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Agro-students' appraisal of online registration of academic courses in the Federal University of Agriculture Abeokuta, Ogun State Nigeria

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ABSTRACT

With integration of information technology tool for academic course registration in the Federal University of Agriculture, Abeokuta, the study assessed the agro-students' appraisal of the online tool for course registration. A simple random sampling technique was used to select 325 agro-students; and validated and reliable questionnaire was used for collection of data on the study objectives. Results of the analysis data showed that the use of online registration tool was appraised valuable for convenient course for registration ($\bar{x}$ = 4.47; SD = 0.682), reduction of attendant stress/rigour of manual course registration ($\bar{x}$ = 4.59; SD = 0.573), guaranteed eligibility to write examination on registered courses ($\bar{x}$ = 4.06; SD = 0.992) and creation of database for students' record of registered courses ($\bar{x}$ = 4.03; SD = 0.993). The Spearman's rho correlation analysis of the study hypothesis showed a significant and positive association between the agro-students' appraisal of online registration of academic courses and their academic performance ($r = 0.155$, $p < 0.05$); educational background ($r = 0.128$, $p < 0.05$); mode of entry into FUNAAB ($r = 0.127$, $p < 0.05$). The linear regression analysis showed that the students' appraisal of the online tool for registration of courses was significantly determined by their frequency of usage of the eduportal ($\beta = 2.185$, $p < 0.01$). It was thus concluded that online registration of academic courses in FUNAAB is a worthwhile development, and recommended that it should be sustained; and the students should be well trained on usage of the eduportal in order to develop skilful and efficient use of the online tool for registration of their academic courses.

Keywords: *Online registration tool, course registration, appraisal of eduportal, agro-students, FUNAAB*

INTRODUCTION

The Federal University of Agriculture, Abeokuta (FUNAAB) was established on January 1st 1988 (www.unaab.edu.ng) with the mandate of training and developing students' capacity for efficient production and management of farm enterprise as agribusiness. The developmental training, as intended by the Nigerian policy on agricultural development, is meant to bring about a new generation of farmers that would innovatively transform Nigeria's agricultural system and gradually replace the aging, poor-resourced and less educated farmers that currently dominates the country's agricultural system (Lawal-Adebowale, 2012; Karami, Karami & Attaran 2013). To achieve the mandate of manpower development, the university adopted an academic structure that entails class (course) work, laboratory and field practical for training of the students on theoretical and practical farm production and management. The class work, alongside the laboratory and field practical, take a 5-year academic calendar or ten semesters (University of Agriculture, 2012).

Although the university runs both agricultural and non-agricultural programmes, all admitted students take general science courses in their first two semesters or first year, often referred to as 100 Level, in the university with a view to providing them basic knowledge of science and its

relevance and application in agriculture. The remaining four years or eight semesters however focus mainly on agro-based courses. In essence, admitted students into agricultural programmes begin the mainstream agricultural courses from their second year, often referred to as 200 Level, and this runs till their fifth year or 500 Level. By then, every student is expected to have taken a minimum of 240 course units, comprising course work, laboratory and fields work, and passed them all as a requirement for graduation. But for any of the agro-students to be eligible to take any of the outlined courses in a particular academic session such students have to register for the courses as prescribed by the university's academic regulations (University prospectus, 2012). For instance, every student is expected to register a minimum of 16-course units and maximum of 24-course units per semester or a minimum of 32-course units and maximum of 48-course units per session. In view of this, every student picks up course forms and manually fills them (by hand writing) in quadruplet and thereafter have the concerned lecturers signed against each of the courses handled by them. The appended signatures and submission of the duly signed forms to their respective Departments for documentation thus serve as evidence of course registration by the students and the qualification to attend lectures and take examinations on the courses.

This style of course registration, which was the practice from inception of the university till 2006, however takes a great deal of time, and sometimes becomes strenuous, especially where the students have to skip lectures or shuttle between lecture hours to get their course forms signed by the concerned lecturers. The acts of shuttling between lecture hours for course registration was observed to have been induced by the need for the students to meet up the appointment as may be fixed by a particular lecturer to have their signed, and the need to have course registration exercise completed within the stipulated time by the management of the university. This format of course registration however took a new dimension in the university in 2006/2007 academic session, following the installation, configuration and deployment of educational portal (eduportal) for electronic or online registration of the academic courses. The eduportal/online registration tool, as deployed by the management of FUNAAB, is meant to enhance the creation and documentation of students' academic database through a progressive annual course registration.

In order to effectively accomplish the task of electronic or online registration of academic courses, the university had the Information and Communication Technology Centre (ICTREC) established to develop and manage electronic resources for creation of database for prospective and admitted students during admission process and when finally admitted; and for registration of academic courses by the students. The centre thus has Internet connection, through a Virtual Small Aperture Technology (VSAT), and computers in place for use by the students whenever they visit the ICTREC for course registration. Based on this development, the agro-students no longer have to embark on manual registration of courses but rather visit the ICTREC for registration of their academic courses at beginning of every academic calendar year. In view of seven years of operation and usage of eduportal for electronic course registration by the students, it becomes essential to ascertain their judgement or appraisal of the online registration of courses in the university with view to ascertaining whether or not the online registration tool is of value to the students. The value of the electronic tool, as may be appraised by the students, is expected to stem from comparison of their experiences on manual registration of academic courses with the use of eduportal for course registration in the university. In the light of this, the study addressed the following specific objectives.

1. Describe the personal characteristics of the selected agro-students,
2. Ascertain the agro-students' experience on the use of eduportal for educational registrations,
3. Assess the students' appraisal of the value of online registration of academic courses in the university
4. examine the constraints to a hitch-free online registration of academic courses by the agro-students

Hypothesis

H_{01}: There is no significant relationship between the agro-students' personal characteristic and their appraisal of on-line registration of academic courses

H_{02}: Agro-students' appraisal of the online registration tool is independent of their experience of usage of the tool for registration of pre-varsity examinations

RESEARCH METHODOLOGY

The study was conducted in FUNAAB. The University has a three-fold (tripodal/triad) mandate guiding its educational and community-based operations, and these are teaching, research and extension. In order to adequately accomplish the three-fold mandates, the university structured its operational system into three arms, namely academic colleges, research institute and extension centre. The academic colleges, which comprise College of Agricultural Management and Rural Development (COLAMRUD), College of Animal Science (COLANIM), College of Plant Science (COLPLANT), train the enrolled agricultural trainees on skilful development and management of agriculture through course work taken as lectures in the classroom and practical training in laboratories and field demonstrations. The research institute, tagged Institute for Food Security, Environmental Resources and Agricultural Research (IFSERAR), has the mandate to conduct science based-research for agro-innovation or technology discovery and development of technical information that would meet the needs of local farmers and fits the farming condition of the southwest farming zone of Nigeria. The extension arm of the university, dubbed Agricultural Media Resources and Extension Centre (AMREC), functions to disseminate generated agro-technologies or technical information to the local farmers in the university's model villages and communities for their education and empowerment.

Unit of analysis: this comprised the agricultural students whose year of studentship or level is between the second year (200 level) and fifth year (500 level) in Federal University of Agriculture, Abeokuta (FUNAAB), Ogun State, Nigeria.

Sampling frame: this consists of 3852 agricultural students who are listed in FUNAAB students' directory for the 2011/2012 academic session.

Sampling technique and procedure: from the available comprehensive list of 3852 agricultural students in the university's student directory was stratified sampling of 386 the agro-students. The stratification was based on the three colleges of agriculture, namely COLAMRUD, COLANIM and COLPLANT thereby signifying that students across the options of the available agricultural programme in the university were fairly represented in the sampling. On another note, the students were stratified based on the year or level of studentship in the university – second year (200 level), third year (300 level), fourth year (400 level) and fifth year (500 level) in order to ensure that all the agro-students by year of studentship were adequately accommodated in the sampling. In essence, the stratified sampling technique was found appropriate basically because it makes it possible to have a fair representation of all the agricultural students, across colleges and levels, in the sample size. Table 1 shows proportionate sampling of the students across colleges and levels at 10% to give 386 of them as respondents.

Table 1. *Agro-students' stratification of agro-students for selection based on colleges and levels/year of studentship in the university*

Levels / Colleges	200	300	400	500	Total
COLAMRUD	296	199	172	125	792
COLANIM	443	450	352	292	1537
COLPLANT	424	464	305	335	1528
Total	**1163**	**1113**	**829**	**752**	**3857**

Source: *FUNAAB (2012)*

Measurement of variables

i. **Appraisal of online registration:** was measured at interval level using a 5 point rating scale of 10 items. Students' responses on ratings of Strongly Agree (SA), Agree (A), Strongly Disagree (SD), Disagree (D) and Undecided (U) were assigned the score of 5 to 1. Based on this, it implies that a respondent could obtain a maximum score of 50 (if all responses were SA) and minimum score of 10 (if all responses were U) to the 10 items on the scale.

ii. **Appraisal mean score:** based on the respondents' responses to the 10 items it implies that each of them could only obtain a maximum mean score of 5.0 and a minimum mean score of 1.0. Mean value of items that falls between 1.0 and 1.70 implies that the registration tool was appraised less valuable, between 1.71 and 3.40 implies that it was appraised to be averagely valuable and between 3.41 and 5.0 means that the tool was appraised highly valuable.

iii. **Index score for determination of the level of online registration appraisal:** was estimated by cross sectional ranking of the score obtained by each of the students against the obtainable score of 50. Thus, a score range of 10 to 27 implies that the registration tool is appraised as less valuable, between 28 and 35 signifies that the tool is appraised as averagely valuable and between 36 and 50 denotes that the eduportal registration tool is appraised as highly valuable.

iv. **Experience of eduportal usage:** this was measured at interval level using indicators such as forms or previous usage, frequency of usage and capacity for usage. Previous forms of usage was assigned the score of 1 for registration usage at secondary school level, 2 for registration usage at Colleges of Education or Polytechnic level, and 3 for registration usage at university level (FUNAAB). For frequency of usage, this was rated as once, twice, thrice and quartet over time or years. On capacity for usage, the score of 1, 2, and 3 were assigned the capacity for usage by the someone else (done for me), with the assistance of someone and by self (personally) respectively.

Validity and reliability of data gathering instrument

Validity: of the data gathering instrument was ascertained by the use of face and content validity. Based on the theoretical concept of validity and reliability by Babbie (2005), the face validity was done by ensuring that the study variables were accurately measured using indicators that actually reflect the concepts under consideration in this study. For instance, indicators such male and female are indicators reflecting sex as a variable, "form, frequency and capacity for eduportal

usage by the students" as indicators that reflects experience of eduportal usage for online registration; items such as "limits students-lecturers contacts for course registration" as one of the several items of indicators for measuring students' appraisal of the value of online registration of academic courses etc. The content validity on the other hand was done by development of a wide range of indicators or item statements that adequately capture the study concepts thereby ensuring that each of the study concepts was comprehensively captured. The developed indicators or array of statements were based on extensive review of literature on similar studies. For instance about 10 statements were developed as a way to adequately or comprehensively reflect appraisal of the value of online registration in the study.

Reliability: to ascertain reliability of the data gathering instrument, a test-re-test method in which the instrument was administered on 20 students at interval of two weeks. The selected students for the conduct of the reliability test, were not part of the set of students that were eventually surveyed in the study, Correlate analysis of collected data for reliability test, using the Spearman rho analytical tool, showed that the items were significantly correlated to reflect a reliability of the data gathering instrument. For analysis of the item or rating scale component of the data gathering instrument, using the Pearson Product Moment Correlation (PPMC) analytical tool, reflects a correlate value of 0.73 based on which the rating scale was considered reliable. However, items that were cumbersome or less responded to were either eliminated or adjusted as a way to improve the quality of the instrument.

Data collection: Structured questionnaire was used to obtain information on the selected agricultural students' personal characteristics, their experiences on usage of eduportal for online educational registrations, attendant constraints to a hitch-free course registration exercise, and a self developed scale items, inferred from extensive literature review on online educational activities, was incorporated in the questionnaire as means of eliciting information on the students' appraisal of online registration of courses in FUNAAB.

Data analysis: Data obtained from the retrieved 325 questionnaires were subjected to descriptive statistics, using frequency count and percentage, and inferential statistics, using correlation matrix linear regression statistical tools. The descriptive statistics made it possible to have a clear presentation and discussion of responses of the respondents. The inferential statistics created the platform for cross-tabulation of measured variables such as the students' personal characteristic and their appraisal of online registration of academic courses; and between their experiences on usage of online registrations tool for academic course registration. Spearman rho correlation matrix became appropriate for hypothesis one on the ground that most of the students' personal characteristics were measured at nominal level, and linear regression was found appropriate for hypothesis two on the ground that students' appraisal and their experience, particularly frequency, of usage of online tool for registration of academic courses were measured at interval levels.

RESULTS AND DISCUSSION

Personal characteristic of the respondents

Table 2 shows that most of the surveyed agro-students were male (62.8%). This observation suggests that more male enrolled as agricultural students in FUNAAB than their female counterpart, (FUNAAB, 2013) and this may be due to the fact that agriculture is considered a masculine profession probably due to the rigours involved in agricultural activities, especially in a developing country like Nigeria. This finding goes in line with Adesope, Adebayo and Agumagu (2006) indication that the Nigerian agricultural organisations, namely the Agricultural Development Programme (extension agencies), Colleges of Agriculture, Agricultural Research

Institutes and University/Faculties of Agriculture; had more male workers than their female counterpart in Nigeria. These results thus imply that the Nigerian agricultural system is largely dominated by male agro-practitioners.

Examination of the agro-students' age shows that more than half (55.7%) of them were within the age range of 21 and 25 years, and this suggests that the enrolled agricultural students in FUNAAB were young and in their active years. This is similar to Raman (2011) findings, whereby most (65%) of the students surveyed on Information and Communication Technology (ICT) application in University of Utara, Malaysia were within the age range of 21 and 24. The results thus implies that the University (FUNAAB) is on the verge of turning out new generation of young and educated farmers with the potentials to transform Nigeria's agriculture through the application of the acquired knowledge of modern farming techniques in agricultural practise; and to replace the less educated and aging farmers that currently dominate the country's farm production system.

Table 2. *Personal characteristic of the respondents (n = 325)*

Variables	Frequency	Percentage
Sex		
Male	204	62.8
Female	121	37.2
Age		
< 20	34	10.5
21 – 25	181	55.7
26 – 30	92	28.3
> 31	18	5.5
Attended secondary school		
Public school	188	57.8
Private school	137	42.2
Educational background		
SSCE	233	71.7
OND/NCE	56	21.2
HND	93	7.1
Mode of admission		
Pre-degree	108	33.2
UTME	161	49.5
Direct entry	56	17.3
CGPA		
< 1.00	14	4.3
1.00 – 1.50 (Pass)	33	10.2
1.51 – 2.39 (Third Class)	47	14.5
2.40 – 3.49 (Second Class Lower Division)	125	38.4
3.50 – 4.49 (Second Class Upper Division))	86	26.4
> 4.50 (First Class)	20	6.2

Consideration of the agro-students' history of pre-university education shows that as much of 56.6% of the students attended public secondary schools; 67.3% of the students had the Senior Secondary Certificate Examination (SSCE) as their highest level of education; 18.9% had Ordinary National Diploma/National Certificate of Education (OND/NCE) and 13.8% of them had Higher National Diploma (HND) as additional educational status. Although, candidates with SSCE are admitted into 100 level (first year) and those with OND/NCE and HND admitted into 200 level (year two) and 300 level (year three) respectively, SSCE remains a pre-requisite for any candidate to be enrolled as a student in FUNAAB or any other university in Nigeria.

About 49.5% of agro-students were observed to have gained admission into FUNAAB through the Unified Tertiary Matriculation Examination (UTME) and a lesser proportion of them gained admission into the university through either pre-degree programme (35.1%) run by them University or direct entry (18.4%) administered by the nation's matriculation exanimation body known as Joint Admission and Matriculation Board (JAMB), in the country. This observation suggests that the strength of admission into FUNAAB for its agricultural programmes is in line with the Federal Government of Nigeria's policy on education that admission into the tertiary institutions in Nigeria should be through the UTME.

Given the obtainable maximum Cumulative Grade Point Average (CGPA) of 5.0 and minimum CGPA of 1.0 for any candidate to graduate from the university, examination of the agro-students' academic performance shows that about 38.2% of them were within the CPGA range of 2.40 – 3.49 and 26.4% of them were within the CGPA range of 3.50 – 4.49. With this observation, it suggests that most of the agro-students' academic performance was above average. This implies that the agro-students had good knowledge of the taught agricultural courses and as such could express gained acquired knowledge in written form to the satisfaction of their lecturers during examinations.

Agro-trainees' usage experience of online registration tool

With the emergence and integration of ICT in the Nigerian education system, students had become exposed to the use of electronic-based educational activities, at least from the secondary school. Although ICT such as computers, internet and television and video player are generally used as teaching and learning tools in some schools across the country, use of eduportal is largely for registration of examinations and processing of admission into the universities in the country. Examination of the agro-students' previous usage (experience) of the eduportal for online registration thus shows that as much as 68% of the students had used the eduportal for online registration of the Senior Secondary Certificate Examination (SSCE) – a unified or general examination written by all secondary school leaving students and organised by the two main examination bodies in the country, namely the West African Examination Council (WAEC) and National Examination Council Examination (NECO). The use of eduportal tool for registration of the unified examinations must have been induced by requirement of the two examination bodies that all eligible secondary school leaving students for both the May-June and November-December examinations have to register for the examinations online via their respective eduportals. While 87.1% of the students had their registration for admission into the university done online, all of them had their registration of courses done online in the university.

Assessment frequency of usage of the eduportal for online registration of courses or examinations by the agro-students (Table 3) shows that about 37.6% of them used the tool for at least a quartic-time over time or years; 23.7% used the online tool at least thrice over time or years; 21.8% of them used the tool at least twice over time or year and a few of them (16.9%) used the online tool at least once in time or year. Indication of once time usage of the online tool for educational registration by the students could be adduced to the fact that registration of courses in the university, and for a particular

pre-university examination, takes place once a year. Those who had more frequency of usage might have used the eduportal tool for registration of two or more unified secondary school examinations in a year and at the same time used the electronic tool for processing of their admissions within the same year. In addition to the students' pre-university usage experience of the online tool is the yearly usage of the tool for course registration at the beginning of every academic session in the university. Usage of online tool by students over time or years thus implies that they had either used the tool at least once in a year and over two or more years; or two or more times within a year, depending on the number of different pre-university examinations they registered for in a year or over the years; and on the number of university admissions they processed in one or more years.

On account of the agro-students' capacity for usage of the online tool for course registration in the university, the result shows that about a quarter (22.5%) of the students personally used the eduportal for successful completion of their course registration without the assistance of any other person. About 40.9% of the students on the other hand sort assistance of experienced personnel in order to scale over technical hitches they might experienced while operating the electronic system for course registration. As much as 36.6% of the students however lacked competence for use the online tool and as such handed over the course registration exercise to someone else to have it done for them. This finding suggests that the observed 22.5% of the agro-students were computer literate and information technology compliant and as such could readily make use of the registration tool successfully. The students' personal ability to use the eduportal tool for course registration without the assistance of any other person might have been influenced by their previous and frequency of usage tool either before gaining admission into the university or while in the university. The required assistance by certain set of students for successful use of the electronic tool for course registration is not necessarily because they were computer illiterate, but due to technical hitches in the process of online registration of their courses. With regard to the set of students who had the online registration of their courses done for them someone else, it could be inferred that such ones were computer illiterate and less information technology compliant.

Table 3. *Agricultural trainees' experience (previous usage) of on-line registration tool (n = 325)*

Variables	Frequency	Percentage
Previous form of eduportal usage		
WAEC/NECO examinations	221*	68.0
Higher institution Admission process	283	87.1
FUNAAB academic registration	325	100
Frequency of online registration usage		
Once over time/years	55	16.9
Twice over time/years	71	21.8
Thrice over time/years	77	23.7
Quartic over time/years	122	37.6
Capacity for registration execution		
Personally	73	22.5
With someone's assistance	133	40.9
Done for me	119	36.6

***** Multiple responses

Agro-students' appraisal of the value of online registration of academic courses in FUNAAB

In an attempt to ascertain the agro-students' appraisal of the value of the online registration of academic courses in FUNAAB, a 10 item scale was administered on them for their responses. Based on the students' obtained mean scores in relation to the obtainable mean score on each of the 10 item statements, the level of appraisal was established as less valuable (1.0 – 1.7), moderately valuable (1.8 – 3.4) and highly valuable (3.5 – 5.0). Result of the online appraisal by the agro-students, as indicated in Table 4, thus showed that they appraised the registration tool as of high value because of reducing, if not eliminated, the stress ($\bar{x}$ = 4.59; SD = 0.573) of having to go round individual lecturers for their signatures against the courses taught by them; and for making course registration easily done ($\bar{x}$ = 4.47; SD = 0.682). The ease of ICT application for educational activities, as opined by Adam, Nelson and Todd (1992); Ramayah and Osman (2005); Sime and Priestly (2005); Raman (2011), has a strong influence on users' willingness to use and sustain the usage of the online tool for educational registration purposes.

Table 4. *Agro-students' value appraisal of online registration of academic courses in FUNAAB (n = 325)*

Item statements for appraisal of eduportal	**Mean* Score**	**Standard deviation**
It eases course registration	4.47	0.682
Saves time wastages on registration	2.99	1.066
Checkmates over-registration of courses	3.11	1.319
It enhances clear identification of courses to be registered	3.85	1.090
Limits students-lecturers contacts for course registration	3.92	0.843
Reduces the stress often experienced in manual registration of courses	4.59	0.573
It helps to quickly detect left out/outstanding course(s) that out to be registered for	3.87	1.034
Assured students the qualification to write examination on registered courses	4.06	0.992
Reduces paper/manual registration of courses	2.87	1.184
Establishes students' course data-base throughout duration of the academic programme	4.03	0.993
Pooled appraisal score**	**Freq**	**%**
10 – 23 (Less valuable)	9	2.8
24 – 36 (averagely valuable)	78	24.0
37 – 50 (Highly valuable)	238	73.2
Mean of pooled score	37.78	
Standard deviation	4.28	

* Mean score of 1.0 – 1.7 implies less valuable, 1.8 – 3.4 as averagely valuable and 3.5 – 5.0 as highly valuable

** Index score of 10 – 23 implies less valuable, 24 – 36 averagely valuable and 37 – 50 as highly valuable

Although the agro-students no longer have to manually fill course (paper) forms, usually in quadruple, they certainly have to print out the online-registered courses for their individual and departmental records. This probably accounted for their appraisal of the online registration as of

average value ($\bar{x}$ = 2.87; SD = 1.184) as the tool does not completely eliminate the paper work. In the same vein, the electronic registration tool was adjudged to be of average value with regards to saving of time wastage ($\bar{x}$ = 2.99; SD = 1.066) in comparison with manual registration of academic courses. This observation goes in line with Miah and Omar (2011) findings that online registration of courses takes lesser time to accomplish than having to contact lectures for paper-based course registration.

Cumulative assessment of the agro-students' appraisal of the value of the online tool for academic course registration in FUNAAB shows that as much as 73.2% of the students appraised the registration tool to be of high value (37 – 50; $\bar{x}$ =37.78) thereby suggesting that the initiated online registration exercise by the university is a welcome idea among the agro-students. This cannot be unconnected with the fact that the online tool enhances the students' registration of their academic courses in an efficient and convenient manner. This observation goes in line with Al-Ahmad (2010) findings that as much as 98.8% of the surveyed students on ICT application in educational activities adjudged the electronic tool as veritable technology for effective management of academic records.

Constraints to hitch-free online registration of courses by the agro-students in FUNAAB

Table 5 shows the constraining factors to a hitch-free online registration of academic courses by FUNAAB agro-students. About 94.8% of the students considered inadequate computer systems as constraints to smooth running of the online registration of academic courses as each of them had to take turns for registration of their courses. This situation, coupled with inadequate supporting staff to attend to the students (75.1%) and the given duration for all students to have their courses registered, which they considered insufficient time period (77.5%), cost the students a great deal of effort and patience to eventually have their courses registered.

Table 5. *Constraints to hitch-free online registration of academic courses by FUNAAB agro-students (n = 325)*

Variables	Frequency	Percentage
Poor knowledge of computer usage	130	40.0
Inadequate computer system to serve the students	308	94.8
Inadequate supporting staff to attend to students for course registration	244	75.1
None provision of training for students on the use of eduportal for course registration	235	72.4
Need to shuttle between lecture hours and time for course registration	238	73.3
Slowness of the university's internet server	221	68.1
Insufficient allocated period of time for course registration	252	77.5
Unfriendliness computer centre's staff to the student during course registration	207	63.8
Epileptic power supply	280	86.2

The need for the students to skip lectures or shuttle between lecture hours and course registration centre (73.3%), and lack of training for them on the use of eduportal for course registration (72.4%) were considered constraints to smooth online registration of courses by the students. This observation, particularly the none provision of training on usage of the online registration tool, could have accounted for why most (36.6%) of the students could not personally

use the online tool for their course registration and 40.9% of them had to seek the assistance of a knowledgeable person for successful completion of their course registration (Table 3).

Alongside the problem of none provision of training that warranted assistance for the students on the use of online tool for course registration was poor knowledge of computer operation by 40% of the students. Provision of little or no training for students on the use of online tool for academic purpose was equally observed by Miah and Omar (2011) among 70% of the students of Southern University at New Orleans' (SUNO). With these observations, it could be inferred that the students were probably not expected by the university management to personally operate the eduportal for registration of their courses but to have it done for them by the ICTREC staff. But unfortunately the staffs on ground, as observed in FUNAAB, were not enough to adequately accommodate the large population of students turning up at the electronic resource centre (ICTREC) for the course registration exercise thereby making the registration exercise to take longer period of time to have all the students' course registration completed.

Other factors found to have constrained the smooth running of the online registration tool, as highlighted by the students, were epileptic power supply (86.2%) and slowness of the internet server (68.1%). These factors, which were generally beyond the control of the students and ICTREC staff, made the course registration to stop temporarily until power supply becomes restored or the server becomes faster for use. Temporary stoppage of the course registration thus constitutes additional reason for the prolong period it takes all the agro-students to have their course registration done and completed in the university.

Spearman's rho correlation matrix of the relationship between the agro-trainees' personal characteristics and their value appraisal of online registration of academic courses

Spearman rho correlation analysis of the relationship between the agro-students' personal characteristics and their appraisal of the value of the online registration of academic courses (Table 6) shows a significant and positive relationship ($r = 0.155$, $P < 0.01$) between the students' Cumulative Grade Point Average (CGPA) and their appraisal of the online tool as valuable for making course registration easy to complete (EASEREG). Based on this, it was inferred that students' with higher CGPA or better academic performance values the deployment of the online tool for registration of academic courses; and this may have been influenced by their developed competence for computer operation and usage of the online registration tool. As opine by Lawal-Adebowale and Omotayo, (2012), effective use of the electronic tool requires a good understanding of its functionalities and utilities.

The observed significant and positive relationship ($r = 0.128$, $p < 0.05$) between the agro-students' educational background (EDUBACK) and clear identification of courses to be registered for (COURSEID) suggests that previous usage of the online registration by the students during the SSCE examination and admission into College of Education or Polytechnics accounted for their ability to use the online tool to sort courses from the database and have them registered as expected at beginning of the academic session. In essence, the students were able to use the acquired knowledge of eduportal usage for subjects and course registration at the pre-university education system – secondary school, College of Education and Polytechnics – to intuitively use the university-based eduportal for successful registration of their courses

Similarly, a significant and positive relationship ($r = 0.127$; $p < 0.05$) was observed between the agro-students' mode of entry (MODEENTRY) into FUNAAB and their appraisal of the online registration as valuable for limiting contact with course lectures (LIMITCONTACT). This observation implies that irrespective of the agro-students' mode of entry into FUNAAB, all appreciated the value of having their course registration done online without having to contact

individual lecturers for course registration. By implication, this saves the students the time and rigours of going round the individual lecturers to have their registered courses signed.

Table 6. *Spearman's rho correlation matrix of the relationship between the agro-trainees' personal characteristics and their value appraisal of online registration of academic courses*

Variables	AGE	SEX	SECSCH	EDU-BACK	MODE ETNRY	CPGA
EASEREG	.033	-.021	-.046	-.028	-.036	.155**
	.555	.703	.411	.620	.515	.005
SAVETIME	.001	-.048	-.011	.002	.026	-.011
	.990	.386	.839	.973	.636	.839
CHECKMATE	.037	.012	.051	.036	-.040	-.074
	.506	.827	.356	.523	.470	.182
COURSEID	-.048	-.011	.006	.128*	-.005	.075
	.390	.846	.913	.021	.931	.180
LIMITCONTACT	-.017	-.080	-.018	.080	.127*	-.041
	.758	.149	.741	.149	.022	.466
REDUCESTRESS	-.058	.025	.050	.020	.003	.005
	.296	.648	.368	.719	.956	.923
DETECT	-.023	-.039	.020	-.017	.036	-.105
	.680	.487	.722	.760	.517	.059
EXAM QUAL	.008	.016	-.078	.058	.034	-.065
	.890	.775	.158	.294	.545	.243
PAPERWRK	-.054	-.024	.043	-.077	-.065	-.028
	.334	.666	.435	.163	.240	.610
DATABASE	.056	.006	.024	-.029	.059	-.034
	.315	.915	.672	.604	.287	.542

** Significant at p < 0.01level
* Significant at p < 0.05level

In view of the observed significant relationship between certain personal characteristics of the agro-students and their appraisal of the value of the online tool for course registration in FUNAAB, the stated hypothesis that there is no significant relationship between the agro-students' personal characteristic and their appraisal of on-line registration of academic courses was thus rejected. In essence, it implies that personal characteristics such as educational background and good academic performance are associated with appraisal of innovations or technology as either of value or not.

Linear regression analysis of the determinants agro-trainees' appraisal of the online registration of academic courses

Linear regression analysis of the relationship between the agro-students' appraisal of online registration of academic courses and their experience of eduportal usage, as indicated in Table 7, shows that the appraisal was significantly influenced by the students' frequency of eduportal usage ($\beta = 2.185$, $t = 6.640$) at $p < 0.01$. These observations suggest that appraisal of the online tool as valuable for registration of academic courses by the students was influenced by their past exposure to eduportals and frequency of usage for educational related registration purposes. The exposure and experience of usage certainly began from their secondary school education when they had to register for unified or leaving certificate examinations (SSCE) under WAEC and NECO. In addition to this was the use of universities-based eduportals for processing of admission into their choice universities. The experience of eduportal usage is thus an aggregation of the students' series of usage the eduportal tools over time, beginning from usage for examination registration at secondary school level, through the usage for processing of admission into the universities, to continuous usage for online registration of courses in FUNAAB.

With this outcome, the stated hypothesis that agro-students' appraisal of the online registration tool is independent of their experience of usage of the tool for registration of pre-varsity examinations was rejected. In essence, it implies that acquired experiences on eduportal usage over time makes possible for the users to adjudge whether or not it is of value in relation to the kind of educational tasks it is used for. In line with this submission was Murphy and Karasek's (1999); Murphy (2002), position that acquired experiences on usage of certain tool or practice enhances one's better understanding of the practice and ability to effectively utilise the tool. In the light of this, experience or frequency of eduportal usage by the agro-students thus constitutes an explanatory variable of their appraisal of the online registration tool as of value.

Table 7. ***Linear regression of analysis of the determinants agro-trainees' appraisal of the online registration of academic courses***

	Unstandardized Coefficients		Standardized Coefficients		
Model	**β**	**Std. Error**	**Beta**	**t**	**Sig.**
(Constant)	26.464	1.939		13.647	0.000
Forms of eduportal usage	-0.178	0.242	-0.042	-0.797	0.426
Frequency of eduportal usage for registration	2.185	0.329	0.348	6.640	0.000*
Capacity for registration execution	-0.119	0.296	-0.021	-0.402	0.688
Secondary school attended	0.632	0.460	0.073	1.373	0.171
Educational background	0.505	0.375	0.072	1.348	0.179

*Significant at p<0.01

CONCLUSIONS AND RECOMMENDATIONS

In view of analysis of the study data, it could be concluded that online registration of academic courses in FUNAAB is a worthwhile development as it was appraised to be of highly value by the agro-students basically because for making their course registration easier; eliminating or reducing associated stress with the manual registration of courses; giving the assurance of writing examinations on registered courses and creation of registered course database. The agro-

students' appraisal of the online registration of courses as highly valuable was however associated with certain personal characteristic of the students, namely heir academic performance/cumulative grade point and mode of entry into the university, thereby necessitating rejection of the first hypothesis that there is no significant relationship between the students' personal characteristics and their appraisal of the online registration tool. Similarly, the second hypothesis that agro-students' appraisal of the online registration tool is independent of their experience of usage of the tool for registration of pre-varsity examinations was rejected on the ground that frequency of eduportal usage for registration of examinations/courses by the agro-students was significantly related to their appraisal of the online registration of academic courses as a valuable tool. Effective use of the online tool for course registration was however constrained by factors such as lack of training for agro-students on usage of the online tool for course registration, inadequate computer systems for use by the students, inadequate supporting staff for the students and epileptic power supply. Based on these observations, the following recommendations were thus proposed.

i. The online registration of academic course in FUNAAB should be sustained and improved upon for quality and efficient services
ii. The students should be provided training on the use of the online registration for development competence for self application
iii. Given the population of students going online for registration of courses at a time in the university, there should be adequate supporting or technical staff to attend to the students during course registration
iv. In view of the poor electricity supply in the country, a steady alternative power supply should be put in place by the university for powering of the Internet especially during the period of course registration by the students

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