ICT COMPETENCIES OF GUIMARAS STATE COLLEGE FACULTY: BASIS FOR IN-SERVICE TRAINING

Simeon J. Cainday III
Kristian Rey R. Trinidad
Reiner Jun G. Alminaza
Jerrie May H. Larroder

ABSTRACT

This study assessed the level of ICT Competencies of Guimaras State College Faculty as Basis for In-Service Training in ICT Basics , Information and Communication, Computer Ethics and Security, Word Processing, Electronic Spreadsheet and Multimedia Presentation. The descriptive research design was utilized in the study. The respondents were 67 GSC contractual and regular faculty members of the three campuses namely Salvador, Mosqueda and Baterna. The statistical tools used were frequencies, mean, percentage, ranking, T-test, Analysis of Variance (ANOVA) and Pearson's (r) Coefficient.

Findings showed that most of the respondents have ages 21 to 40 years old, with MA units, almost have attended institutional trainings and seminars and 1-5 years in service. Results also showed that the level of ICT competencies of GSC faculty as a whole in 6 areas was "familiar" or used/done the function/operation occasionally but need further practice to be confident. The most common problem and concern met by the faculty members in the use of ICT is no proper equipment and software.

There is a significant difference existed in age, designation, income, length of service and subject taught. The college should conduct an ICT skills training to enhance the knowledge and skills of faculty members. IT faculty members were the one to spearhead the training.

Keywords: ict, competencies, gsc, faculty, in-service training

INTRODUCTION

Technologies have proved to have helped enhancing the learning environment and provide enrichment in the learning process (Duhaney, 2000). With the use of technology, the role of the teacher changes such that he/she is no longer the center of the classroom who passes information and knowledge to students. Students learn through critical thinking, inquiry, and problem solving from information accessed from a variety of sources (Houghton, 1997). Many studies have indicated that the reason for the lack of the use of computer technology by teachers is their lack of training (Vagle&Coliece 1995; Yaghi, 1997; Yildirim&Kiraz, 1999). Research has shown that teachers are more hesitant and less likely to use computer technology than other people in otherprofessionals (Paprzycki&Vidakovic, 1994). Research into the competency levels of teachers has shown that teachers' beliefs about using technology for teaching are directly related to their practice (Albion, 1999). Research in Scotland indicated that teachers may be aware of their need to gain adequate skills in using ICT but they suffer from lack of time and resources to develop their skills. They depend on other staff to help them through difficulties in using technology (Williams, et al,1998).

Education is the first and best key area for ICT applications. ICT is often perceived as a catalyst for change, change in teaching styles, and change in learning approaches and in access to information (Watson, 2005). ICTs can help by providing alternative possibilities for education (Casal, 2007). Use of different information communication technologies has become inevitable for students in learning. By using modern information communication

technologies, students can retrieve required information within a short time. They can access and disseminate electronic information such as e-books and e-journals and can improve their learning by using different modern ICTs in form of wireless networks, internet, search engines, databases, websites, and web 2.0 technologies. Teachers are a vital link in the education chain, and for education to truly respond to the needs of 21st century, they must play a central role in leveraging technology, and in particular, using new and old Information and Communication Technology (ICT) devices in teaching and learning. What kind of skills will teachers need to acquire in order to be effective in an ICT based learning environment?

The benefits of technology in general and ICT in particular are beginning to be felt in the development of human resources in administrative and teaching infrastructures. The integration of technology in the classroom is very helpful for students learning (Collins, 1991 and David, 1991) and helps make learning more interactive (Madian,1991). Information and Communication Technologies (ICT) are seen as important tools of advancement in developing countries. As concluded by Duhaney (2000), the introduction and use of information technology changed the traditional classroom activities and changed the way that teachers and students interact with each other.

Guimaras State College as the only state college in the Province of Guimaras has 4 mandated functions, Instruction, Research, Extension and Production. In instruction, GSC focuses on leveraging technology to transform the roles of the teacher and the learner in the classroom. Teacher development is clearly required to prepare teachers with ICT skills to equip students with the kinds of critical skills needed if they, as members of the society, are to contribute meaning-fully in the country's future development. All teachers need to be familiar with ICT applications and competent in the use of ICT applications. It has been widely acclaimed that for GSC's vision (GSC as Center of Excellence in Education and Green Technology Generation) to be achieved, education, especially teacher development, will play a key role and ICT equally so.

This study will address this issue by highlighting the experiences of teachers using ICT in Guimaras State College. However, how prepared are the teachers in Guimaras State College classrooms to deliver 21st century education? The challenge in Guimaras State College today is not only shortage in the availability of teachers who are ICT-competent, but the need to move from learning to use ICT to using ICT to learn.

STATEMENT OF THE PROBLEM

This study aimed to assess the level of ICT competencies of the GSC Faculty members. Specifically, this study sought answers to the following questions:

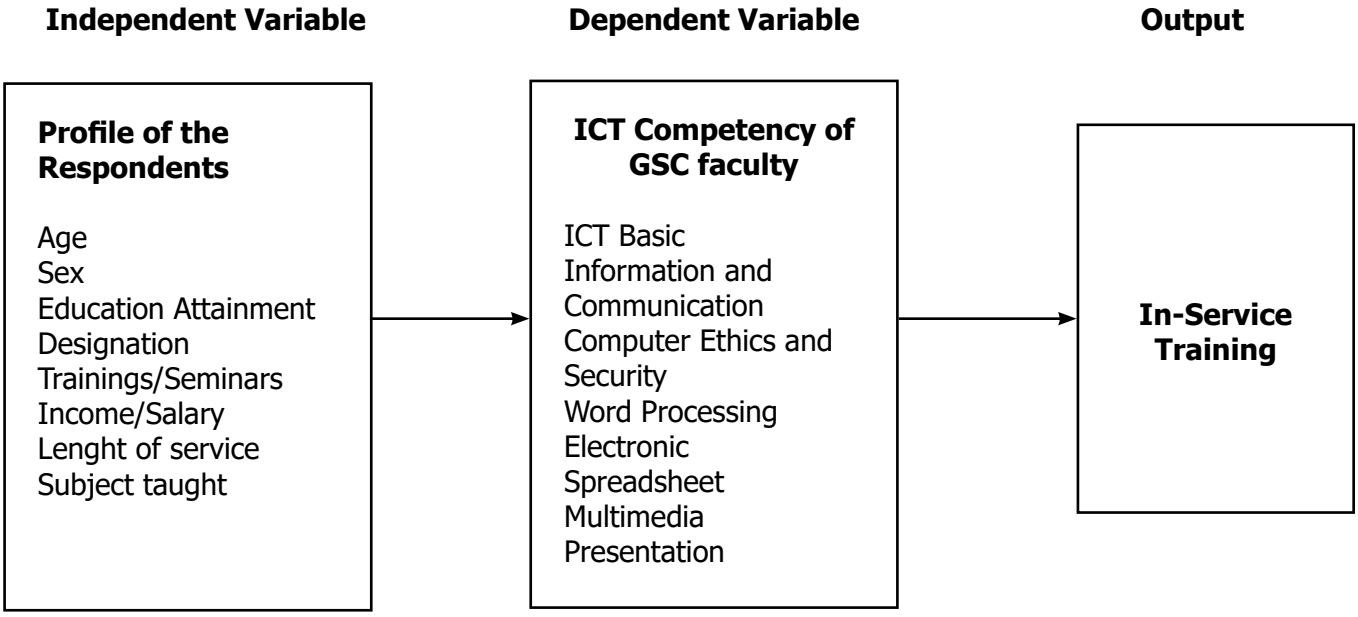
1. What is the profile of the faculty members of GSC in terms of age, sex, educational attainment, designation, trainings, income/salary, length of service and subject taught?

2. What is the level of ICT competencies of the GSC Faculty members in terms of knowledge and skills on ICT Basics, Information and Communication, Computer Ethics and Security, Word processing, electronic spreadsheet and Multimedia presentation?

3. Is there a significant difference in the ICT competency of the GSC faculty taken as a whole when categorized according to age, sex, educational attainment, designation, trainings, income/ salary, length of service and subject taught?

4. What are the problems and concerns met by the faculty members' in the use of ICT technology?

Research Paradigm



REVIEW OF RELATED LITERATURE

Use of ICT in Higher Education

Today, a great number of experiences with educational technology in higher education exist world-wide, especially in the developed world. This has resulted in new opportunities in the integration of ped-agogical and technological resources, which has enlarged flexibility across the learning process. It has equally improved the communication between lecturers and students and the interaction between different educational resources. Oliver (2002) asserts that the use of ICT in higher education enhances student-cen-tered learning.

Within higher education, one of the major teaching challenges has always been helping students to bridge the gap between knowledge and real life practice. This is especially important in applied academic disciplines such as education where professional knowledge is constantly being renewed and recreated through real practice (Cheetham&Chivers, 2001). The National Policy on ICT in Education and Framework launched in 2010 presents a holistic and broad vision for ICT integration in the education sector in Nigeria. This policy moves beyond a basic technology literacy approach. White (2003) recommends that teachers need to experience online learning as part of their professional development. The National Universities Commission (NUC) has worked assiduously to lay the foundation for ICT integration in higher institutions through investment in ICT infrastructure, management information systems, e-mail access, and library information services. There have been essentially three kinds of ICT infra-structural provisions in Nigerian tertiary institutions. These are:

- Local initiatives; conceived and developed using local resources
- Corporate initiatives; corporate organizations such as Cisco and Microsoft

International partnership initiatives; for instance the NetTel@Africa telecommunications management post graduate programme project sponsored by the Nigerian Communications Commission in partnership with regional stakeholders united in their desire to increase the capacity of African ICT sector.

In line with the National Information Technology Development Agency's (NITDA) mandate of Private Public Partnership (PPP) arrangement, the University of Benin, in 2002, went into partnership with Broadband

Technology, an IT firm based in Lagos. This led to the establishment of U. B. Technologies, which was specifically, to provide;

- Internet services for students and staff,
- Training on ICT use for students and staff, and
- Computer services at a reduced rate.

ICT Skills and Competencies

Regardless of the quantity and quality of technology available in classrooms, the key to how ICTs are used is the teacher; therefore, teachers must have the competence and the right attitude to-wards technology (Kadel, 2005). Competence is defined as the ability to combine and apply relevant attributes to particular tasks in particular contexts. These attributes include high levels of knowledge, values, skill, personal dispositions, sensitivities and capabilities, and the ability to put those combinations into practice in an appropriate way (Commonwealth Department of Education, Science and Training, 2002). An ICT competency describes what a teacher should know to be able to use technology in his/her professional practice.

Kirschner and Woperies (2003) highlighted some major ICT competencies teachers require. These include competency in:

- making personal use of ICT;
- mastery of a range of educational paradigms that make use of ICT;
- making use of ICT as minds tools;
- using ICT as tool for teaching,
- mastering a range of assessment paradigms which involves use of ICT; and
- understanding the policy dimensions of the use of ICT for teaching and learning.

Similarly, Marija and Palmira (2007) classified ICT competencies into two: basic and educational ICT competence. In Nigeria, higher education institutions still have a long way to make optimal use of ICT in the learning process as the ICT competencies of the majority of teachers at this level is at the basic level, if they have any at all.

At the global level UNESCO designed a competency framework for teachers (ICT-CFT), which was launched in 2008 to help educational policy-makers and curriculum developers identify the skills teachers need to harness technology in education (UNESCO, 2008). The Competency Standards were developed in cooperation with Cisco, Intel, and Microsoft, as well as the International Society for Technology in Education (ISTE). The framework was created by crossing three approaches to ICT integration in education (Technology Literacy, Knowledge Deepening, and Knowledge Creation) with the six components of the educational system (Policy & Vision, Curriculum & Assessment, Pedagogy, ICT, Organization & Administration, and Teacher Professional Development). This is shown in Figure 1.

Figure 1: UNESCO ICT Competency Framework for Teachers Framework, Source: UNESCO, 2008

The guidelines recommend that the identification of ICT competencies for teachers should be based on a clear understanding of a country's overall approach to ICT use in education. Different countries could adopt any one combination of three approaches:

- to develop a technology-literate workforce to enhance national economic productivity and competitiveness;
- to develop knowledge workers, or individuals who can apply knowledge to add value to the economy and society; and
- to develop innovators and knowledge creators for the knowledge society.

Lee (1997) found that a great number of students in teacher preparation programmes were not equipped with basic computer operational skills. Ozcemelem's (2010) study revealed that there is a low level of skillfulness in the use of ICT among students of Nigerian universities. Similarly, Yusuf (2005) reported that teachers in Nigerian secondary schools are not competent in basic computer operations and in the use of generic software. If teachers are expected to integrate ICT into the school curriculum, preparations must be made at the pre-service teacher education level. Teacher preparation programmes should focus on the need for student-teachers to have ICT skills for their own use, in the preparation of materials for teaching and learning activities; the need to facilitate the direct use of ICT in students' learning activities within the classroom situation; and

Computer Training and ICT Competencies

The literature suggests that lack of adequate training and experience is one of the main factors why teachers do not use technology in their teaching. This also results in teachers' negative attitude towards computer and technology. In addition, lack of confidence leads to reluctance to use computers by teachers (Kumar & Kumar, 2003). Another problem has been the impact of the lack of training on the integration of ICT into teacher preparation programmes in Nigeria. Training focus repeatedly targets digital literacy with little pedagogical content. Many training institutions have recognized the need for the adoption of ICT standards and its inclusion in the Nigeria teacher education curriculum (legede, 2009). The use of ICT in coursework is based on teachers' own initiative as there is no policy or curriculum requirement to use ICT as a tool for teaching.

It becomes imperative that students should be equipped with digital literacy competencies in order to exploit information resources that the electronic age produces. School leavers may not possess the necessary computer skills for their university education although they have been using electronic devices frequently (Nash, 2009). In fact, there is an urgent need for ICT training to be given to fresh university students in order to obtain successful learning outcomes from the use of ICT and to satisfy the needs of their future employers. The most important ICT training needs should include skills development to assist ICT teaching and learning approaches for subject specific areas of specialization; maintenance training; research oriented training on ICT use for data analysis – numerical data; spread sheets; and programmes.

RESEARCH METHODOLOGY

Research Design

The study used the descriptive research design using questionnaires to collect data in order to test the hypothesis or answer questions concerning the current status of the subject of the study.

Respondents of the Study

The respondents of the study were 67 contractual and regular Faculty Members of Guimaras State College of three (3) campuses namely Salvador, Mosqueda and Baterna.

Research Instrument

In gathering the data needed in this study, set of questionnaires were utilized; the questionnaire has divided into three (3) parts. Part I, the profile of the respondents, Part II, computer competency survey adopted from the CICT-ISchoolsconsistingwith 6 divisions; ICT Basics, Information and Communication, Computer Ethics and Security, Word Processing, Electronic spreadsheet and Multimedia presentationon a 5 point Likert scale where 1-novice, 2-beginner, 3-familiar, 4-proficient and 5- expert, and Part III-Survey on problems and concerns metby the faculty in terms of ICT consisting of 10 items.

Data Gathering Procedure

The researcherspersonally distributed and gatheredpersonally the questionnaires to the respondents. They were then retrieved, consolidated and tabulated the data.

Statistical Tools Used

Processing of the data gathered in this study is through the Statistical Package for Social Sciences (SPSS) making use of the following statistical tools: frequencies, mean, percentage, ranking, T-test, Analysis of Variance(ANOVA) and Pearson’s (r) Coefficient.

RESULTS AND DISCUSSION

A. Profile of the Respondents

Data in Table 1 shows the profile of the respondents in terms of age. The result revealed that out of 67 respondents, 37(55.2%) were mostly at21 to 40 years old (young), 22(32.8%) were 41 and above(old) and 8(11.9%) does not indicated their age.

Table 1. Profile of the respondents in terms of Age

	F	%
21 to 40 years old (Young)	37	55.2
41 and above (Old)	22	32.8
Did not indicate	8	11.9
Total	67	100.0

Data in Table 2 shows the profile of the respondents in terms of sex. Out of 67 respondents, majority were female 40(59.7%), 22(32.8%) were male and 5(7.5%) have not indicated their gender. It means that most of the faculty members of Guimaras State College are female.

Table 2. Profile of the respondents in terms of Sex

	F	%
Male	22	32.8
Female	40	59.7
Did not indicate	5	7.5
Total	67	100.0

In terms of educational attainment, Table 3 shows that 13(19.4%) of the respondents were Bachelor's Degree, 19(28.4%) were Master's Degree, 26(38.8%) with MA units and 9(13.4%) were Doctoral Degree. It indicates that almost half of the respondents were pursuing their Master's Degree for professional development.

Table 3. Profile of the respondents in terms of educational attainment

	F	%
Bachelor's Degree	13	19.4
Masters' Degree	19	28.4
w/ MA Units	26	38.8
Doctoral Degree	9	13.4
Total	67	100.0

When it comes to designation, table 4 shows that 36(53.7%) out of 67 respondents were instructors, 4(6.0%) were deans, 3(4.5%) were directors, 20(29.95%) were professors, 2(3.0%) were campus administrators, 1(1.5%) was a Vice President and 1(1.5%) was the Chief Admin Officer.

Table 4. Profile of the respondents in terms of designation

	F	%
Instructor	36	53.7
Dean	4	6.0
Director	3	4.5
Professor	20	29.9
Campus Administrator	2	3.0
Vice President	1	1.5
Chief Admin Officer	1	1.5
Total	67	100.0

In terms of trainings/seminar attended, table 5 shows that 42(63.6%) out of 67 respondents have attended trainings/ seminars conducted in the college, 38(57.6%) have attended local seminars, 31(47.0%) have attended regional seminars, 30(45.5%) have attended national seminars and 9(13.6%) have attended international seminars.

It indicates that in this profile, respondents could have multiple responses because they were sent to various trainings/seminars either in Institutional, Local, Regional, National and International level.

Table 5. Profile of the respondents in terms of training/seminars attended.

	F	%
Institutional	42	63.6
Local	38	57.6
Regional	31	47.0
National	30	45.5
International	9	13.6
Total	67	100.0

*Multiple Responses

In terms of income/salary, table 6 shows that 28(41.8%) have a monthly income of 1 to 10,000, 4(6%) have a monthly income of 10,001 to 20,000, 20(29.9%) have a monthly income of 20,001 to 30,000 and 15(22.4%) have monthly income 30,001 and above. It implies that most of the faculty members were contractual instructors.

Table 6. Profile of the respondents in terms of income

	F	%
1.00 to 10,000	28	41.8
10,001 to 20,000	4	6.0
20,001 to 30,000	20	29.9
30,001 and above	15	22.4
Total	67	100.0

With regards to the length of service, table 7 shows that out of 67 respondents, 31(46.3%) have served 1-5 years, 8(11.9%) have served 6-10 years, 4(6.0%) have served 11-15 years, 3(4.5%) have served 16-20 years, 5(7.5%) have served 21-25 years, and 16(23.9%) have served the college for 26 years and above. Almost half of the respondents were contractual faculty members which served the college for almost 1-5 years.

Table 7. Profile of the respondents in terms of length of service

	F	%
1 - 5 years	31	46.3
6 to 10 years	8	11.9
11 to 15 years	4	6.0
16 to 20 years	3	4.5
21 to 25 years	5	7.5
26 years and above	16	23.9
Total	67	100.0

Data in table 8 shows that 13(19.4%) were teaching English subjects, 7(10.4%) were teaching Mathematics, 8(11.9%) teaching Social Sciences, 8(11.9%) teaching HRM subjects, 4(6.0%) were teaching Computer subjects, 5(7.5%) teaching Science subjects, 3(4.5%) were teaching Filipino subjects, 9(13.4%) were teaching Business Management subjects, 1(1.5%) was teaching Criminology subject, 3(4.5%) were teaching Professional Subjects, 5(7.5%) were teaching Industrial Technology subjects and 1(1.5%) was teaching Research subject.

Table 8. Profile of the respondents in terms of subject taught.

	Frequency	Percent
English	13	19.4
Mathematics	7	10.4
Social Science	8	11.9
HRM	8	11.9
Computer	4	6.0
Science	5	7.5
Filipino	3	4.5
Business Management	9	13.4
Criminology	1	1.5
Professional Subjects	3	4.5
Industrial Technology	5	7.5
Research	1	1.5
Total	67	100.0

B. Level of ICT Competencies of the GSC Faculty members in terms of knowledge and skills on ICT Basics, Information and Communication, Computer Ethics and Security, Word processing, Electronic Spreadsheet and Multimedia Presentation

Data in Table 9 shows the level of ICT Competencies of the GSC Faculty members in terms of knowledge and skills on ICT Basics. Out of 10 standards indicated for ICT Basics, respondents were only familiar in 8 of the standards, and they were "Proficient" only in operating a computer which includes starting, and identifying its parts and arranging and customizing desktop which includes adding, removing and changing desktop properties. With a mean score of 3.23, it was found out that GSC faculty members were only familiar on ICT Basics. It implies that they need to understand the components of a personal computer, how information networks are used in computing and management of files and print documents.

Table 9. Level of ICT Competencies of the GSC Faculty members in terms of knowledge and skills on ICT Basics

Items	**Mean**	**Sd**	**Interpretation**
A. ICT BASICS			
1. Explain the terms Information Technology & Communications Technology	3.25	1.020	Familiar
2. Identify the different hardware and software components of a computer and how they work together	3.06	0.998	Familiar
3. Differentiate the different types of software	2.91	1.125	Familiar
4. Discuss Networking/ Communications Technology	2.97	1.114	Familiar
5. Operate a computer	3.61	1.086	Proficient
6. Arrange and customize the desktop	3.45	1.197	Proficient
7. Manage Applications	3.37	1.166	Familiar
8. Manage Files	3.58	1.032	Familiar
9. Manage a printer	3.51	1.106	Familiar
10. Troubleshoot the computer	2.54	1.271	Familiar

Scale: 1.00 – 1.79 (Novice), 1.80 – 2.59 (Beginner),
2.60 – 3.39 (Familiar), 3.40 – 4.19 (Proficient), 4.20 – 5.00 (Expert)

Data in Table 10 shows the level of ICT Competencies of the GSC Faculty members in terms of knowledge and skills on Information and Communication. Respondents were proficient only in sending and receiving email, organizing and printing of messages, and were only familiar in most of its standards. With the mean score of 3.20, it implies that respondents were familiar in the concepts and terms but need further practice to be confident in using the internet and electronic mail.

Table 10.Level of ICT Competencies of the GSC Faculty members in terms of knowledge and skills on Information and Communication

Items	Mean	Sd	Interpretation
B. INFORMATION AND COMMUNICATION			
1. Discuss Internet and World Wide Web	2.90	1.089	Familiar
2. Access the Web	3.19	1.158	Familiar
3. Use Bookmarks	2.9	1.116	Familiar
4. Search the Web	3.28	1.191	Familiar
5. Download web pages	3.3	1.206	Familiar
6. Send receive email	3.46	1.185	Proficient
7. Create an address book	2.84	1.175	Familiar
8. Organize messages	3.46	1.078	Proficient
9. Print messages	3.49	1.092	Proficient
Total	**3.20**	**0.996**	**Familiar**

Scale: 1.00 – 1.79 (Novice), 1.80 – 2.59 (Beginner),
2.60 – 3.39 (Familiar), 3.40 – 4.19 (Proficient), 4.20 – 5.00 (Expert)

Data in Table 11 shows the level of ICT Competencies of the GSC Faculty members in terms of knowledge and skills on Computer Ethics and Security. The mean score is 2.92. It was found out that all of the standard requirements were familiar or they have used/done the function or operation occasionally but need further practice. It implies that better understanding on security and legal issues associated with using the computer is important.

Table 11.Level of ICT Competencies of the GSC Faculty members in terms of knowledge and skills on Computer Ethics and Security

Items	Mean	Sd	Interpretation
C. COMPUTER ETHICS AND SECURITY			
1. Understand personal property and user rights	3.30	1.155	Familiar
2. Understand the concept of software piracy and violation of copyright laws	3.12	1.080	Familiar
3. software piracy and violations, computer fraud and possible penalties	2.73	1.213	Familiar
4. Apply common courtesies and acceptable use policies while telecomputing	2.76	1.143	Familiar
5. Apply fundamental principles of computer security	2.79	1.162	Familiar
6. Recognize and respond to ethical situations and cyber security issues involving computing devices of all forms	2.81	1.158	Familiar
Total	**2.92**	**1.051**	**Familiar**

Scale: 1.00 – 1.79 (Novice), 1.80 – 2.59 (Beginner),
2.60 – 3.39 (Familiar), 3.40 – 4.19 (Proficient), 4.20 – 5.00 (Expert)

Data in Table 12 shows the level of ICT Competencies of the GSC Faculty members in terms of knowledge and skills on Word Processing. It was found out that the respondents were "Proficient" in this skill set division with a total mean of 3.82. Only standard on creating letters using mail merge was familiar to the participants. It implies that the ability of the respondents in creating letters using mail merge in word processing needs to be practiced.

Table 12.Level of ICT Competencies of the GSC Faculty members in terms of knowledge and skills on Word Processing

Items	Mean	Sd	Interpretation
D. WORD PROCESSING			
1. Manage documents	3.91	1.164	Proficient
2. Format text	3.97	1.114	Proficient
3. Format paragraph	4	1.101	Proficient
4. Format document	3.82	1.192	Proficient
5. Move and copy text, Insert text, Delete text	3.9	1.089	Proficient
6. Insert tables	3.93	1.185	Proficient
7. Insert pictures and images	3.85	1.171	Proficient
8. Create letters using Mail Merge	3.27	1.201	Familiar
9. Preview documents	3.69	1.157	Proficient
10. Print a document	3.87	1.179	Proficient
Total	**3.82**	**1.088**	**Proficient**

Scale: 1.00 – 1.79 (Novice), 1.80 – 2.59 (Beginner),
2.60 – 3.39 (Familiar), 3.40 – 4.19 (Proficient), 4.20 – 5.00 (Expert)

Data in Table 13 shows the level of ICT Competencies of the GSC Faculty members in terms of knowledge and skills on Electronic Spreadsheet. The results revealed that most of the standard skills in electronic spreadsheet were used/done the function/operation occasionally but need further practice to be confident in using it. On the other hand, respondents were "Proficient" in handling worksheets. It implies that the tasks associated with developing, formatting, modifying, and printing a spreadsheet, generating and applying standard mathematical and logical formulas and creating and formatting graphics/charts must be demonstrated in using spreadsheet application.

Table 13.Level of ICT Competencies of the GSC Faculty members in terms of knowledge and skills on Electronic Spreadsheet

Items	Mean	Sd	Interpretation
E. ELECTRONIC SPREADSHEET			
1. Manage workbooks	3.24	1.207	Familiar
2. Select cells Enter data in a cell Insert and delete cells Insert and delete rows and columns	3.43	1.282	Proficient
3. Handle worksheets	3.79	3.591	Proficient
4. Format data	3.19	1.196	Familiar
5. Format cells	3.22	1.229	Familiar
6. Format worksheet	3.13	1.230	Familiar
7. Create formulas and functions	3.00	1.101	Familiar
8. Create charts/graphs Format charts/graphs	3.09	1.203	Familiar
9. Preview a worksheet Print a worksheet	3.25	1.210	Familiar
Total	**3.26**	**1.155**	**Familiar**

Scale: 1.00 – 1.79 (Novice), 1.80 – 2.59 (Beginner),
2.60 – 3.39 (Familiar), 3.40 – 4.19 (Proficient), 4.20 – 5.00 (Expert)

Data in Table 14 shows the level of ICT Competencies of the GSC Faculty members in terms of knowledge and skills on Multimedia Presentation. The results revealed that out of 12 standard skills in multimedia presentation, respondents were proficient in creating slides and use different slide views, formatting text and inserting pictures and images and the rest were used/done the function/operation occasionally but need further practiced. It was found out that the mean score is 3.31 "Familiar". It implies that there is a need to demonstrate the ability to use the multimedia presentation.

Table 14.Level of ICT Competencies of the GSC Faculty members in terms of knowledge and skills on Multimedia Presentation

Items	Mean	Sd	Interpretation
F. MULTIMEDIA PRESENTATION			
1. Discuss basic presentation skills	3.25	1.210	Familiar
2. Apply appropriate visual and design considerations	3.31	1.144	Familiar
3. Manage presentations using a presentation tool	3.27	1.250	Familiar
4. Create slides	3.43	1.270	Proficient
5. Apply slide layouts and templates	3.33	1.342	Familiar
6. Format text	3.48	1.211	Proficient
7. Insert pictures and images	3.45	1.210	Proficient
8. Insert drawn objects	3.24	1.292	Familiar
9. Create charts/graphs	3.13	1.242	Familiar
10. Create a slide show	3.31	1.270	Familiar
11. Prepare outputs	3.16	1.344	Familiar
12. Print slides	3.31	1.270	Familiar
Total	**3.31**	**1.187**	**Familiar**

Scale: 1.00 – 1.79 (Novice), 1.80 – 2.59 (Beginner),
2.60 – 3.39 (Familiar), 3.40 – 4.19 (Proficient), 4.20 – 5.00 (Expert)

Data in Table 15 shows the Level of ICT Competencies of the GSC Faculty members in terms of knowledge and skills on ICT Basics, Information and Communication, Computer Ethics and Security, Word Processing, Electronic Spreadsheet and Multimedia Presentation as a Whole. The results revealed that GSC faculty members were proficient in word processing and they were only familiar in five skills set division. It implies that faculty members need in service training on ICT Basics, Information and Communication, Computer Ethics and Security, Electronic Spreadsheet and Multimedia Presentation to become competent in ICT.

Table 15. Level of ICT Competencies of the GSC Faculty members in terms of knowledge and skills on ICT Basics, Information and Communication, Computer Ethics and Security, Word Processing, Electronic Spreadsheet and Multimedia Presentation as a whole

Skills	Mean	Sd	Interpretation
1. ICT Basics	3.23	0.969	Familiar
2. Information and Communication	3.20	0.996	Familiar
3. Computer Ethics and Security	2.92	1.051	Familiar
4. Word Processing	3.82	1.088	Proficient
5. Electronic Spreadsheet	3.26	1.155	Familiar
6. Multimedia Presentation	3.31	1.187	Familiar
Total	**3.29**	**0.969**	Familiar

Scale: 1.00 – 1.79 (Novice), 1.80 – 2.59 (Beginner),
2.60 – 3.39 (Familiar), 3.40 – 4.19 (Proficient), 4.20 – 5.00 (Expert)

C. Significant difference in the ICT competency of the GSC faculty taken as a whole when categorized according to age, gender, educational attainment, designation, trainings, income/salary, length of service and subject taught

Data in table 16 shows the significant difference in the ICT competency of the GSC faculty according to age. The result reveals that there is a significant difference in the ICT Competencies of respondents as to age. Young varies from old. Young is more competent than old because young generations were more focused and more open to technology and skills improvements while old were more focused only on their field of specialization.

Table 16.Significant Difference in the ICT competency of the GSC faculty taken as whole when categorized according to age

T-test for Age

	T	df	Sig. (2-tailed)
Equal variances assumed		57	.000
Equal variances not assumed	6.061	42.634	.000

0020* p<.05 level of significance

Data in table 17 shows the significant difference in the ICT competency of the GSC faculty according to gender. The result reveals that there is no significant difference in the ICT Competencies of the respondents as to gender. Male does not vary from Female. It implies that whatever sex of the respondents both male and female were competent when it comes to ICT.

Table 17. Significant Difference in the ICT competency of the GSC faculty taken as whole when categorized according to gender

T-test for Gender

	T	df	Sig. (2-tailed)
Equal variances assumed	1.482	60	0.144
Equal variances not assumed	1.345	32.938	0.188

*p<.05 level of significance

Data in table 18 shows the significant difference in the ICT competency of the GSC faculty according to educational attainment. The result reveals that there is no significant difference in the ICT Competencies of the respondents as to educational attainment. It implies that whatever is the degree of education attained by the respondents their level of competence in ICT were the same.

Table 18. Significant Difference in the ICT competency of the GSC faculty taken as whole when categorized according to educational attainment

ANOVA for Educational Attainment

	Sum of Squares	Df	Mean Square	F	Sig.
Between Groups	5.092	3	1.697	1.882	.142
Within Groups	56.832	63	.902		
Total	61.924	66			

*p<.05 level of significance

Data in table 19 shows the significant difference in the ICT competency of the GSC faculty according to designation. The result reveals that there is a significant difference in the ICT Competencies of the respondents as to designation. It implies that low ranking faculties were much skillful and competent in ICT, because most of the low ranking faculties were young and are more open to technology and skills improvements while those high ranking faculties has less skills in ICT because most of them were old and were more focused only on their field of specialization. This data agrees to the result in table 15. The Significant Difference in the ICT competency of the GSC faculty taken as whole when categorized according to age.

Table 19. Significant Difference in the ICT competency of the GSC faculty taken as whole when categorized according to designation

ANOVA for Designation

	Sum of Squares	Df	Mean Square	F	Sig.
Between Groups	19.542	6	3.257	4.611*	.001
Within Groups	42.382	60	.706		
Total	61.924	66			

*p<.05 level of significance

Data in table 20 shows the significant difference in the ICT competency of the GSC faculty according to trainings/seminar attended. The result reveals that there is no significant difference in the ICT Competencies of the respondents when it comes to training and seminars attended. It implies that whatever is the level of the seminars attended and how many seminars the respondents have attended it does not affect the competency of the respondents. It is because most of the seminars they have attended don't have any relevance to ICT.

Table 20. Significant Difference in the ICT competency of the GSC faculty taken as whole when categorized according to trainings/seminar attended

ANOVA for Trainings /Seminars Attended

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	2.073	5	.415	.423	.831
Within Groups	59.85	61	.981		
Total	61.924	66			

*p<.05 level of significance

Data in table 21 shows the significant difference in the ICT competency of the GSC faculty according to income. The result reveals that there is a significant difference in the ICT competencies of the respondents when it comes to income. It implies that highest paid respondents which refer to old were more focused only in their field of specialization and is dependent only to their secretaries when it comes to technology, while lowest paid respondents which refer to young were more competent and more open to technological change like ICT.

Table 21. Significant Difference in the ICT competency of the GSC faculty taken as whole when categorized according to income

ANOVA for Income

	Sum of Squares	Df	Mean Square	F	Sig.
Between Groups	24.215	3	8.072	13.485*	.000
Within Groups	37.709	63	.599		
Total	61.924	66			

*p<.05 level of significance

Data in table 22 shows the significant difference in the ICT competency of the GSC faculty according to length of service. The result reveals that there is a significant difference in the ICT competencies of the respondents when it comes to length of service in the College. It implies that respondents with shorter length of service where more competent that those who served the college for longer time. It is because respondents with shorter length of service are mostly young and new to the institution that makes them open to technological improvement and are more competent in ICT. While, those who have served the college for longer period of time are mostly old and were focused only to their field of specialization.

Table 22. Significant Difference in the ICT competency of the GSC faculty taken as whole when categorized according to length of service

ANOVA for Length of Service

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	22.292	5	4.458	6.862*	.000
Within Groups	39.631	61	0.650		
Total	61.924	66			

*p<.05 level of significance

Data in table 23 shows the significant difference in the ICT competency of the GSC faculty according to the subject taught. The result reveals that there is a significant difference in the ICT competencies of the respondents when it comes to the subject they taught. It implies that respondents who taught Computer subjects of course were the most competent in ICT because very obvious, it is their field of specialization. While others, especially those were teaching professional subjects were mostly focused on their fields with a bit of knowledge about ICT.

Table 23. Significant Difference in the ICT competency of the GSC faculty taken as whole when categorized according to subject taught

ANOVA for subject taught

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	22.979	11	2.089	2.950*	.004
Within Groups	38.945	55	.708		
Total	61.924	66			

*p<.05 level of significance

D. Problems and concerns met by the faculty members in the use of ICT

Problems Met

Data in table 24 shows the Problems and Concerns met by the faculty in terms of ICT. The result reveals that out of ten problems/concerns cited about using this ICT, ranked number 1 is that there is no proper equipment and software followed by no technical support and of course the need of new computer system. Second to the last is the lack of ability it is because of this first 3 problems identified. Problem in not knowing about how to use the internet is the last. It implies that despite of lack of ability, respondents were more interested to internet and find ways on how to use it.

Table 24. Problems and Concerns met by the faculty in terms of ICT

Common Concerns	**F**	**%**
1. No technical support	48	77.4
2. No time	28	45.2
3. Need new computer	47	75.8
4. No proper equipment and software	49	79
5. Difficulties in using technology	33	53.2
6. No incentives	34	54.8
7. The cost of using technology	37	59.7
8. Student might be better than me	29	46.8
9. Not enough ability	27	43.5
10. Does not know how to use the internet	9	14.5
Total	**67**	**100.0**

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

Summary

This study aimed to determine the Level of ICT Competencies of Guimaras State College Faculty: Basis for In-Service Training.

The study made use of descriptive research design to determine the Level of ICT Competencies of Guimaras State College Faculty. The respondents of the study were the 67 casual and regular faculty members of the three campuses namely Salvador, Mosqueda and Baterna. The data were gathered using the research made questionnaire composed of three (3) parts. Part I, the profile of the respondents, Part II, computer competency survey adopted from CICT iSchools with 6 divisions; ICT Basics, Information and Communication, Computer Ethics and Security, Word Processing, Electronic spreadsheet and Multimedia presentationon a 5 point Likert scale where 1- novice, 2-beginner, 3-familiar, 4-proficient and 5- expert, and Part III-Survey on faculty concern in using computers consisting of 10 items.

The instrument was subjected to validity and reliability testing. The questionnaires were reproduced and administered to the respondents. They were then retrieved, consolidated and tabulated and data were processed using the SPSS.

The statistical tools used were frequencies, mean, percentage, ranking, T-test, Analysis of Variance (ANOVA) and Pearson's (r) Coefficient.

Findings

The findings of the study were as follows:

1. The profile of the respondents showed that most of the respondents have ages between 21 to 40 years old (55.2%); more than half were female (59.7%); almost were with MA units (38.8%); almost were Instructors (53.7%); more than half attended institutional trainings/seminars, more than half have 1-5 years in service and mostly were English teachers which constitutes (19.4%) of the total number of respondents.
2. The level of ICT competencies of GSC faculty members in terms of knowledge and skills on ICT Ba sics (M=3.23), Information and Communication (M=3.20), Computer Ethics and Security (M=2.92), Electronic Spreadsheet (M=3.26) and Multimedia Presentation (M=3.31) were "familiar" or used/ done the function/operation occasionally but need further practice to be confident and in Word Pro cessing respondents were proficient with a mean of 3.82. The level of ICT competencies of GSC fac ulty as a whole in 6 areas was "familiar" with a mean of 3.29.
3. There are significant differences in age, designation, income, length of service and subject taught and there are no significant differences in gender, educational attainment and in trainings/seminars attended.
4. The most common problems and concerns met by the GSC faculty members in the use of ICT were no proper equipment and software (79.0%), no technical support (77.4%), need new computer (75.8%), the cost of using technology (59.7%) and no incentives (54.8%).

Conclusions

Based on the results of the study, the following conclusions were made:

1. Majority of the respondents have ages of 21 to 40 years old, female, with MA units, instructors, attended institutional trainings/seminars, 1-5 years in service and teaches English subject.
2. Results on the level of ICT competencies of GSC Faculty members in terms of knowledge and skills on ICT Basics (M=3.23), Information and Communication (M=3.20), Computer Ethics and Security (M=2.92), Electronic Spreadsheet (M=3.26) and Multimedia Presentation (M=3.31) interpreted as "familiar" or used/done the function/operation occasionally but need further practice to be confident and in Word Processing respondents were proficient with a mean of 3.82. The level of ICT competencies of GSC faculty as a whole in 6 areas was "familiar" with a mean of 3.29.
3. A significant difference existed in age, designation, income, length of service and subject taught and there is no significant difference existed in gender, educational attainment and in trainings/seminars attended.
4. The most common problem and concern met by the GSC faculty members in the use of ICT is no proper equipment and software.

Recommendations

Based on the conclusions made, the following recommendations were advanced:

1. Trainings on ICT should be conducted to GSC faculty members to be adept in using ICT in teaching.
2. Additional computer units should be provided by the college in every office.
3. Faculty members need various trainings/seminars in regional, national or international levels for pro fessional development.
4. IT faculty members will spearhead the trainings on ICT.
5. IT faculty should have National Certificate related to ICT to have an additional knowledge and to be more equip and competent.

References:

- CICT iSchools
- A Survey of ICT Competencies among Students in Teacher Preparation Programmes at the University of Benin, Benin City, Nigeria
  By: R.B. Danner, Department of Educational Psychology and Curriculum Studies, University of Benin, Benin City, Edo State, Nigeria
- ICT Competencies of Higher Education Teachers in Puducherry Region
  By: Z. Zayapragassarazan, Assistant Professor in Educational Technology, Department of Medical Education JIPMER, Puducherry
  Dr. E. Ramganesh, Associate Professor, Department of Educational Technology Bharathidasan Uni versity
- Teacher Educators' ICT Competencies, Usage and Perceptions