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Investigating African 'Digital-Immigrant' Students' Reactions to Moodle Resources

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Abstract

In this study, we investigated the reactions and perceptions of 'digital immigrant' students to the adoption of blended learning combining the Moodle VLE and traditional face-to-face instructional delivery method on EAP courses in a Nigerian university of technology. Data sets from extractable online logs for activities, discussion board interaction and two online surveys are triangulated by focus group discussion responses. The data revealed that students' use of the online components of the courses are high and perceptions of the various values such as relevance, reflective thinking, interactivity, tutor support, interpretation, learning experience and benefit are very positive, and are in the range of 60s to 90s in percentage points. However, peer to peer interaction while positive is not as high, indicating the additional work that need be done in addition to the challenges of infrastructure and cost that students would want addressed. Implications of the findings include the potentials of blended learning in difficult academic contexts and subject areas, the relevance of social interaction platforms in language learning and other subject areas, and the crucial role technology can play in large class contexts.

Key words: Digital immigrant; Moodle; Blended learning; Interaction; Critical thinking; Learner autonomy

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INTRODUCTION

When Marc Prensky came up with the terminologies 'Digital Natives' and 'Digital Immigrants', he did not have Nigerian young students as referents. Most of these youths do not belong to the generation that had "Computer games, email, the Internet, cell phones and instant messaging [as] integral parts of their lives" (Prensky, 2001). But the rapid developments in the last two decades in the application of Information and Communications Technologies (ICTs) to education is a major challenge to educators, even in Africa, particularly sub-Saharan Africa and specifically Nigeria where educational practices remain steeped deeply in the traditional mode of rote learning, and there is yet to emerge a dynamic ICT policy. Recent efforts at curriculum renewals by higher education institutions focus essentially on content rather than methodology, the vehicle for delivering that content. In these developing countries, transition to an industrial, and possibly a knowledge society will depend on deep and far reaching changes in the education sector. In advanced educational systems, learning has moved from the dominant behaviourist to social constructivist approaches (Bransford, Brown & Cocking, 2000). The emerging world scenario places a heavy burden on educators with a concern for the system they continue to nurture. Transition from a teacher-fronted, rote learning, and large class (500+) English as a Second Language (ESL) programme to a Blended Learning one in low resourced, technology-poor context would therefore represent a quantum leap, in a Nigerian Higher Education institution. Of course, the much acknowledged digital gap therefore means that young adults in African contexts are far from being 'digital natives'. Indeed, evidence shows they are 'digital immigrants' (Aborisade, 2005a).

The project being reported here was conceived as an on-going action research effort by classroom teacher-researchers to bring about change and to monitor its processes. It began as an attempt to get students to use

English more in learner-learner, and learner-teacher interactions in order to develop proficiency, and has turned out as a project that is taking our full attention, and one the institution is beginning to pay attention to. This paper describes a practitioner-led research-in-progress project using the Blended Learning approach, incorporating the traditional Face-to-Face (F2F) teaching-learning mode and the Web 2.0 learning technologies in an effort to implement change.

1. CONTEXT AND BACKGROUND

The project was intended to explore possibilities for increased learner interaction and collaboration, and the enhancement of learning experience of largely 'digital-immigrant' students in two English for Academic Purposes (EAP) courses (GNS 101 and GNS 102) for freshmen undergraduates at The Federal University of Technology Akure (FUTA), Nigeria. The English language is the official language in the multi-lingual country with strong threats from the local pidgin and a dwindling interest in real educational achievement by the youth, with the consequence of poor levels of proficiency in the official and academic medium. The large class situation is a constant feature that compounds the problem of effective teaching-learning, and which led us at FUTA to finding alternative approaches in EAP modules for 3000+ freshmen cohorts over two semesters of the foundation year.

The EAP programme (content and methodology) is grounded in theories of mediated and distributed collaborative learning linked with socio constructivism (Dillenbourg, 1999; Kyriakicou, 1999; Vygotsky, 1978) and communities of practice (Wenger, 1998). It also benefits from findings of the great potential in using the VLE as a mode of delivery, but requiring, in the process, a great deal of time and input from academic and technical staff. The value of technology supported education has been well accounted for in the literature. Barajas and Owen (2000) maintain that the development of Virtual Learning Environments (VLEs) enabling new opportunities to personalise learning is a milestone. That technology supported courses "provide better support for the less able, engage students who do not respond well to 'traditional' classroom learning, provide opportunity for accelerated learning for gifted and talented students, and develop independent learning skills through a personalised learning" experience is well attested to (Boulton, 2009). The American National Research Council (1999: 218) contended that computer-based technologies can be "powerful pedagogical tools … [as] extensions of human capabilities and contexts for social interactions" supporting learning. Several other studies agree with the notion held by many practitioners and researchers, that technology helps students to construct knowledge. In light of all this, many higher education institutions have adopted various types of course/learning management technological tools and platforms for meeting the needs of students and faculty.

At FUTA the initial decision to look for alternative methods and pedagogies emanated from problems associated with teaching a language for proficiency course in very large classes (3000+ students and 5 teachers amid several other constraints). As a first step, in 2005 Web 1.0 internet resources offered a useful alternative. At this stage, having earlier adopted the Communicative Language Teaching (CLT) model, a task-based, problem-based and process-product syllabus was adopted. The process was assisted by various accounts in second language (L2) teaching literature (e.g. Dudley-Evans, 1984; Hopkins, 1988; Bloor and St. John, 1988; Hyland and Hyland, 1992) and several workshops over three years. Our experience at that stage of development was reported in some detail (Aborisade, 2003). Thus, the objective of the course necessitated setting up situations where interactions take place to achieve what Candlin (1987) referred to as "purposeful communication". But implementing all this in the large classes made the inadequacies of the F2F ethos become only too glaring. Moreover, in resource-poor Nigerian higher education system where there are no 'digital natives' both faculty and students needed computer and digital information literacy skills. However, it was clear that the new learning technologies of Web 2.0 offered the best opportunities to innovate our curriculum and provide new learning opportunities for the students who are in any case, as with the youth of other climes, inquisitive, critical, explorative, manipulative, and nonconforming – challenging and questioning established authorities (except that in our context they are not 'digitally savvy'). Indeed, some of the available technologies such as cell phones, television, computers and video play a major role in their everyday social interactions. As such, it is reasonable to assume that they have been apprenticed to the use of technology through communities of practice (home and peer groups) and would be able to apply technological skills in academic contexts.

The Blended Learning approach, which enabled us to keep the F2F (faculty's comfort zone) and gradually incorporate Web 2.0 as we improve our competencies and adapt to the new tools, offered the best model. This approach is sometimes also referred to as 'hybrid learning' or 'mixed mode learning' (Doering, Veletsianos & Yerasimou, 2008). Teaching and Learning literature confirms that when people learn with human and technological resources, the individuals can extend their knowledge and social connections. In this regard, Blended Learning is particularly useful especially in our context, as according to Krawiec, Salter, & Kay (2005, cited in Rodriguez and Anicete, 2010), "creating learning tasks

for students which involve an online discussion can be particularly effective." Students learn from one another by receiving feedback from peers; threaded discussions allow students to respond in thoughtful ways to questions that stimulate critical thinking and promote the sharing of ideas. Citing Deliaglioglu (2004) Rodriguez and Anicete (2010: 792) quoted some of such reports:

> Studies on student achievement in hybrid course showed that students were more successful in the hybrid courses than they do in purely web based or traditional courses (Lilja, 2001; Truckman, 2002, Christman et al., 1997; Christman & Badget, 1999; Persin, 2002). The literature showed that students' course satisfaction was high in hybrid courses (Gray, 1999; Black, 2002). Students' attitude towards technology and technology integrated courses were indicated as positive in hybrid courses. Several studies showed that a "mixed" course structure was preferred by the students and that hybrid courses effected students learning positively (Gunter, 2001; Leon de la Barra et al., 1999) (p. 266).

The FUTA project sought to examine how Nigeria's 'digital-immigrant' students reacted to the use of resources afforded by a Learning Management System (LMS) to complement the F2F environment of their traditional learning situation. Understanding how students react and the impact of this new learning mode on their attitude is vital to our reform effort and the progress we can make as faculty and as an institution in contributing to making Nigeria a learning society and building a knowledge economy. This project is an extension of earlier efforts in using the Wiki to enhance student learning experience on our problem-based project-writing module; and it builds on earlier findings (Aborisade, 2010) that our students, though lagging behind technologically, especially at the digital and internet domains, are no less enthusiastic by prospects of learning through the media of their play and social networking. Indeed, many are bringing so much zeal into the project that it is beginning to challenge teachers out of their complacency.

The main aim of this study, therefore, is to determine and implement, as an iterative process and an action research effort, a pedagogical framework for the use of information and communications technology, specifically, a VLE, for 'digital-immigrant' students' learning processes.

2. METHODS

This study was carried out at The Federal University of Technology Akure (FUTA), Nigeria over two semesters on two EAP courses, one in each semester. The courses are credit bearing and are designated as GNS 101 (Study Skills) and GNS 102 (Integrated Reading & Writing). Fresh undergraduate students have two contact hours a week over thirteen weeks of each semester. Three thousand (3000+) plus students are divided roughly along disciplinary lines and taught F2F by five teachers. Time and space constraints make it impossible to divide students into smaller groupings, and each teacher has to face the smallest groups we could afford of between 300 and 400 for face-to-face lectures for GNS 101, but we are able to build very small teams of five within the larger teaching groups for GNS 102 project group work.

To extend the classroom space beyond the walls, have more meetings and enable student-student and student-teacher interactions, the MOODLE (Modular Object-Oriented Dynamic Learning Environment) Virtual Learning Environment was introduced (www.futaelearningdirect.com). This came after trying out the Wiki (www.futagns102@pbworks.com) for the 'Integrated Reading and Writing' module with reports indicating high enthusiasm of students for online learning. The configuration and setting up of the Moodle was carried out on trial and error basis, without any expert involvement. One of the teaching team who had a brief experience of using it as a visiting researcher in a UK university worked with some software technologists to get it installed and running. University authorities paid for external hosting of the website.

The research methodology is that of practitioner led action research with the teacher as participant and researcher. The method engages with context rich qualitative and quantitative data collection and analysis, searching for themes within and across data sets. About 3000+ students were collectively enrolled on the learning site in each semester but they were required to register individually using a passkey. All students have access to computers and Internet in the various cybercafés on and off campus. At the beginning of the session they have an orientation programme on the use of the VLE and are taken through the process of forming working teams for group work in the second semester. The Moodle site thus provides additional learning spaces, where they get learning materials, discuss their weekly topics on the forum and give support to each other, search links, collaborate to edit group work on the wiki, read course news and announcements posted by teachers, download and upload assignments, and submit term papers. A record of the use and access of the Moodle learning site was obtained for the purpose of this study. Some of the data collected from the LMS database was for eleven departments taught by this investigator in the first semester of 2010/2011 session; these data sets are indicated in the applicable tables for the end-of-course evaluation. The online end-of-course evaluation survey, available only on the VLE in addition to Moodle's Constructivist On-line Learning Environment Survey (COLLES) were used for quantitative data while a focus group discussion with a few group leaders, to provide qualitative data, served to triangulate information for other data sets. The interview was meant to clarify some of the issues raised by students' evaluation survey responses. All data sets were collated and analysed for themes and implications, and these are presented in the following discussion.

3. DATA COLLECTION AND ANALYSIS

Two quantitative data sets were collected from the Moodle extractable statistics: the first comprises students' access and use of the resources, that is, hits recorded of visits and activities. The second is the Constructivist On-Line Learning Environment Survey (COLLES). The format of the survey questionnaire requires the respondent to indicate a level of agreement or disagreement using a 5-point Likert scale (1-almost never, 2-seldom, 3-sometimes, 4-often and 5-almost always). The questions ask about the following: (1) the course's relevance to student's interests and professional goals, (2) the level of critical or reflective thinking that the student applies to the material in the course, (3) the level of interactivity the student engages in during the course, (4) the level of tutor support and (5) peer support the student is receiving in the course, and (6) the success of both student and tutor in making good sense of each other's communication (Dougiamas & Taylor, 2002). Three hundred and twenty six (326) returns from the same teacher-investigator's group of eleven departments totalling about 800 registered online were received for the COLLES survey questions.

A third quantitative data set was generated by the End-of-course evaluation questionnaire available on-line also on the Moodle but only sets completed by this teacher-investigator's group of students (647) were used for analysis. Six hundred and forty seven returned their responses; of this number only four hundred and three (403) properly completed questionnaires were analysed. Adapted from the University of Manchester Enquiry-based learning survey, the questions are in three sections focusing on the general but also emphasising specific issues peculiar to our context. Section one which is used for this study consists of 27 questions focusing on 3 areas: 1) Internet (VLE-supported) learning (9 questions); 2) Learning experience (13 questions); and, 3) Benefits (7 questions). Some questions overlap and responses are counted twice. Responses are rated on a 5-point Likert scale (1 strongly disagree – 5 strongly agree). The frequency and percentage calculations of responses were calculated.

The fourth set of data generated was qualitative and came from the focus group discussion using semi-structured interview questions focusing on the more specific issues. Two group leaders were randomly selected from each of eleven departments, giving a total of twenty-two. This was split into two groups, and discussions held on two different days for each group. Both sets of interviews were tape-recorded, transcribed and open-coded. Similar open codes were clustered together and recurring themes linked to those in the three other sets of data. The specific issues addressed by the focus groups are: Team work dynamics, Drivers of interaction, Learning styles, and Challenges. There are methodological difficulties with investigating our online learning, some of these are well known in terms of limitations in our technical capacity. The limitations of the approach adopted in this study are therefore acknowledged. It is hoped that the multi-faceted nature of the evaluation here in part redresses this.

4. FINDINGS

4.1 Moodle Extractable Data

Data for two semesters are presented here. The two sets are for the foundation year cohort in the 2010/2011 session. Peculiarly, data for the first semester are always less than complete, for a number of reasons. First, students arrive at varying times during the first six weeks. Many are forced to change departments based on their entry qualifications. A good number settle down rather late to participate in the orientation programme and are therefore unable to activate their online registration. Typically, some 3000+ students (fresh and repeating) are registered for the course in each semester. More students successfully activate registration in the second semester than the first. We were unable to track students' posts and threads by school in the first semester, due principally to our lack of technical capacity at this moment. In the second semester (GNS 102) students are normally grouped into teams of five for the project investigation and the groups are given number IDs by which we track their contributions; but we were also unable to track logins into the Wiki on the Moodle where students do their term paper drafts and editing in this semester for the same reason of capacity.

Table 1 gives details of numbers of students enrolled, registered online, discussion posts, discussion threads in each semester where possible, for all students. The table reveals that more students, by School and in total, succeeded in registering on-line in the second semester than the first (2656:2905). Discussion posts follow a similar pattern while the threads initiated by students in the second semester almost doubled that in the first. Table 2 presents some statistics for activities in GNS 102 for this investigator's group of 11 departments, for activities other than the students' discussion board. Between them the students who registered online logged 1476 views of the News Forum posted by this teacher-investigator giving information about the course; teacher-investigator's 6 discussion board posts logged 5117 views and 444 replies; resource-content materials had 10327 views, which included downloads; and, three (3) assignments logged 1061 views, which also included downloads, and 1971 uploads of completed assignments for submission.

Table 1
Student Registration/Activity Data

Schools	Enrolled Stdts		Registered Online		Discussn Posts		Discussn Threads	
	GNS 101	GNS 102	GNS 101	GNS 102	GNS 101	GNS 102	GNS 101	GNS 102
SAAT			496	555	-	5053	-	-
SEET			466	521	-	4033	-	-
SEMS			259	280	-	2444	-	-
SET			516	523	-	4835	-	-
SMAT			138	176	-	1958	-	-
SOS			781	850	-	5271	-	-
Total	3284	3254	2656	2905	15032	23594	2543	4718

Table 2
Access-Activity Statistics from Log

Activity	Views	Contribution	Submission
News Forum	1476	-	-
Teacher posts (6)	5117	444	-
Resource-Content	10327	-	-
Assignment (3)	1061	-	1971

4.2 COLLES Survey

Table 4 gives the overall results of the COLLES survey indicating the perception of students about their learning experience online. Only those who indicated 'often' and 'almost always' (4 and 5) are captured for this analysis. Of the six scales, Relevance, Reflective thinking and Tutor support received the highest percentage scores followed by Interpretation, Interactivity, and, Peer support that received less than 50%. While Relevance of the courses and the methods of delivery are rated highest (76.2%) followed by Reflective thinking (75.6%) and Tutor support (73.5%), Peer support (49.7%) is rated lowest on the scales. Interactivity, one major aim of adopting the Blended delivery method is rated second lowest, 50%, and both are a cause for concern because it is indicative of the much work that needs to be done in getting students to work together and lean more on one another. Table 3 reveals item by item what students feel about each aspect of their learning experience. Making sense of the tutor's message under Interpretation ranked highest overall (88.3%), an indication that teacher-student interaction improved. Although overall Reflective thinking received high scores, students underline that thinking about their peers' ideas is not one of their priorities, and this ranked very low with items under Interactivity and Peer support. Other individual items ranking high include, '*I think critically about my own ideas*', '*I think critically about how I learn*' (Reflective thinking), and '*I learn how to improve my professional practice*' (Relevance). '*Other students respond to my ideas*', '*Other students ask me to explain my ideas'* and '*Other students praise my contribution*' (Interactivity and Peer support) occupy the last rungs of the scale, suggesting that students are yet to learn to leverage each other's potential advantages. Tutor support ranks highly with students to underline the changing paradigm and the new role of teachers within the paradigm – a new learning ethos. Interactivity ranks low although high enough at this point for students who were never used to interacting on course materials; this requires a new look if the aims of Blended learning would be accomplished.

Table 3
Results of the COLLES Survey Items

COLLES items	Percentage (%) of Agreement	Mean	Standard Deviation
Relevance			
My Learning Focuses on Issues that interest me	77.3	4.16	.993
What I Learn is important for my professional practice	76.4	4.19	.954
I learn how to improve my professional practice	84.0	4.35	.848
What I learn connect well with my professional practice	67.1	4.03	.979
Reflective Thinking			
I think critically about how I learn	84.4	4.28	.866
I think critically about my own ideas	86.1	4.4	.815
I think critically about other student ideas	52.4	3.63	1.035
I think critically about ideas in the reading	79.4	4.23	.854
Interactivity			
I explain my ideas to other students	54.3	3.69	1.022
I ask other students to explain their ideas	55.2	3.71	1.067
Other students ask me to explain my ideas	43.6	3.45	1.110
Other students respond to my ideas	47.0	3.52	1.031
Tutor Support			
The tutor stimulates my thinking	76.4	4.16	.896
The tutor encourages me to participate	79.5	4.23	.887

To be continued

Continued

COLLES items	Percentage (%) of Agreement	Mean	Standard Deviation
The tutor models good discourse	69.7	3.98	1.009
The tutor models critical self-reflection	68.4	3.94	.995
Peer support			
Other students encourage my participation	55.2	3.71	1.004
Other students praise my contribution	41.6	3.37	1.093
Other students value my contribution	54.0	3.64	1.018
Other students empathize with my struggle to learn	47.2	3.41	1.105
Interpretation			
I make good sense of other students' message	72.3	4.09	.848
Other students make good sense of my message	58.9	3.78	.978
I make sense of the tutor's message	88.3	4.42	.747
The tutor makes good sense of my message	49.1	3.55	1.124

***Note**: This table presents the percentage of students who answered often or almost always (4 & 5), in a 5-point Likert scale (1=never and 5=almost always)*

Table 4
Totals for the COLLES Scales

COLLES items	Percentage (%) of Agreement	Mean	Standard Deviation
Relevance	76.2	4.18	.951
Reflective thinking	75.6	4.13	.943
Interactivity	50	3.59	1.062
Tutor support	73.5	4.08	.955
Peer support	49.7	3.53	1.065
Interpretation	67.1	3.96	.991

Low student-student interaction was taken up at the focus group discussion and it was apparently that students are only gradually imbibing the culture of collaborative work; traditional course work competitiveness keeps them from trusting each other in academic work, and that remains the order on other courses. It is salutary, nonetheless, that students rate their interaction and peer support this high considering where they are coming from: a voiceless tradition within a rote learning ethos. On the other hand, Tutor support is rated high with 'encouragement to participate' and 'stimulating students' thinking' coming tops on the scale.

It is important that in our case students recognized and rated very high Relevance and Reflective thinking scales of the Blended Learning courses, as these are two values missing in the traditional F2F language classes. Indeed, many usually blamed their lack of interest, truancy in classes and general poor performance on the drab and boring technicalities of language courses. Specifically, response rate to the question of the course focusing on issues that interest them is highest, on this scale, at 77.3%. At 86.1%, students agreed they think critically about their own ideas. Although different in focus and in some respects, these results are in consonance with and corroborate those of Rodriguez and Anicete (2010) who both looked at students' views of a hybrid ecology course.

4.3 End-of-Course Survey

The End-of-course survey is a 27-item questionnaire available online on the *Moodle* learning site to all students. Questions focus on general issues as in COLLES but also emphasise certain specific issues germane to our local context. The items are in three sections of Internet (VLE) Learning; Learning Experience, and Benefits. It is perceived that a good number of our students lack basic computer/internet skills. Some are ashamed to admit this, but we find out such students do not have functioning email accounts on entry into the university. Many students come in from rural secondary schools and therefore have had no exposure to Internet use. Learning supported by technology would therefore be unfamiliar. Secondly, we needed to be sure that students understood the new learning process in the unfamiliar environment of a VLE and how they used its affordances. Thirdly, we asked specific questions on what students perceived to be the specific benefits of the online component of the Blended Learning. On a 5-point Likert scale (1- strongly disagree to 5- strongly agree) questions sought to find out students perceptions of their learning supported by technology (Moodle VLE). Responses to some of the most crucial questions for this discussion are totalled in frequencies and percentages; for this purpose responses for 'Agree' and 'Strongly Agree' are combined for concurrence. Tables 5 to 6 give details of questions and responses to them in frequency and simple percentage calculation.

Table 5
Learning via VLE (Internet Learning)

Statements	SD		D		NS		A		SA		Total	
	fq	*%*	*Fq*	*%*	*fq*	*%*	*fq*	*%*	*fq*	*%*	*fq*	*%*
FUTA E-learning Express is my first experience of learning using the internet facility as support	56	13.9	109	27	8	2	192	47.6	38	9.4	403	100
I found this course difficult to follow because I could not use the computer and internet well	171	42.2	175	43.4	20	5	30	7.4	7	1.7	403	100
My major problem with using the E-learning Express is cost of access to computer and /or internet	21	5.2	39	9.7	49	12.2	158	39.2	136	33.7	403	100
Having taken this course, I now feel confident to follow other courses on the Moodle	15	3.7	19	4.7	36	8.9	257	63.8	76	18.9	403	100
I learned to use the internet well on this course	21	5.2	33	8.2	52	12.9	209	51.9	88	21.8	403	100
I have become a better user of online resources after the Use of English course	15	3.7	9	2.2	41	10.2	236	58.6	102	25.3	403	100
I learned how to browse, download and upload on this course	49	12.2	67	16.6	37	9.2	205	50.9	45	11.2	403	100
I would like to use the FUTA E-learning Express to study other courses in the University	67	16.6	45	11.2	124	30.8	69	17.1	98	24.3	403	100
FUTA E-learning Express is a waste of time	253	62.8	100	24.8	31	7.7	16	4.0	3	0.7	403	100

For learning supported by VLE (Internet learning) most students who think they already learned to use the internet before coming to the course also believe they learned about using a VLE on the course. A sampling of responses on Internet Learning confirms our perceptions of students' internet use readiness. 62.1% indicated they have learned to browse, to download and upload on this course; a much higher value than the number that admit to not having functioning email accounts on entry to the course. 83.9% said they have now become a better user of online resources, while 82.7% now feel confident to follow other courses using this medium. The major problem with using the VLE support, 72.9% claim, is cost of access to computer/Internet, and 87.6% of respondents disagreed that the learning Express (Moodle) is a waste of time. An earlier study (Aborisade, 2005a) had found that a third of new students lacked computer and internet skills.

Table 6
Learning Experience

Statements	SD		D		NS		A		SA		Total	
	fq	*%*	*Fq*	*%*	*fq*	*%*	fq	%	fq	%	fq	%
I learned to use a Virtual Learning Environment, VLE (e.g Moodle) to enhance my learning process in addition to face - to - face classes	27	6.7	21	5.2	22	5.5	272	67.5	61	15.1	403	100
Now I feel that I understand the learning process in this course	6	1.5	8	2.0	21	5.2	294	73.0	74	18.4	403	100
The resources on the Moodle helped me to develop competence in my use of English	6	1.5	30	7.4	49	12.2	264	65.5	54	13.4	403	100
The lecturer focused more on encouraging me to find information than on giving me the facts	5	1.2	42	10.4	45	11.2	238	59.1	73	18.1	403	100
The activities were more about analysing and evaluating information than it was about memorising it	4	1.0	8	2.0	26	6.5	285	70.7	80	19.9	403	100
The activities were very tasking and involved spending long hours after class	7	1.7	47	11.7	29	7.2	168	41.7	152	37.7	403	100
I feel I am better able to find information from different sources: library, internet, classmates, etc	12	3.0	7	1.7	55	13.6	222	55.1	107	26.6	403	100
The FUTA Express Forum enabled me to raise issues with my mates and lecturer	5	1.2	20	5.0	22	5.5	195	48.4	161	40.0	403	100
I made many posts on the Forum (more than 5)	27	6.7	25	6.2	47	11.7	101	25.1	203	50.4	403	100
I enjoyed reading other students posts on the forum	23	5.7	21	5.2	45	11.2	223	55.3	91	22.6	403	100
I would like that the Forum be kept open and accessible all session	6	1.5	13	3.2	56	13.9	152	37.7	176	43.7	403	100
The Forum enabled me to keep in contact with my lecturer and course mates	5	1.2	32	7.9	68	16.9	187	46.4	111	27.5	403	100
FUTA E-learning Express made learning more stimulating	2	.5	12	3.0	51	12.7	190	47.1	148	36.7	403	100

Questions on the Learning Experience focused more on what students were able to do more of or better and how they understood and enjoyed the process of learning. On their experience, respondents expressed overall satisfaction and agreement on the issues raised. 82.6% affirmed they learned to support their learning with the VLE, and an overwhelming 91.4% felt they understood the learning process of the course. On the course process, 77.2% were sure the lecturer encouraged them to find information for themselves rather than giving them information (facts), while the activities on the course were about analysis and evaluating information rather than memorising them (90.6%). Participation on forum discussions is one of the interactive activities on the course and many students (77.9%) confirmed they enjoyed reading others' posts while 73.9% said the forum enabled them to keep in contact with teacher and peers. Indeed, 81.4% would love that the forum be kept open after the course. Student-student interaction, on the forum, is rated higher in this evaluation than in the COLLES survey. But the scores are still lower than for other scales, reflecting comparable rating with other values.

Table 7
Benefits of Learning via VLE

Statements	SD		D		NS		A		SA		Total	
	fq	%	fq	%	fq	%	fq	%	fq	%	fq	%
Learning this way enabled me to catch up on missed classes	21	5.2	24	6.0	53	13.2	170	42.2	136	33.5	403	100
It enabled me to study the subject more out of class	15	3.7	9	2.2	29	7.2	272	67.5	78	19.4	403	100
FUTA E-learning Express Forum is a good way to keep in touch with my classmates	15	3.7	41	10.2	46	11.4	187	46.4	114	28.3	403	100
The FUTA Express Forum enabled me to raise issues with my mates and lecturer	5	1.2	20	5.0	22	5.5	195	48.4	161	40.0	403	100
I learned to use social networks from using the Forum	23	5.7	21	5.2	45	11.2	223	55.3	91	22.6	403	100
I used the Forum to discuss issues other than topics in Use of English, e.g. social, religious, general interest	32	7.9	44	10.9	51	12.7	170	42.2	106	26.3	403	100
The Forum enabled me to keep in contact with my lecturer and course mates	5	1.2	32	7.9	68	16.9	187	46.4	111	27.5	403	100

The section on Benefits focused more on the discussion forum and responses confirmed all they claimed in the previous section. 74.7% felt the forum was a good way to keep in touch with peers and 88.4% felt the medium enabled them to raise issues with lecturer and peers. One other benefit students expressed agreement with was that e-learning site enabled them to study outside the class (86.9%) and it enabled them to catch up on missed classes (75.7%). A number of other benefits were identified independently at the focus group discussions, these included time-management, broadening of horizon, increased interaction with peers online and widening of knowledge base.

4.4 Focus Group Interviews

Two teams of group leaders on the GNS 102 writing project were interviewed. The interviews were focused on the same issues that had featured in the surveys for clarification: 1) Team-group work interactions; 2) Drivers of interaction; 3) Old versus New learning methods, 4) Challenges and difficulties students have using the VLE.

The issue of interaction featured prominently because inability to achieve any meaningful interaction in the L2 EAP course brought about the attempt to support learning with technology. Students affirmed the positive results of the survey, that the format of the course engendered interaction amongst students both during group work and on the Forum, but more so between teachers and students. Students readily trusted their teachers than they would their peers. Distrust and competition as in other courses and as of old continued to hinder full collaboration for some students. The old learning and evaluation methods emphasise competition more than collaboration and that culture would take some time to change. The issue of uncooperative students, in the groups, is usually under-reported by group leaders who bear the brunt of carrying the burden of extra work for their groups. They affirmed four drivers of interaction on these courses: these are, enjoyment derived from online and project investigation work; the novelty of using technology in learning; the challenge the activities on the course (especially GNS 102) poses and the possibilities of independent or autonomous thinking afforded by searching for solutions of their own for well known social problems. The support they get from their teachers is unlike what they were used to in the traditional lecturing mode, and this pushes them to work harder, they claim. The major challenges identified are mainly the workload on these courses and the difficulties of unreliable Internet connectivity, plus the financial burden associated with it. They are of the opinion that if connectivity infrastructure improves and costs are lower they would want to have all their courses supported by technology.

The results from the four data sets point to high enthusiasm of majority of students. It is noted that enthusiasm is tentative for a large number in the beginning (GNS 101). This is explained by the result of an earlier study (Aborisade, 2005a) indicating that up to a third of the students on entry into the university had no functioning e-mail accounts, a confirmation of lack of Internet access and familiarity at that stage.

5. DISCUSSION

Four different but related data sets have been relied on for this investigation. The first set presented data on students' participation and activities online at the learning site; the second is the COLLES while the third is the End-of-course evaluation survey – all these three are quantitative, calculated in simple statistics. The fourth which is qualitative provides some illumination on other issues from students' voices. From all the data sets expressing the students' viewpoints the major benefits of supporting learning with technology have returned good results, corroborating studies of experiences in various contexts. In this instance these are: making the courses more relevant to students' purposes; providing an interesting learning environment where students understand the learning process and manage their learning curve; this helps also in fostering Critical thinking and Learner Autonomy as expressed in Reynard's (2007) study. Learning on this course is no longer by rote; students search for and negotiate their meanings within a social environment that foster a level of collaboration rather than competition, creating a learning community (Hensley, 2005), and using a wide range of online resources. Although peer-peer interaction is still rather low, it is in the process of being fostered and marks a clear departure from a dying ethos, if this effort can be sustained. A lot more has to be done in this regard. To achieve greater collaboration we would need to work on and strengthen what the students have identified as drivers of interaction.

Institutional and academic responses to identified challenges have to be firm and quick. Low level resource availability is an institutional challenge but the costs of computer and internet access for students must be addressed if the present gains must be sustained. Changing teacher roles have to be reckoned with in planning and attitudinal reorientation which requires continuing professional development must be promoted.

CONCLUSION

The current investigation is only a part of an on-going effort at introducing and managing change in a traditional low-resourced technology-poor large class context. The change is teacher-initiated and the report is to indicate existing possibilities in spite of the difficulties faced by educators in the developing world. The investigation examined students' use of the affordances of technology supported courses and their perceptions of the various values of this instructional delivery method. In spite of being 'digital immigrants' and despite the major challenges of infrastructure and costs associated with the use of digital technology, students found motivation in the adoption of technology and derived great pleasure and reward in its use. The processes described above are transferable to similar teaching-learning contexts, with the prospect of creating an engaging learning environment, even in large class contexts.

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