



THE IMPLEMENTATION OF INFORMATION TECHNOLOGY PROGRAMS: THE AEMILIANUM COLLEGE INC. EXPERIENCE

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Abstract. This qualitative research assessed the IT programs offered by ACI . The students are satisfied and grateful for the knowledge imparted by their instructors, who are qualified to teach based on CHED PSGs. They learn a variety of programming languages like C#, Python, Java, Hypertext Preprocessor (PHP), Structured Query Language (SQL), Extensible Hypertext Markup Language (XHTML), Ruby, VB.Net, and many more. Various algorithms, machine problems, and case studies were studied and solved to develop the skills of an IT professional. School facilities have an impact on the overall school experience of students and teachers, as well as the health, behavior, and engagement of the students. Aemilianum College Inc. (ACI) offers an IT program from Baccalaureate to Graduate Studies, which has helped many graduates to get promoted in their respective workplaces. It has also helped shape young people in their chosen fields, and is committed to its Philosophy, Vision, Mission, and Goals. However, there are challenges in the IT programs implementation, such as the declining number of students in IT programs and the low salaries of instructors. ACI has implemented a 3-year Strategic Plan to address the online services crisis, which includes cleaning and painting the facade, beautifying the campus, creating development plans for instructors, sending them training and seminars, and providing a Faculty Ranking System. Regular Training is also needed for non-teaching staff to improve morale and increase productivity.

KEYWORDS: *Information Technology Program, Computer Education and Program Experiential Evaluation*

INTRODUCTION

Education is a treasure that can be given to children, but it is also an opportunity to provide services to people who aspire to have an education. It increases self-confidence, helps those around him, and helps them handle life's challenges. Education is a learning experience, and it teaches people to look into the different perspectives or concepts about life before applying them to their daily lives. It is pertinent to children, adults, and society. The advent of the 21st century has given birth to a new set of skills that allow students to become critical thinkers, creative, communicative, and willing to collaborate on certain matters. This technology has brought to life the usage of computers and the internet to gain access to websites all over the world, making learning more exciting and fun. Governments have mandated the use of information communication technology (ICT) in the learning process in schools and universities, and IT integration is encouraged among universities to make more learning more student-centered. In the Philippines, RA 106503 has institutionalized open distance learning in levels of tertiary education, paving the way for many colleges and universities to open Information Technology (IT) programs such as Computer Science, Information Technology, and the like. The Commission on Higher Education (CHED) encouraged Higher Educational Institutions (HEIs) to upgrade school learning to the modern digital age through Policies, Standards, and Guidelines (PSGs). HEIs must comply with the minimum standards set forth in the PSGs, which include program objectives, curriculum, course descriptions, and the like. The PSGs were released in the

form of CHED Memorandum Orders (CMOs) to make the PSGs valid and regulatory. HEIs that produce competent graduates in the IT field have become the most sought-after schools. HEIs in the Bicol Region offer IT programs to cater to the growing needs of society. Information and Communications Technology (ICT) is used to handle communications processes such as telecommunications, broadcast media, intelligent building management systems, audiovisual processing and transmission systems, and network-based control and monitoring functions. The internet has become an important factor in the modern world, and IT professionals are responsible for maintaining digital infrastructure and providing troubleshooting assistance to technology consumers.

Research Questions

This qualitative research was aimed at evaluating the status of the implementation of Information Technology Programs at Aemlium College Inc. in the province of Sorsogon. This was determined by exploring the participants' lived experiences. Using the interview questions, this study sought answers to the following queries:

1. What are the lived experiences of students, instructors, and administrators on the implementation of Information Technology Programs along with:
 - a. Curriculum
 - b. Faculty
 - c. School Facilities
 - d. Administration
2. What valuable connections of the IT programs to the academic development strategy of the Institution as perceived by:

- a. Students
 - b. Instructors
 - c. Administrators
 - d. External Stakeholders
3. How do students, instructors, and administrators respond to the IT programs implemented in the Institution along with:
 - a. Curriculum
 - b. Faculty
 - c. School Facilities
 - d. Administration
4. What are the challenges encountered by the Aemilianum College Inc. in the implementation of Information Technology programs in terms of:
 - a. Curriculum
 - b. Faculty
 - c. School Facilities
 - d. Administration
5. What are the insights of the students, instructors, and administrators about the challenges they experience regarding the implementation of the IT program?
6. What strategic approaches can be proposed to inspire the implementation of Information Technology programs?

Research Process

In evaluating the present status of IT programs of ACI, the Researcher used the Qualitative Method of research. According to Austin and Sulton², "Qualitative research involves asking participants about their

experiences of things that happen in their lives. It enables researchers to obtain insights into what it feels like to be another person and understand the world as other experiences it."

The first step of the Qualitative Method of Research is to prepare questions based on the statement of the problem of the study. The researcher got the available, comfortable, and quality time of the FGD participants. In this study, participants signed an informed consent form before the interview. The participants interviewed by the researcher used the research questions to formulate FGD on the participants in the same category. The FGDs were conducted virtually via Google Meet or Zoom online platforms, and others were conducted in person.

The researcher applied the steps in conducting FGD. The Data logging or the methodical collection of information. Data logging is the process of collecting and storing data over time in different systems or environments. It involves tracking a variety of events.³ The researcher organized the data collected by transcribing it systematically. She evaluated the data for patterns or repeated ideas that emerged and gave subtitles. Based on the initial concepts, establish a set of codes that can be applied to categorize data and then assign titles. Then the researcher identifies recurring themes. Finally, documentation is made until all the data is presented narratively.

Findings and Interpretations

Assessing the IT programs offered by ACI is the goal of this Study by gathering the lived experiences of the identified students, instructors, and administrators. And with the results, be able to provide an appropriate recommendation of the plan to address challenges and enhance the program.

How the Different Subjects were taught in the IT Programs

From their point of view, students are satisfied and grateful for the knowledge imparted by their instructors. All their mentors are qualified to teach based on CHED PSGs. The shared knowledge, skills, and values have strengthened their personality as professionals in the field of IT.

They learned a variety of programming languages like C#, Python, Java, Hypertext Preprocessor (PHP), Structured Query Language (SQL), Extensible Hypertext Markup Language (XHTML), Ruby, VB.Net, and many more. They learn to design and develop software applications and publish websites. Also learned Multimedia Systems, and use a mobile operating system like Android in programming, Networking, and Robotics using Arduino, Raspberry Pi hardware, etc. Various algorithms, machine problems, and case studies were studied and solved to develop the skills of an IT professional. According to Doyle ⁴, "The workplace has excellent opportunities for information technology (IT) professionals. Every business requires IT-focused employees. Computer and information technology jobs are among the fastest-growing occupations, with employment in computer and information technology occupations projected to grow 12% from 2018 to 2028, which is much faster than the average for all occupations.

Based on the lived experiences of the ACI Instructors, there were class discussions, reporting, hands-on computer programming, problem-solving, take-home activities, case studies, and research provided to develop the skills needed by an IT student. During the COVID-19 pandemic, the instructors also had a way to teach using a

blended learning modality. Classes are facilitated through virtual classes using Google Meet and Zoom online platforms or by Self Learning modules. Instructors motivated the students to actively participate in the classroom and computer laboratory activities

School Facilities Employed in Teaching IT Subjects

Studies show that school facilities have an impact on the overall school experience of students and teachers. More importantly, they also affect the health, behavior, and engagement of the students. The ACI provided the facilities needed by students taking up IT courses. The Institution tried to comply with all the requirements stated in the CHED's policies, standards, and guidelines. There are only a few things to pay attention to, such as adding ventilation. Green boards to whiteboards protect the health of both students and instructors. But some things need to be fixed. Some rooms need to add wall fans, ceiling fans, and air-conditioners. These are necessary for the school to be conducive to learning. But some things need to be fixed. Some rooms need to add wall fans, ceiling fans, and air-conditioners. These are necessary for the school to be conducive to learning.

Valuable Connections of the IT Programs to the Academic Development Strategies

ACI has helped shape young people in their chosen fields. The capstone projects by the senior students like websites, software applications, and other IT-related projects are of great help to the school and even the institutions surrounding them.

ACI is the only College to offer an IT program from Baccalaureate to Graduate Studies. ACI has helped many graduates to

get promoted in their respective workplaces. Not only that, but many have also been in permanent employment because of the program. With that, ACI is committed to its Philosophy, Vision, Mission, and Goals.

Response to the IT Programs Implementation

Due to the good services provided by the institution to students, instructors, and external stakeholders, Aemilianum College Inc. became known to its stakeholders in the province and throughout the region. Graduates encourage others to patronize the institution's IT programs. Even those from other places students avail an IT program. Especially the master's in information technology that the Alumni are promoting, some students are still coming from Camarines Sur, Masbate, Catanduanes, and Samar.

Challenges Encountered in the IT Programs Implementation

One of the challenges of the College is the declining number of students in IT programs. Instructors do not stay long in service due to their low salaries. Some need to seek additional income and others decide to resign. At this point, the students are directly affected. Their morale is declining because of the situation.

In the eyes of new generations of students, their first impression of the College was of an old hospital or government office. The unclean and unpainted facade is not attractive to them. They prefer other schools that are even small if they think it is presentable.

Due to frequent Systems Administrator turnover, upgrading and updating the College's online services are not

on time. Therefore, safe, easy, and fast online transactions are not well provided.

ACI wants to overcome this crisis. There was a 3-year Strategic Plan to start acting on this challenge. The implementation of the plan has already begun. As Waitley⁸ said, "Failure should be our teacher, not our undertaker. Failure is a delay, not defeat. It is a temporary detour, not a dead end. Failure is something we can avoid only by saying nothing, doing nothing, and being nothing."

Strategic Approaches Recommended for the effective implementation of the IT Programs

According to the study, the College needs to start cleaning and painting the facade. Also, consider beautifying the whole campus with planned landscaping and flowering plants in front to attract students.

It is in the Recommendation according to the FGD participants to have an effective plan for the instructors. Have development plans for them. Also, create activities to build teamwork with them and be enthusiastic in delivering services to students. It is also sending them training and seminars to help upgrade their knowledge. Also, provide a Faculty Ranking System that could help them see promotions that allow them to work hard at self-improvement to reach it. That could also be the basis for giving them incentives and adjusting their salaries.

Regular Training is also needed for the non-teaching staff to improve morale and increase productivity, which results in providing better services to the clients.

Conclusion

Based on the findings and interpretations presented, the researcher formulated the following conclusions:

1. Students and Instructors created an atmosphere of collaboration. IT-related topics discussed include different algorithms, robotics, web designing, networking, etc. Even amidst the COVID-19 pandemic, the learning process goes on. Class discussion is through a virtual classroom. Delivering assigned reports is by pre-recorded videos posted via Youtube or presented via Google Meet or other digital platforms. The blended learning modality emerged. Learning Management System was developed and published online to deliver Self-Learning modules.
2. The capstone projects of IT students have helped in the day-to-day transactions of the College and its other beneficiaries. ACI has also played a significant role in the promotion of IT graduates.
3. ACI Stakeholders patronize the institution's IT programs. They also share their good experiences on campus. The Master in Information Technology (MIT) program extends to Camarines Sur, Catanduanes, Masbate, and as far as the Northern island of Samar.
4. There are several challenges ACI is facing now: the decline of IT enrollees, the instructor's exodus to "greener pastures," lack of training for ACI office staff, lack of online services for the stakeholders, and the painting of the ACI facade and

the beautification of the surroundings.

5. Stakeholders are positive that ACI will overcome the challenges currently facing.
6. Develop a Strategic Plan to address the identified challenges of ACI.

Recommendations

From the thematic findings, the following conclusions are formulated:

1. Maintenance of the different modalities of teaching with proper interventions be made.
2. Capstone projects should be recommended for the progress of the ACI. Tracer studies must be conducted to determine the achievements and whereabouts of the graduates.
3. IT programs should be strengthened.
4. Marketability of the IT programs must be monitored through school campaigns; a Ranking process for the employability of the faculty and staff; INSET and seminars must be conducted for faculty and staff, and improvement of the school facilities is deemed necessary.
5. Strengthen stakeholders.
6. A strong and practical strategic program be implemented.