronter

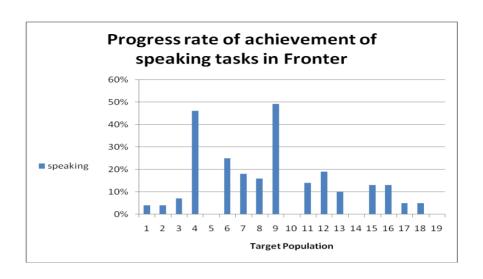


Figure 13: Progress rate of achievement of speaking tasks in Skype.

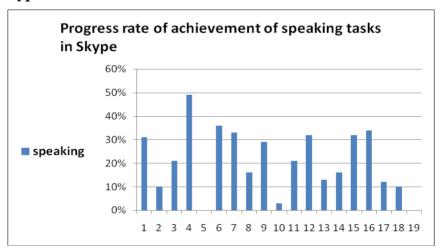


Figure 14: Progress rate of achievement of all tasks in Fronter

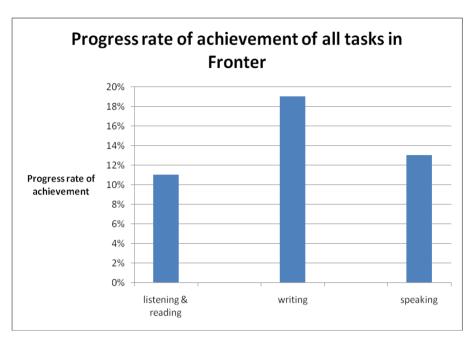


Figure 15:Progress rate of achievement of all tasks in online Time magazine, Skype & Fronter Forum.

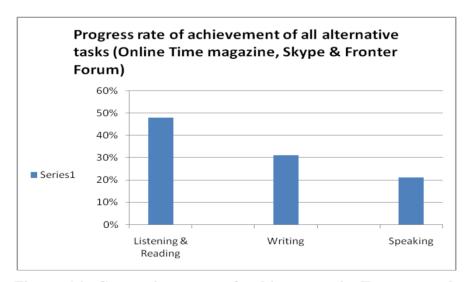
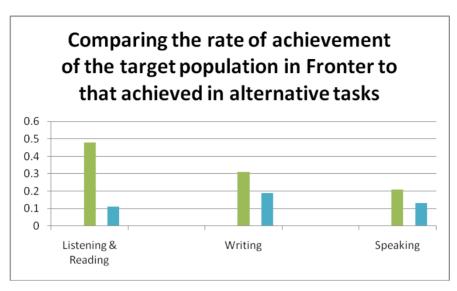


Figure 16: Comparing rates of achievement in Fronter to those achieved in alternative tasks.



Figures 8,9,10,11,12,13,14,15 and 16 demonstrate that the progress rate of achievement using alternative online tasks in the listening and reading sections exceeds that accomplished in Fronter by 37% and their ratio is 48%: 11%. However, in the writing section, the difference is only 12% and in the speaking section, is only 8%. Consequently, the rate of task achievement in the listening and reading section using www.time.com, the forum of Fronter, Facebook, and emails show the highest level of attainment in all tasks whether in Fronter or in alternative online tasks. Accordingly, it is highly recommended to incorporate authentic reading and listening texts in this section in Fronter. An obstacle that might encounter the teachers is that authentic online texts sometimes do not match the English proficiency level of all students. Students with lower English proficiency levels might find the speed of delivering speech in videos on www.time.com too quick or the vocabulary used too difficult and hence, comprehension will not be achieved. However, this obstacle is not encountered by the target population as they found the texts on that site comprehensive and interesting. In addition, they are given the freedom to choose the texts that they would like to read and watch; accordingly, when they come across a text that is difficult for them, they will avoid it using their cognitive filtering skills. As far as the speaking coefficients are concerned, the difference in the rate of progress between the speaking tasks on Fronter and the alternative speaking tasks reveals that a very limited progress is achieved. Though the performance of the target population in Skype as an alternative conferencing tool demonstrates a higher rate of development of 8% when compared to their progress of achievement in the speaking tasks in Fronter, still 10% of the target population encountered technical difficulties in installing and implementing Skype. However, they have all agreed that the implementation of Skype as a video conferencing tool is much easier than the video session conferencing tool available on Fronter and the installation of Skype is less time consuming than that of Fronter.

Since the execution of this alternative task unit in 2012, a number of online virtual environment tools have appeared for free access such as <a href="https://www.edmodo.com">www.edmodo.com</a>, www.edmodo.com, www.centraldesktop.com is a virtual learning environment offering options for creating virtual classroom environments as well as the accessibility of a dashboard.

Since the validation process is "multifaceted" as it requires many "types of evidence.... to support any claims for the validity of scores" (Weir, 2005, p13), Fronter is compared to Edmodo as an illustration of the most updated virtual environments available online. However, the evaluation criteria compiled entail measures accessible on other computer-assisted language learning tools as to include the most updated evaluation standards.

**Table 2: Criteria for Evaluating Virtual Environment Tools** 

|    | Table 2: Criteria for Evaluating Virtual Environment Tools  |               |                |  |  |
|----|---|---------------|----------------|--|--|
|    | Criteria for Evaluating Virtual<br>Environment Tools  | Fronter       | Edmodo         |  |  |
| 1. | Motivating animation as in http://www.dvolver.com/moviem aker/make.html   | Non-Available | Non-Available  |  |  |
| 2. | Customization of the design and background of the virtual environment tool www.wix.com and http://www.dvolver.com/moviem aker/make.html         | Non-Available | Non -Available |  |  |
| 3. | Customization/Selection of characters delivering speech or creating avatars as in www.voki.com and http://www.dvolver.com/moviem aker/make.html | Non-Available | Non-Available  |  |  |
| 4. | Authentic tasks as online job applications in job seekers   | Non-Available | Available      |  |  |
| 5. | Collaborative tasks as in http://www.discoveryeducation.com   | Non-Available | Available      |  |  |
| 6. | Authentic texts as texts available at www.time.com  | Non-Available | Available      |  |  |
| 7. | Authorware for quizzes and tasks as in www.edmodo.com   | Non-Available | Available      |  |  |
| 8. | Instant update for new links to texts discussing the topics of interest to the users www.edmodo.com   | Non-Available | Available      |  |  |
| 9. | Forums for updated news for both teachers and students as in www.eslcafe.com  | Available     | Available      |  |  |

| Criteria for Evaluating Virtual<br>Environment Tools   | Fronter       | Edmodo         |
|--|---------------|----------------|
| 10. Forums for website developers to receive the feedback of users                               | Non-Available | Non-Available  |
| 11. Speech recognition recording option as in www.fotobabble.com                                 | Available     | Non-Available  |
| 12. A search option  | Available     | Available      |
| 13. Dictionaries and Thesauri  | Non-Available | Non-Available  |
| 14. Automatic transfer of audio or video recordings into written script                          | Non-Available | Non-Available  |
| 15. User friendly (easy navigation and registration)   | Available     | Available      |
| 16. Instant feedback to learners as in www.testmagic.com   | Non-Available | Non-Available  |
| 17. Contextualization of linguistic items  | Available     | Available      |
| 18. Quick accessibility and loading of the speech recognition tools                              | Non-Available | Non-applicable |
| 19. Links to similar professional or academic communities as in www.edmodo.com                   | Non-Available | Available      |
| 20. Newsletters for teachers as in http://teachertrainingvideos.com/                             | Non-Available | Available      |
| 21. Classification of activities according to English proficiency level as in www.esl-lab.com    | Non-Available | Non-Available  |
| 22. Audio-visual texts can be delivered using different accents of English native speakers as in | Non-Available | Non-Available  |

| Criteria for Evaluating Virtual<br>Environment Tools   | Fronter       | Edmodo   |
|--|---------------|--|
| www.voki.com   |               |  |
| 23. Pictures of participants in the video room to reveal their identity as in www.facebook.com | Non-Available | Non-<br>Applicable   |
| 24. Hyperlinks as in www.wix.com   | Non-Available | Available  |
| 25. Progress account of the performance of students  | Available     | Available  |
| 26. Video conferencing   | Available     | Non-Available<br>but videos can<br>be uploaded as<br>posts |

From table 2, a number of recommendations should be made to upgrade the digital options available in Fronter. Although the hyperlinks in Fronter are user-friendly and easy to browse, the animation should be more encouraging and motivating allowing for more audiovisual materials. The implementation and customization of avatars can enhance the integration of more inspiring animation for the development of the four skills. Though Fronter presents a progress account for the performance of each student in the section entitled Portfolios, it does not allow for the installment of hyperlinks in the assignments of the target population. Students need to link their written performance to online resources that they have integrated to fulfill the writing assignments. In addition, the classification of activities according to various language proficiency levels is not required in the case of Fronter because the tasks are initially validated and specially developed for the target population. In spite of the fact that the texts and tasks incorporated in the online assignments in Fronter are focusing on business and academically oriented topics, the target population has shown a higher rate of achievement when the texts and tasks are more authentic. To attain a high level of authenticity of text and task, it is necessary to create automatic links to similar professional or

academic communities as well as to forums in the field of specialization. However, as far as the options for teachers are concerned, it is advisable to install author-ware for quizzes to facilitate the process of compiling and uploading quizzes and tests. Furthermore, there is a persisting demand for the quick accessibility and loading of the speech recognition tools available in the Liveclass in Fronter.

To conclude, Fronter as a virtual environment tool attaining all measures of security represents a pioneering attempt in the field of academic implementation of virtual environment tools: however. to achieve high validation coefficients and required motivational levels, a number of modifications are proposed. Authenticity of text and task should be achieved through the implementation of online avatars, virtual environment tools and speech recognition options. On the other hand, such levels of authenticity can also be accomplished through the integration of offline options available on IPads. IPhones as well as local networking systems such as NetMeeting sessions. The incorporation of audio-visual texts is an asset that augments the motivation of learners and the installment of user-friendly software and digitized options that require minimal computer literary also encourages the learners to implement the digitized tools and hence increasing their motivational levels. An advantageous digitized option in Fronter is the saving of the performance of the learners in a database demonstrating their scores, time of achievement, date of achievement as well as the type of task achieved. However, immediate feedback for correct task attainment is not available. This option is accessible in many online tools and it comes out in the form of a clapping audio file or a check that appears on the screen or even a picture of a smiling face. Finally, Fronter as a highly academically validated virtual environment tool stands for a revolutionary computer-assisted language learning accomplishment in blended learning milieus.

#### **References:**

Burstein, J & Chodorow, M, (2010) Progress and new directions in technology for automated essay evaluation. In Kaplan, R (Ed.) *The Oxford handbook of applied linguistics*. New York: Oxford University Press.

Carot-Sierra, J, García-Carbonell, A & MacDonald, P. (2013, June) Computer learner corpora: analyzing interlanguage in synchronous and asynchronous communication. Language Learning & Technology. 17(2), 36-56

Chapelle, C. (2010) Computer-assisted language learning. In Kaplan, R.(Ed.) *The Oxford handbook of applied linguistics*. New York: Oxford University press.

Collentine, J. (1998) Cognitive Principles and CALLGrammar Instruction: A Mind-Centered, Input Approach. CALICO Journal. 15, 1-3

Cook, G. (2003) Applied linguistics. UK: Oxford University Pres.

Eid, M (2011) Implementing NetMeeting sessions in developing literary critical thinking skills. The Journal of the faculty of Education: Alexandria University. 21(6), 429-484

Khabbazbashi, N., Khalifa,H., Malarkey, J. & Walker, C. (2012, 30 July) Cambridge ESOL English Language Services for the Center for Advancement of Post Graduate Studies, Cairo University Progress Report 1. University of Cambridge ESOL Examinations.

Lai, C. (2013, June) A framework for developing self-directed technology use for language learning. Language Learning & Technology. 17(2), 100-122

Lee, L. (2011, October) Blogging: promoting learner autonomy and intercultural competence through study abroad. Language Learning & Technology. 15(3), 87-109.

Mahalingappa, L., Mancilla, R. & Polat, N.(2013, June) Anonymity ad motivation in asynchronous discussions and L2

- vocabulary learning. Language Learning & Technology. 17(2), 57-74.
- Meng, W & Yang, Y (2013, June) The effects of online feedback training on students' text revision. Language Learning & Technology. 17(2), 220-238
- Motteram, G. (2013) Innovations in learning technologies for English language teaching. London.UK: British Council.
- Pim, C. (2013) Emerging technologies, emerging minds: digital innovations within the primary sector learning technologies for English language teaching. In Motteram, G. (Ed.) *Innovations in learning technologies for English language teaching*. London. UK: British Council.
- Schmid, E. & Whyte, S. (2012, June) Interactive whiteboards in state school settings: teacher responses to socio-constructivist hegemonies. Language Learning & Technology. 16(2), 65-86
- Weir, C. (2005) Language testing and Validation: an evidence-based approach. New York. USA: Palgrave MacMillan.

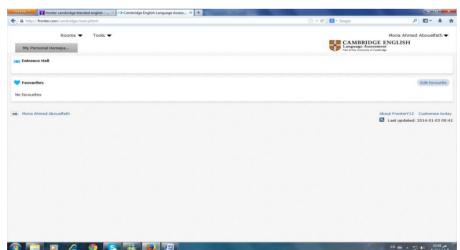
# Appendix 1

**Different sections in Fronter:** 

Users have to sign in using their usernames and passwords:



After signing in, the following screen will appear having the different sections of Fronter:



When users choose a room, the page designed as a welcome page to the BULATS Blended Learning Course will appear:

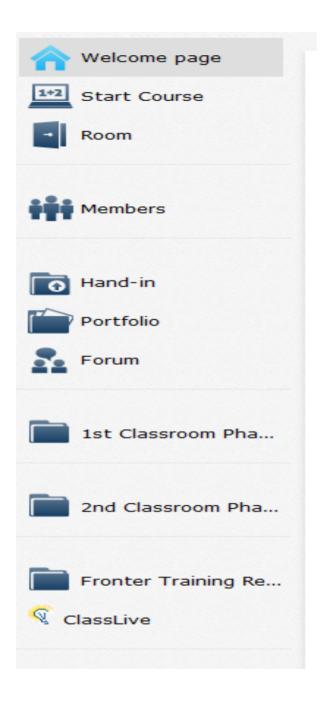
The BULATS Blended Learning Course is designed to develop business English language skills through approximately 50 hours of online study modules. Delivered directly to you, it builds up ability across the four skills of reading, writing, listening and speaking.

The course includes both self-study and guided practice material and is organized into 3 modules:

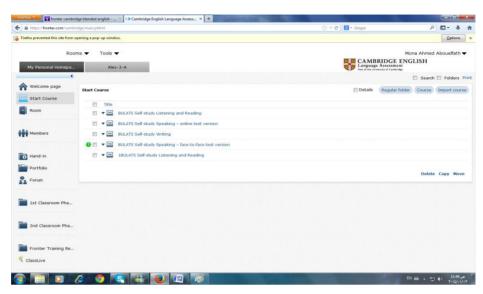
- Reading and Listening Module (20 + 10 hours)
- $\circ$  Speaking Modules for the online and paper-based versions of the Speaking test (5 + 5 hours each)
  - $\circ$  Writing Module (5 + 5 hours).



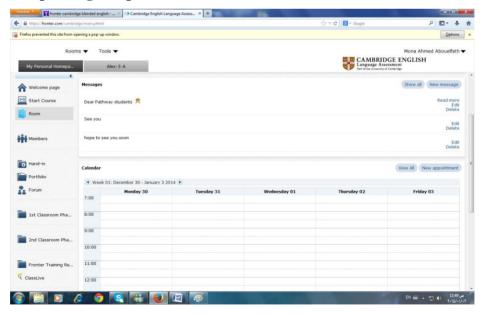
On the left side of the welcome page, there is a bar menu entailing the different sections of fronter:



If users click on the icon of Start Course, the listening, reading, writing and speaking syllabi for self-study will appear:



This is one of the rooms available in Fronter entailing the chatting tool which comprises all previous and current messages posted by the coordinators or teachers. It also has a scheduled calendar where the coordinators and teachers can make appointment with students or allocate time for their presence for the speaking components.

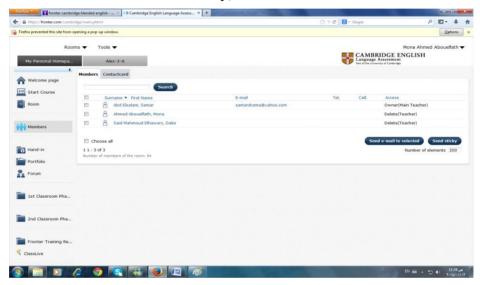


When clicking on the members icon, a list of the teachers and coordinators in a certain batch will be displayed. In this batch, the following list of members appears:

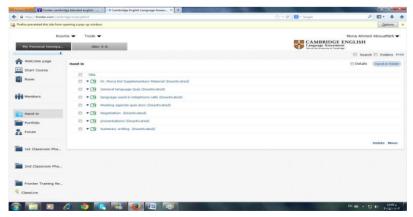
Abdesalam, Samar

Ahmed aboulFath, Mona

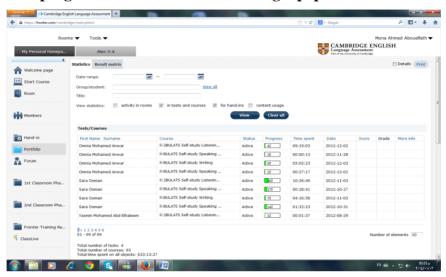
Said Mahmoud El Hawary, Dalia



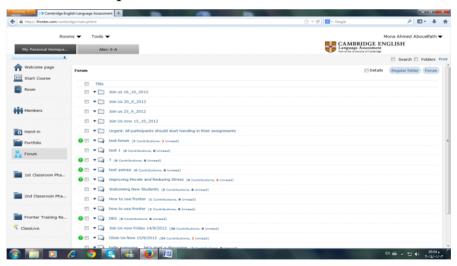
The hand-in option available in Fronter allows teachers and/or coordinators to supply students with supplementary materials required to facilitate the process of accomplishing their tasks for the listening, reading, speaking and writing sections.



The portfolio option available in Fronter allows teachers to access the progress of achievement of the target population:



The forum tool is a chatting tool that also provides all previous interactions processed in Fronter:



Classlive which takes 25 minutes to operate is a video conferencing session:

