BACHELOR OF SCIENCE IN INFORMATION TECHNOLOGY

School of Business and Information Technology

La Consolacion College Bacolod

ETEEAP Online Application System

Submitted In Partial Fulfillment of the Requirements for

ITS 312: Software Engineering

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Chapter 1

Introduction

The Expanded Tertiary Education Equivalency and Accreditation Program (ETEEAP) is a national initiative designed to provide non-traditional learners and working professionals with an alternative pathway to complete their higher education. By recognizing prior work experience, non-formal training, and informal learning, ETEEAP allows qualified individuals to earn academic degrees, opening opportunities for both personal and career advancement.

La Consolacion College Bacolod (LCCB) is among the institutions authorized to implement ETEEAP. Through a structured assessment process, the institution evaluates applicants' competencies and determines their eligibility for degree equivalency. However, the current application and registration process at LCCB is entirely manual, relying on paper-based forms and face-to-face transactions. This traditional approach has become increasingly inefficient and is prone to several issues, including delays, misplaced records, and the absence of real-time monitoring.

Applicants most of whom are working professionals the manual submission of forms and documents is time-consuming and inconvenient. On the administrative side, manually handling paperwork, encoding data, and tracking application progress results in additional workload, slower processing, and a higher risk of errors. These challenges highlight the need for a more efficient, reliable, and accessible system.

This study proposes the development of an ETEEAP Online Application System to modernize the existing process. By automating application submission, document handling, and progress tracking, the system aims to reduce errors, enhance communication, and improve the efficiency and accessibility of ETEEAP services at LCCB.

STATEMENT OF THE PROBLEM

The implementation of the Expanded Tertiary Education Equivalency and Accreditation Program (ETEEAP) at La Consolacion College Bacolod (LCCB) currently faces several operational challenges due to the absence of a centralized digital system. These problems include:

- **Time-consuming and error-prone manual processing of applications and requirements**

  The current reliance on paper-based forms and manual data entry leads to delays and increases the likelihood of mistakes during the application process.

- **Difficulty in tracking applicant progress and evaluation status**

  Without an automated system, monitoring each applicant's status and evaluation results becomes inefficient.

- **Lack of a secure and organized digital storage system for applicant documents**

  all documents are kept on paper, they can be easily misplaced, damaged, or lost. This also makes it harder and slower for administrators to find the documents when they need them

STATEMENT OF OBJECTIVES

This study aims to develop an ETEEAP Online Application System for La Consolacion College Bacolod (LCCB) to improve the current manual process of handling ETEEAP applications. Specifically, it aims to:

1. **Create an easy-to-use online platform for submitting applications**

   To allow applicants to fill out and submit their forms and requirements online instead of using paper.

2. **Enable tracking of application status**

   To help both students and staff easily see the progress of each application and submitted documents

3. **Create a safe digital storage system for applicant documents.**

   This will make sure all uploaded files are stored properly, organized, for reducing the chances of losing or mishandling documents.

SCOPE AND LIMITATIONS OF THE STUDY

This section explains what the ETEEAP Online Application System for La Consolacion College Bacolod (LCCB) will include and what it will not. It defines the features the system will support, the users it will serve, and acknowledges some challenges and restrictions that may affect its performance. This helps set clear expectations for users, developers, and stakeholders throughout the project.

Scope

This study focuses on the design and development of an ETEEAP Online Application System for La Consolacion College Bacolod (LCCB). The system is intended to improve the application, registration, and monitoring process for students applying under the Expanded Tertiary Education Equivalency and Accreditation Program (ETEEAP). Specifically, the system will:

- Allow applicants to fill out and submit application forms and required documents online.

- Provide administrators with tools to manage applications and track applicant progress.

- Offer a communication feature for sending notifications for applicants thru system.

- Be accessible through standard web browsers on computers and mobile devices.

Limitations

While the system aims to improve the ETEEAP application process, it has the following limitations:

- The system is limited to handling ETEEAP-related applications only and does not cover other academic or enrollment processes at LCCB.

- It does not include advanced document verification features such as digital signatures or third-party validation.

- The system will rely on a stable internet connection; applicants with limited access to the internet may still face challenges.

- The system will be designed primarily for use by ETEEAP administrators and applicants; use by other institutions or programs is not within the scope of this study.

- Integration with existing school systems (e.g., student records, grading systems) is not covered in this initial version.

Significance of the Study

The ETEEAP Online Application System will simplify and speed up the application process for students applying under the Expanded Tertiary Education Equivalency and Accreditation Program (ETEEAP) at La Consolacion College Bacolod (LCCB). It will improve the efficiency of handling applications for both applicants and administrative staff, reducing errors and delays. This study will also provide a reference for future researchers and developers interested in creating similar educational management systems.

The expected system will benefit the following groups:

Administration

This study will help the administration manage ETEEAP applications in a more organized and efficient way. The online system will reduce problems caused by misplaced or damaged documents. It will also make it easier to access records and generate reports for CHED. Overall, it supports better decision-making and smoother operations.

Administrative Staff

The system will lessen the workload of administrative staff by reducing manual encoding and handling of paper documents. It will make checking requirements, tracking submissions, and communicating with applicants faster. This will help staff work more accurately and efficiently. It also minimizes mistakes caused by manual processing.

Applicants

Applicants will benefit from the convenience of submitting forms and documents online. They can track their application status without having to visit the school. Their files will be safely stored and protected from being lost. This makes the entire process easier and more accessible for working individuals.

Researchers

This study gives helpful information for researchers studying online systems in schools. It shows how technology can make manual tasks easier and fix common problems. The findings can guide others doing similar projects and add to IT knowledge.

Future Researchers

Future researchers can use this study as a guide when creating or improving online application systems. They can build on its methods and findings. This study supports the ongoing improvement of digital tools in education and can inspire new ideas for better system designs.

Definition of Terms

Academic Equivalency

- Conceptually: Academic equivalency recognizes prior learning and experiences as comparable to formal academic qualifications.

- Operationally: It is the process by which ETEEAP evaluates applicants' work experience and training to award equivalent academic credits or degrees.

Applicant

- Conceptually: An applicant is a person applying for admission into a program or service.

- Operationally: It refers to students or professionals submitting applications through the ETEEAP Online Application System at LCCB.

CHED (Commission on Higher Education)

- Conceptually: CHED is the Philippine government agency responsible for regulating and overseeing higher education.

- Operationally: CHED provides policies and requirements that the ETEEAP program and system must follow.

Data Backup

- Conceptually: Data backup is the copying and archiving of data to protect it from loss or damage.

- Operationally: It involves regularly saving application data and documents in secure storage to prevent accidental loss.

Document Upload

- Conceptually: Document upload is the process of submitting required files electronically through a system.

- Operationally: It refers to applicants attaching scanned copies of certificates, IDs, and other requirements in the ETEEAP Online Application System.

Evaluation Appointment Scheduling

- Conceptually: Evaluation appointment scheduling is the coordination of designated times for applicant assessments or reviews.

- Operationally: It is a feature of the system allowing staff to set, manage, and notify applicants of their evaluation dates.

Notification

- Conceptually: A notification automatically informs users of updates, alerts, or messages.

- Operationally: The system sends emails or in-app alerts about application status, deadlines, and evaluation appointments.

Online Application Form

- Conceptually: An online application form is a digital document used to gather applicant information electronically.

- Operationally: It is the web-based form within the system that captures user data and uploads for ETEEAP processing.

Prior Learning Assessment (PLA)

- Conceptually: PLA evaluates knowledge and skills gained outside formal education for academic credit.

- Operationally: It is the process by which ETEEAP reviews applicants' work experience and training to determine eligibility.

Real-Time Tracking

- Conceptually: Real-time tracking means continuously updating information immediately as changes happen.

- Operationally: The system allows applicants and staff to view current status updates of applications without delay.

User Account

- Conceptually: A user account is a unique login profile that grants access to a system.

- Operationally: Applicants and administrators use accounts to securely access the ETEEAP Online Application System.

User Interface (UI)

- Conceptually: The user interface is the part of a system users interact with to perform tasks.

- Operationally: It is the design and layout of the online application system that allows easy navigation and data entry.

Workflow Automation

- Conceptually: Workflow automation uses technology to perform repetitive tasks automatically.

- Operationally: It refers to the system routing applications, sending notifications, and updating statuses without manual input.

Data Privacy

- Conceptually: Data privacy involves protecting personal and sensitive information from unauthorized access.

- Operationally: The system uses security measures to safeguard applicant data during submission and storage.

System Administrator

- Conceptually: A system administrator manages and maintains a software system.

- Operationally: This refers to the staff at LCCB who oversee and control the ETEEAP Online Application System operations.

Mobile Accessibility

- Conceptually: Mobile accessibility allows system use on smartphones and tablets.

- Operationally: The system is designed to be usable on various devices with web browsers for convenient applicant access.

Chapter 2

Review of Related Literature and Studies

The growing need for digital solutions in higher education has pushed many institutions to adopt online platforms. This is especially true for programs like ETEEAP that serve working professionals needing flexible access. Online systems help simplify application and tracking processes. This review highlights key foreign and local studies that inform the development of an effective ETEEAP online application system.

Foreign Related Literature

Enhancing Non-Traditional Student Enrollment Through Online Systems Journal of Educational Technology & Society (2021)

Canadian universities implemented online application systems to support adult learners. The system allowed applicants to submit forms and track status remotely, improving accessibility. Automated communication kept applicants informed throughout the process. This approach reduced dropout rates and eased the application burden for busy students.

Communication features such as email notifications and messaging were critical to applicant engagement. They helped applicants stay updated and reduced the need for physical visits. These features align well with the goals of LCCB's ETEEAP online system.

The study highlights the importance of user-friendly design for non-traditional students. It suggests that ease of access and clear communication can increase application completion rates. LCCB's system should prioritize these elements to enhance user satisfaction.

Implementation of Online Accreditation Systems in Higher Education Institutions International Review of Research in Open and Distributed Learning (2022)

Several European universities transitioned to online systems for accreditation and prior learning assessments. These systems featured centralized dashboards and automated tracking

to simplify staff work. Transparency and efficiency in evaluation processes were significantly improved by these tools.

Automation reduced manual errors and shortened processing times. Staff workloads were lowered, allowing focus on more complex tasks. These findings support the need for LCCB's ETEEAP system to incorporate automation.

The study recommends features like real-time updates and document uploads. These improve clarity and streamline evaluation workflows. LCCB can benefit by adopting similar automated systems.

Digital Solutions for Government-Funded Educational Programs in Asia Asian Journal of Educational Technology (2024)

This article reviewed online equivalency portals in Southeast Asia, focusing on Malaysia's APEL program. The system included real-time tracking, interview scheduling, and secure document storage. Emphasis was placed on data privacy and mobile accessibility for learners in remote areas.

Security features like user authentication were essential for protecting applicant information. Mobile-friendly design ensured access regardless of location or device. These insights are useful for designing LCCB's ETEEAP system.

The study stresses that adult learners require flexible, secure systems. Integrating privacy and accessibility ensures higher adoption rates. LCCB's platform should incorporate these elements to meet user needs.

Local Related Literature

Development of a Web-Based System for ETEEAP Applications in a Philippine State University University Research Journal, Mindanao State University (2021)

A prototype ETEEAP portal developed for a Mindanao state university allowed online submission and tracking. It reduced processing time by 40% and minimized clerical errors. Applicants reported increased satisfaction due to faster service.

Automation helped streamline evaluation and document handling. The study suggested private institutions like LCCB adopt similar systems. Integration with CHED reporting was also highlighted.

The research supports moving from manual to digital processes. Faster processing benefits both staff and applicants. LCCB can replicate this model to improve its ETEEAP operations.

Automation of Prior Learning Assessment Submission Using Web Portals Philippine Journal of ICT and Education (2023)

Researchers at Polytechnic University of the Philippines developed a secure portal for prior learning assessment submissions. Features included OTP login, document verification, and interview notifications. Users found the portal easy to use and appreciated quick updates.

The system reduced administrative workload and increased communication efficiency. Security measures protected applicant data from unauthorized access. These benefits justify incorporating similar features in LCCB's system.

The study emphasizes user experience and data security. Both are critical for successful adoption of online education systems. LCCB's ETEEAP system should follow these principles.

Online Academic Equivalency System for Professional Learners Capstone Project, STI College – Bacolod (2025)

This project developed an online equivalency system targeting working professionals. It included document uploads, admin dashboards, and eligibility checks. Users praised its mobile accessibility and straightforward design.

The system allowed applicants to apply anytime without campus visits. Positive feedback showed the value of simplicity and responsiveness. This project provides a good reference for LCCB's ETEEAP system development.

The study highlights the importance of accessibility for non-traditional learners. Responsive design ensures usability across devices. LCCB should prioritize these factors for its platform.

Synthesis for Related Foreign and Local Literature

The foreign literature highlights the critical role of digital systems in enhancing accessibility and efficiency for non-traditional learners, particularly adult students and working professionals. Key features such as automated workflows, real-time updates, and effective communication tools are shown to improve application completion rates and reduce administrative burdens. Emphasis on data security and mobile-friendly design ensures that these systems cater to users across different locations and devices, making education more accessible and flexible.

Local studies reinforce these findings by demonstrating successful implementations of ETEEAP online systems within Philippine educational institutions. These projects showcase the benefits of digital transformation, including faster processing times, fewer errors, and enhanced communication between applicants and administrators. Security measures, such as secure logins and document verification, alongside user-friendly interfaces, are essential components that contribute to higher user satisfaction and operational efficiency.

Collectively, the foreign and local literature provide a strong basis for the development of LCCB's ETEEAP online application system. Integrating automation, accessibility, and security features is vital to creating a platform that supports working professionals effectively while streamlining administrative tasks. By adopting these best practices, LCCB can offer a modern, reliable, and user-centric solution tailored to the needs of its academic community.

Review of Related Studies

Online application systems enhance accessibility and streamline processes for working professionals. Studies from Canada, Europe, and the Philippines show that such systems reduce processing times and improve communication between applicants and staff. Mobile accessibility and data privacy are critical factors for user satisfaction. These systems also help minimize errors and administrative workload. This supports the need for a secure and user-friendly ETEEAP online application system at LCCB.

Foreign Related Studies

Online Enrollment System for Adult Learners in Canada

A 2022 study by Canadian researchers examined an online enrollment system designed for adult learners at a large university. The system allowed users to submit applications and upload documents online, improving accessibility for working students. It also included real-time status updates and automated messaging to keep applicants informed. This greatly reduced application dropouts and increased enrollment efficiency.

The study shows that streamlining processes through online platforms significantly improves user experience. Clear communication reduces confusion and speeds up application completion. These features are crucial for programs like ETEEAP.

This study confirms that digital systems can enhance enrollment for non-traditional students by reducing barriers. LCCB can apply these findings to better support working professionals. It highlights the need for easy-to-use, responsive online portals.

Automated Accreditation Systems in European Universities

In 2023, researchers analyzed how European universities implemented online accreditation systems for prior learning assessments. The systems featured centralized dashboards and automated tracking to reduce manual workloads. Transparency in evaluation stages helped both staff and applicants monitor progress effectively. The result was faster accreditation processing and improved data accuracy.

The research indicates that automating administrative tasks benefits staff efficiency and applicant satisfaction. Tracking tools also encourage accountability and reduce errors. LCCB's ETEEAP system should integrate similar automation.

Findings suggest that digital workflows and transparency improve both service quality and operational efficiency. These insights validate adopting online accreditation platforms for ETEEAP. The study highlights the importance of real-time status updates and data management.

Digital Education Equivalency Programs in Southeast Asia

A 2024 study reviewed online portals for educational equivalency in Southeast Asian countries, including Malaysia's APEL system. These platforms offered document uploads, interview scheduling, and applicant profiles. Mobile access and strong data privacy measures were emphasized to accommodate remote learners and protect sensitive information.

The study reveals that mobile-friendly and secure systems are essential for successful equivalency programs. Features like interview scheduling help organize evaluations efficiently. LCCB's system can incorporate these to improve applicant convenience.

Prioritizing privacy and accessibility results in higher engagement and trust among users. The study supports the development of robust, user-centered online application systems. These principles are critical for LCCB's ETEEAP platform success.

Local Related Studies

Implementation of Online ETEEAP Portal in Mindanao State University

A 2021 study at Mindanao State University documented an online portal for managing ETEEAP applications. Automation reduced processing time by 40% and increased user satisfaction. The system allowed document uploads, status tracking, and evaluation monitoring.

The study recommends private institutions like LCCB adopt similar portals for improved efficiency. Integration with regulatory reporting was also suggested to meet compliance needs. This case serves as a practical model for LCCB.

Findings show that digital systems streamline complex application processes. The study highlights benefits in accuracy, speed, and user engagement. These insights can guide LCCB's ETEEAP system development.

Web Portal for Prior Learning Assessments at Polytechnic University of the Philippines

In 2023, a team developed a secure web portal for submitting prior learning assessments under ETEEAP. Features included OTP login, document verification, and interview notifications. Users reported increased ease and speed compared to manual processing.

The study highlights the importance of combining usability with strong security measures. Automated communications reduced administrative burden. LCCB can adopt similar features to enhance system reliability.

This research supports user-centered design and security as vital for application platforms. Efficient communication tools improve applicant experience and staff productivity. These factors are critical for LCCB's online system success.

Online Academic Equivalency System for Professionals at STI College Bacolod

A 2025 capstone project created an online equivalency system for working professionals seeking degrees. It featured document uploads, eligibility checks, and mobile accessibility. Feedback was positive, noting the system's simplicity and convenience.

The project emphasizes mobile-friendly, responsive design to accommodate non-traditional learners. Accessibility at any time was key to user satisfaction. LCCB's system can benefit from these user experience principles.

The study confirms that simplicity and mobile access are essential for working adult applicants. Such systems improve accessibility and streamline academic equivalency processes. These lessons are valuable for LCCB’s ETEEAP platform.

Synthesis of Related Foreign and Local Studies

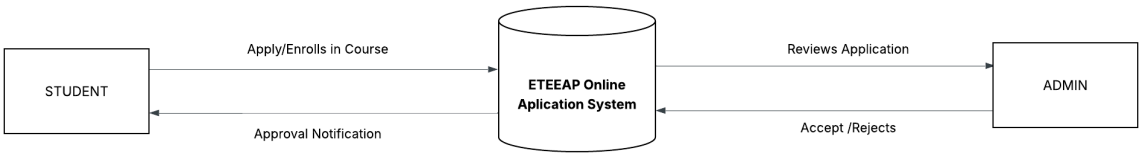
Both foreign and local studies emphasize the critical role of online application systems in improving accessibility and convenience for non-traditional learners, such as working professionals. Foreign research from countries like Canada and European institutions highlights how digital platforms reduce application processing times, improve transparency, and enhance communication through automated notifications. Similarly, local studies in the Philippines reveal that web-based portals for ETEEAP and prior learning assessments significantly reduce clerical errors, speed up evaluation processes, and increase applicant satisfaction.

Security and mobile accessibility are common themes across both foreign and local literature. The studies underscore the importance of safeguarding user data through authentication measures and encryption, while also ensuring that platforms are accessible on multiple devices, including smartphones and tablets. This is especially vital for adult learners who may access the system remotely and at varying times, making flexibility and data privacy key to successful system adoption.

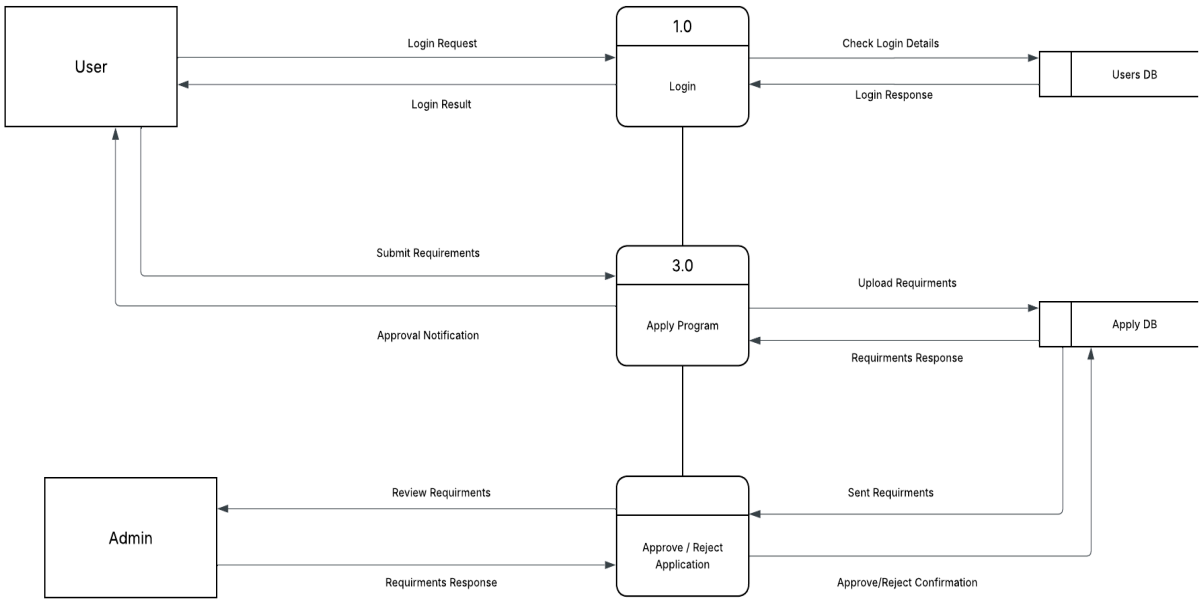
Overall, the evidence from both contexts strongly supports the development of a secure, efficient, and user-friendly ETEEAP online application system. Integrating features such as real-time tracking, document uploads, and communication tools can significantly enhance the application experience for both applicants and administrators. These insights provide a clear foundation for designing a modern system tailored to the needs of La Consolacion College Bacolod and its unique learner population.

Chapter 3

Context Free Diagram



Data flow Diagram



Gantt Chart

Activities	August				September				October				November				December			
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
A. Propose project title	■																			
B. Title approved by faculty		■	■																	
C. Start Chapter 1		■	■																	
D. System Development				■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	
E. Frontend(UI) Development				■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	
F. Back-end Development				■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	
G. Review Chapter 1					■	■														
H. Chapter II						■														
I. Checking of Chapters I&II						■	■													
J. Chapter III							■	■	■											
K. Submit Revised Documents									■											
L. Finalize Chapter 2									■	■										
M. Checking of Chapters I,II &III												■								
N. Submit final revised Documents												■								
O. Testing Phase																				
P. Testing/ Evaluation																■	■			