

ABC-ICT Integration Model (2018) towards Effective and Efficient School-Based Online Enrolment: Educational e-Governance

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Abstract: This research journey delved on the perspectives of internal and external stakeholders relative to enrolment mechanism by adopting the descriptive-correlational method of research. Purposive sampling was employed to determine the target respondents to be involved in the study; hence, the respondents were chosen on the bases of their knowledge and of the information desired. Content validity was ensured by the researcher by subjecting the instrument to editing and checking by the three principals of Sorsogon East to ensure the accuracy and high validity. The quantitative method of analyzing data was utilized in this research. This involves, mean, standard deviation, and frequency. However, in order to establish the correlation between two variables, correlation coefficient had been adopted. Findings reveal that internal stakeholders consider the present mode of enrolment as highly effective. The external stakeholders view the current mechanism as moderately effective. Researcher arrives at the conclusion that there is a negative or minimal correlation between the perspectives of the stakeholders which categorically confirms the researcher's hypothesis. Researcher recommends that assessment of the present mode of enrolment to other schools and/or even nationwide must have been done to generate data relative to its practicality and modernity aspects. The developed ICT model integration, also the proposed e-enrolment may be adopted to achieve efficiency in the workplace.

Keywords: e-Enrolment, e-Governance, Effective, ICT Integration Model (2018), Modernity

Introduction

Views on ICT Integration in Education

Mcluhan (1957) posits that in a culture like ours, long habituated to splitting and dividing all things as a means of control, it is sometimes a bit of a shock to be reminded that, in operational and practical fact, the medium is the message. This is merely to say that the personal and social consequences of any medium-- that is, of any extension of ourselves-- result from the new scale that is introduced into our affairs by each extension of ourselves, or by any new technology. Thus, with automation, for example, the new patterns of human association tend to eliminate jobs, it is true. That is the negative result. Positively, automation creates roles for people, which is to say depth of involvement in their work and human association that our preceding mechanical technology had destroyed. Many people would be disposed to say that it was not the machine, but what one did with the machine, that was its meaning or message. In terms of the ways in which the machine altered our relations to one another and to ourselves, it mattered not in the least whether it turned out cornflakes or Cadillacs. The restructuring of human work and association was shaped by the technique of fragmentation that is the essence of machine technology. The essence of automation technology is the opposite. It is integral and decentralist in depth, just as the machine was fragmentary, centralist, and superficial in its patterning of human relationships.

The foregoing perspective of Mcluhan (1957) accentuates on the boon and bane sides of technology invasion upon humanity. Technology, therefore, brings good things to human such as facility of work, time-practical, accurate and able to produce more output compared to manual manipulation. Conversely, it also has negative aspect. It seems to literally dominate the basic functions of people that humans tend to leave it all to technology which, in the long run, make people complacent, futile and unproductive.

Moreover, Grabe and Grabe (2015) elucidated on the significance of ICT in education. He explained that ICT can even be used to compose multi-authored texts, select from a broader variety of audiences throughout the world, as well as exercise choice of medium and design while composing. This bears significance to the present study which also identified similar strategy, particularly the use of the internet and internet-based materials in

classroom instruction. This investigation however, dealt with the general overview of ICT implementation through an assessment of the program by the school heads and ICT coordinators of the sample schools.

According to Rouse (2017), Information and Communication Technology (ICT) is a term denoting to all devices and software applications that allow users to intermingle with the computer system. The use of online system can help guidance and counselors manage, assess, and conduct online counseling, record data that can be easily repossessed and produce valuable information efficiently.

Additionally, in the study conducted by Iacob (2012), it was revealed that guidance and counseling suffered from lack of ICT modernizations that could help in the execution of new mechanisms specifically intended for counseling. The study correspondingly indicates that there is also a burgeoning mandate for web-based counseling since even in most developed counseling systems in Europe they still experience low ICT implementation in the field.

In addition, Higgins (2003) underscored that computers can be utilized in an array of ways to advance learning and teaching: by individual pupils, by groups and for whole-class teaching. He also pointed-out that when students work collaboratively in small groups, ICT can be used effectively to support talk and improve discussion. He similarly affirmed that ICT integration in the delivery of instructions is effective both in individualized instructions and grouped instructions.

The above authors accentuate on the significance of ICT in the field of education specifically in the teaching-learning process where the best interest of the students are at stake. These pose relevance to the point of this study on the use of ICT to improve the enrolment process even parents or students are outside the province or country, they can still enrol, request and upload forms and documents to the target school of enrolment. This is to keep pace with the trends in education and ,in the long run, become modernized and rationalized institution.

Local Perspectives on ICT Integration in Education

Locally, in the related study of Tacuban (2018) regarding online guidance testing management, she specified that an effective guidance and counseling service was an indispensable factor to provide students with the proper foundation, attitude, skills and values to succeed in life. In effect, the developed online system was assessed by authorities in ICT's and the same to be very effective and efficient along the governance and operations management of Iloilo Science and Technology University, Philippines.

The importance of technology has been streamlined to the vision and mission of the Department of Education. Philippine national policy has, conversely, been articulated to advance the use of ICT in education. In March 2001, the Senate Committee on Education in cooperation with the DECS launched Project CARES. Project CARES was conceptualized to upgrade the use and application of ICT in public elementary and secondary schools nationwide. The project's chief concern is to deliver public schools and district offices with computer-based administration and operations support tools and ultimately make elementary and high school principals more efficient and dynamic in their work as school managers (Rimando, 2009).

In the same vein, Pangilinan (2009) conferred that the Department of Education ICT Education (ICT4E) Strategic Plan which aims for the total metamorphosis of the quality of education in the country by integrating ICT into the transport of the curriculum content to turn the schools into dynamic and state-of-the-art learning institutions. This will link up the students with the infinite interacted world of knowledge and information, cultivate students' capabilities to critically and judiciously seek, absorb, analyse, accomplish and present information, and nurture in the students a lifetime routine of self-teaching.

The vision of the Philippine Education Technology Master Plan is to foster quality education that is reachable through the use of information technology and other inventive technologies. Under this agenda, DepEd is employing an ICT plan for Basic Education which has myriad objectives. The foremost is to provide the physical infrastructure and indispensable procedural support to make ICT available to students, teachers, administrators, and school support staff. Furthermore, it envisions to heightening teachers' capability in the use of ICT and in the design, production and use of ICT-based instructional materials (<http://www.ict-in-education>).

The Department of Education (DepEd) Philippines, is also exercising hard works to advance the incorporation of ICT in both elementary and high school education in the country. Among the many programs of DepEd is to completely implement the use and integration of ICT in the teaching learning practices in the sequence of

trainings of teachers. DepEd has also been forecasting to link to the internet all 6,650 public high schools in the Philippines, through its Adopt-A-School program (Lapuz, 2009).

The cited literatures tackle mainly on the benefits of ICT to make school programs and projects possible. Learning also takes place more easily with the integration of ICT in ensuring that there will be meaningful and permanency in learning among the students. These perspectives somehow show connection to the proposed e-enrolment system as it aims to give convenience and reduced time and effort of the parents & students.

Brief Profile of the Research Locale

Marinas I Elementary School has been one of the 12 schools of Sorsogon East District in the city division of Sorsogon. It is situated almost 12 kilometers from the city proper jitney ride. It has likewise been 2.5 kilometers thereabouts walk journey from the national road. It is obviously deemed as a barrio school with agricultural farming as the main source of income of the inhabitants. The faculty members as of the current school year are residents itself of the barangay, if not from the nearby barangay heading to the heart of the city.

Hence, Figure 1 highlights the trajectory of enrollment for the three (3) consecutive academic years. It is noticeable that the population seems to have been dwindling with many intervening factors to be considered. One factor could be associated to enrolment system as there could be students who are outside the province but are forced to come to school to enroll manually. If there could be online enrollment system in the concerned school, population is likely to grow.

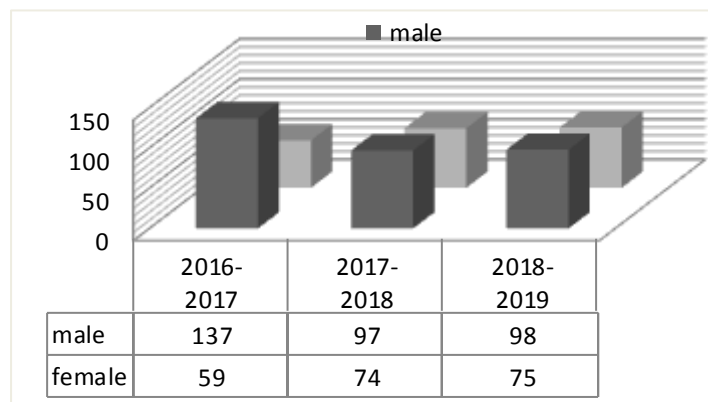


Figure 1. Three-Year Enrolment Trajectory (Source: *S.Y. 2018-2019 School Report Card (SRC)*)

Research Objectives

The long term purpose of this academic pursuit is to improve the enrollment delivery of Marinas I Elementary School by adopting an efficient and effective mechanism in the best interest of the pupils in the long run. In detail, this research aims to: *(i)* determine the effectiveness of the present enrollment system; *(ii)* correlate the perspective between the internal & external stakeholders as to the efficacy of the current enrollment system, and, *(iii)* propose a more efficient enrollment mechanism.

Methodology

This academic undertaking conforms to the view of (Bailey, 1987) as cited by De Belen (2015) who underscores methodology as a philosophy of research process because it includes the assumption and values that serve as the rationale for research and the standards or criteria the researcher uses for interpreting data and reaching conclusions; whereas a method would include the rationale and principles of research, and the philosophical underpinnings that underlie a particular pursuit. Thus, this study fittingly considered the *descriptive-correlational method* of research. It is considered as a descriptive study insofar as, in the process, it elucidated the current enrollment system based on the views of the respondents. This is, conversely, correlational since the researcher thoroughly correlated the perspectives of stakeholder based on their assessments.

The Sampling

The population may be defined as a group of classrooms, schools, or even facilities. Hence, the chief sources of data of this undertaking are the 50 respondents chosen purposively. Campollo (2012) delineates *purposive sampling* as determining the target population, those to be involved in the study. The respondents are chosen on the bases of their knowledge and of the information desired. The researcher, for the most part, considered purposive sampling to ensure high validity gauge of the pursuit. Besides, the hereunder chosen external respondents represent the 45 active parents, School Governing Council (10) and Brgy. Officials (11) comprising the external stakeholders. All 7 teachers and 1 school head are purposively chosen also representing the internal respondents.

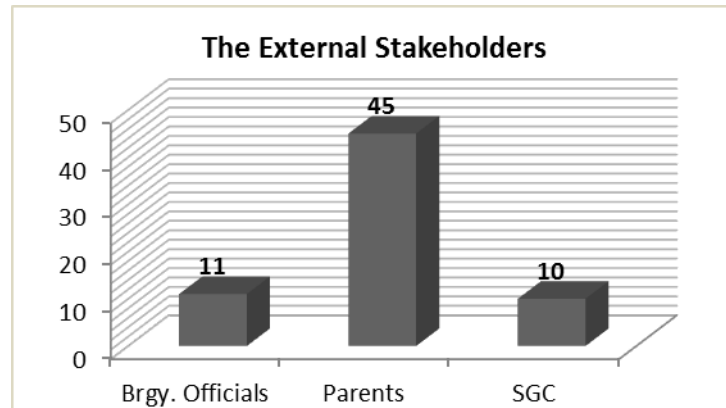


Figure 2. Distribution of the Respondents (Source: S.Y. 2018-2019 School Report Card (SRC))

The Instrumentation and Data Collection

The data gathering commenced on October 8 to 12, 2018 two weeks prior to second quarter examinations. The main instrument employed by the researcher was the researcher-made questionnaire. However, prior to the distribution, *content validity* was ensured by the researcher. The questionnaire was subjected to editing and checking by the three principals of Sorsogon East to ensure the accuracy and high validity of the instrument. The first section includes the profile of the respondents and the second part intends to measure the efficacy of the enrollment system by indicating possible indicators relative to enrollment system. Unstructured interview to the non-respondent stakeholders was undertaken to confirm the researcher's hypothesis.

Ethical Issues

Ethics in research must have been observed in order circumvent future plights. The school head, in effect, was informed thru a communication of the purposes of the conduct of research. In the process of research, the data and information that were taken from the respondents had been held with utmost confidentiality and anonymity. Ensuing research ethics and rules had also been aptly observed by the researcher to circumvent future problems relative to plagiarism, intellectual dishonesty and the like. Cited researchers and authors can be verified as highlighted in the succeeding pages.

This research had likewise been undertaken in response to the DepEd's call for research intensification and also systematically finding answers to the challenges encountered by teachers relative to the implementation of K to 12 curriculum and is not categorically divulging the incompetence of the respondents featured in this masterpiece. Ultimately, this piece of work has not also been a commissioned study.

Data Analysis

The quantitative method of analyzing data was utilized in this research. This involves, mean, standard deviation, and frequency to satisfy the objective no.1. However, in order to establish the correlation between two variables correlation coefficient had been adopted. For the objective no.3, the researcher came-up with the proposed e-

enrolment system. A 5-point scale was used to determine the effectiveness of the current enrolment mechanism: 5 excellently effective, 4 highly effective, 3 moderately effective, 2 fairly effective and 1 is deemed not effective. Tabular and graphical presentations will make this pursuit informative and aesthetic for future readers' sake.

Hypotheses

This research venture endeavored to confirm the following verifiable truths expressed in a null form:

- The current manual enrolment is not effective.
- There is no correlation between internal and external perspectives on the current enrolment mechanism.

Results

Globalization forces all countries to invest in the development of information technology in their respective countries. The modernity and ability of a country to adapt in the 21st century can be measured in the user-friendliness of computers and the literacy of its people in using those computers. Government institutions likewise recognize the importance of Information and Communication Technology (ICT) in education. Many countries around the world have formulated and are now implementing policies regarding the integration of ICT in the curriculum of schools. Thus, Table 1 presents the data on the effectiveness of the present enrolment system.

Table 1. Effectiveness of the Current Enrolment Mechanism as Perceived by Internal Stakeholders

<i>Indicators</i>	<i>Mean</i>	<i>Standard Deviation</i>	<i>Description</i>
<i>A. The manual enrolment is effective, saves time and effort.</i>	3.75	1.93	<i>Highly Effective</i>
<i>B. The present mechanism of enrolment allows parents to participate on school-related programs such Brigada Eskwela, Clean-up Drive etc.</i>	4.90	2.21	<i>Excellently Effective</i>
<i>C. The current enrolment system encourages more enrollees from other places who are originally residents of the barangay.</i>	4.25	2.06	<i>Highly Effective</i>
<i>D. The present enrolment system promotes computer literacy, practical, contemporary, and cost-efficient.</i>	2.25	1.5	<i>Fairly Effective</i>
<i>E. The current enrolment machinery fosters school-community relationships significant in the realization of school-related activities.</i>	3.25	1.80	<i>Moderately Effective</i>
Σ/n	3.68	1.90	Highly Effective

Empirically, Table 1 rolls-out data on the perception of the internal respondents as they experience the current enrolment mechanism in the subject school. The researcher intently included 5 indicators to delineate the efficacy of the present enrolment machinery. It is, on the other hand, worthy to note that indicator B garnered a mean of **4.90** with an SD of **2.21** described as Excellently Effective.

This turn-out denotes the positive impact of the current mechanism of enrolment as parents come to school and do the fixing of damaged benches, painting of chairs, and cleaning the premises dubbed by the DepEd as “Brigada Eskwela”. This measure aims to prepare the school for forthcoming resumption of classes after the summer vacation of students. Students personally come to school with their parents to enroll on manual basis.

Another observable data is indicator D which underscores on the present enrolment system that promotes computer literacy, practical, contemporary, and cost-efficient. This indicator obtained the least mean score of only **2.25** and an SD of **1.5** interpreted as Fairly Effective. This data is indicative of an inefficient and probably not practical enrolment system being used presently in the subject school. The internal stakeholder may have predicted and considered the importance of ICT integration or school-based enrolment system of new, old, and transferee students as 21st century and cotemporary way enrolment.

Collectively, the \sum/n value of **3.68** and an SD value of **1.90** is deemed Highly Effective based on the researcher-devised scale. To the extent that mean score is near the periphery of moderate efficiency, it may therefore presuppose that internal respondents have foreseen practical side and modernity aspect of school-based e-enrolment system which will lessen their efforts and time spent coming to school for the enrolment days during vacation time.

The foregoing findings also bridge the view of Rimando (2009) who highlights the importance of technology streamlined to the vision and mission of the Department of Education. Philippine national policy has, therefore, been formulated to advance the use of ICT in education. In March 2001, the Senate Committee on Education in cooperation with the DECS launched Project CARES. Project CARES was designed to upgrade the use and application of ICT in public elementary and secondary schools nationwide. The project's primary concern is to provide public schools and district offices with computer-based management and operations support tools and eventually make elementary and high school principals more efficient and productive in their work as school administrators.

Relevance in perspective is also noted from Pangilinan (2009) who conferred that the Department of Education ICT Education (ICT4E) Strategic Plan which aims for the metamorphosis of the quality of education in the country by incorporating ICT into the delivery of the curriculum content to turn the schools into dynamic and innovative learning institutions. This will link up the students with the infinite networked world of knowledge and information, develop students' capabilities to critically and intelligently seek, absorb, analyze, manage and present information, and develop in the students a lifetime habit of self-teaching and learning.

Conversely, Table 2 gives readers a data on the perspective of external stakeholders comprising the parents, barangay officers, alumni, etc. There is the predicted significance to consider the view of the external respondents as they are the chief recipients of the proposed school-based e-enrolment prior to the resumption of class and during classes for potential transferees from other districts or divisions. Possible enrollees may just need to input their personal data on the web-based enrolment and upload the basic requirements for acceptance without personally coming to school personally.

Table 2. Effectiveness of the Current Enrolment Mechanism as Perceived by External Stakeholders

Indicators	Mean	Standard Deviation	Description
<i>A. The manual enrolment is effective, and saves time and effort.</i>	1.75	1.32	<i>Fairly Effective</i>
<i>B. The present mechanism of enrolment allows parents to participate on school-related programs such Brigada Eskwela, Clean-up Drive etc.</i>	3.90	1.97	<i>Highly Effective</i>
<i>C. The current enrolment system encourages more enrollees from other places who are originally residents of the barangay.</i>	2.25	1.5	<i>Moderately Effective</i>
<i>D. The present enrolment system promotes computer literacy, practical, contemporary, and cost-efficient.</i>	4.25	2.06	<i>Highly Effective</i>
<i>E. The current enrolment machinery fosters school-community relationships significant in the realization of school-related activities.</i>	4.25	2.06	<i>Highly Effective</i>
\sum/n	3.28	1.78	<i>Moderately Effective</i>

As presented, indicator A earned a mean score of **1.75** and an SD of **1.32** considered as *Fairly Effective* along the idea that manual enrolment is effective, and saves time and effort. The chief reason for this data could be associated to the practicality aspect of present enrolment mechanism of Marinas I Elementary School. Parents probably waste their precious time and effort to personally come and ask for the requirements for acceptance or even personally come to enroll their children. This has also been suggestive of a new mode of enroll enrolment of the school to somehow keep pace with the modern epoch of computerization which seem to replace the manual functions of people.

Worthy to note also is the mean value of **4.25** with an SD of **2.06** deemed as *Highly Effective* under indicator E. This seems to negate the previous claim of the external respondents on the requirement to establish a new mechanism of enrolment for the school for the sake of modernity. This perspective of the respondents can be

linked to the fact that the current enrolment system enables them to personally monitor the progress of their children thereby foster and sound school-community relations.

Be that as it may, the *mean score* of **3.28** with an *SD* of **1.78** is classified as *Moderately Effective* implies a positive response from external stakeholders of their patronage to the proposed new school-based *e-enrolment* system likewise to the ICT integration in education. Respondents could have foreseen the benefits and advantages it will bring in the process. Moreover, the data is also symbolic of all-out support of any school-related initiatives in the best interest of the clientele. This is confirmed by the following coded conversations during interview:

- Sir mas mayad na siguro sir an online na...uhmm.. kay para dili na magkadi sa school halimbawa gaya nasa bakasyon pa man kami...(TCMLE#1) [Translated into English language as : *It is better teacher to have online enrolment so we won't waste our time coming here personally if we are on a vacation for instance*].
- Ok man ada sir an online na kita kay...uhhhm computer age na бага kita niyan, mas maging masigkat ada talaga nan maski harayo lalo ma transfer gaya... (TCMLE#2) [Translated as: *It might be more convenient sir if we will have our enrolment online for us to encourage more enrollees here in our school*]
- Mas matipid sir po hahahahaha...uhhhmm kay syempre makisuyo nlng sa ugwa computer...(TCMLE#3) [Translated as: *It is cost-efficient sir as we will just ask the favor of those who have computers*].

The codes **TCMLE#1**, **TCMLE#2**, and **TCMLE#3** are transcribed conversations during the unstructured interview with the non-respondent external stakeholders. They starkly claimed that online enrolment will be more convenient, cost-efficient, and can be an avenue to entice more enrollees and potential donors for the improvement of the school.

This is parallel to the view of Lapuz (2009) that the Department of Education (DepEd) Philippines, is also exerting efforts to advance the integration of ICT in both elementary and high school education in the country. Among the many programs of DepEd is to fully implement the use and integration of ICT in the teaching learning practices in the series of trainings of teachers. DepEd has also been planning to connect to the internet all 6,650 public high schools in the Philippines, through its Adopt-A-School program.

The goal of the Philippine Education Technology Master Plan is to deliver quality education that is accessible through the use of information technology and other innovative technologies. Under this framework, DepEd is implementing an ICT plan for Basic Education which has several objectives. The first is to provide the physical infrastructure and necessary technical support to make ICT accessible to students, teachers, administrators, and school support staff. Secondly, it aims to develop teacher competence in the use of ICT and in the design, production and use of ICT-based instructional materials (<http://www.ict-in-education>).

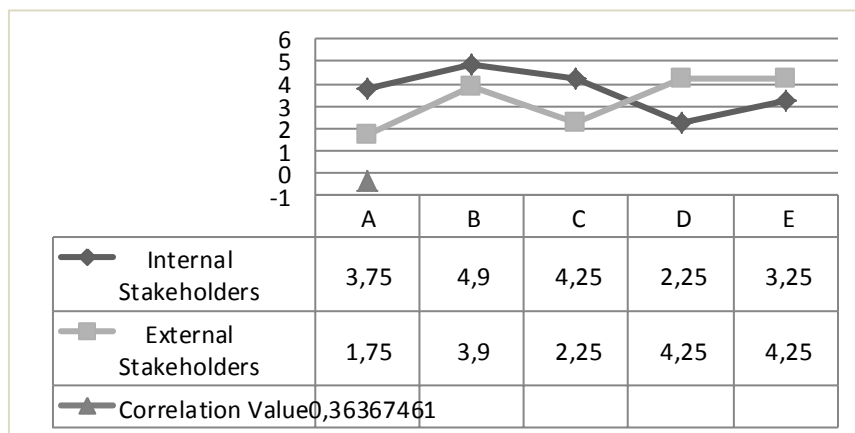


Figure 3. Correlation Coefficient between the Internal and External Stakeholders Perspective based on Mean Scores

Inferred from the above figure is correlation between perspective of internal and external stakeholder based on the 5 indicators cited. The researcher considers the fact that there is a necessity to correlate the two variables to know the conflicting interests between two sets of respondents. Directly denoting, the correlation value of **-0.36** reveals the negative correlation between the two groups of respondents. This therefore means that there is a negative correlation or very minimal correlation between the perspectives of the stakeholders which definitely confirms the researcher's hypothesis. In a nutshell, there could be indicators where both sets of respondents negate at some points. As one indicator moves, the equivalent indicator also moves at an opposite direction and magnitude.

However, as seen in the plotted graph, there are still indicators where both respondents agree at some areas of the current mode of enrolment. One common salient point could be equated to the importance of ICT integration still. This somehow poses connection to statement of Grabe and Grabe (2015) who accentuates on the importance of ICT in education. He explains that ICT can even be used to compose multi-authored texts, select from a wider range of audiences throughout the world, as well as exercise choice of medium and design while composing.

In the same vein, Naidoo (2003) suggests that ICT can also be used to support teachers who lack adequate skills and content knowledge, thus contributing to the improvement of the quality of learning. Teachers who are hesitant to sit in classrooms or feel they are too old for formal system educations would find the interactive and asynchronous nature of ICT helpful for their professional growth.

Figure 4, inasmuch as this research endeavor is concerned, delineates how the proposed *e*-enrolment system shall be undertaken, the logistics needed, and the component diagram of the new mode of enrolment. In order to come-up with design and eventually develop an *e*-enrolment system, the researcher adapted the system prototyping methodology.

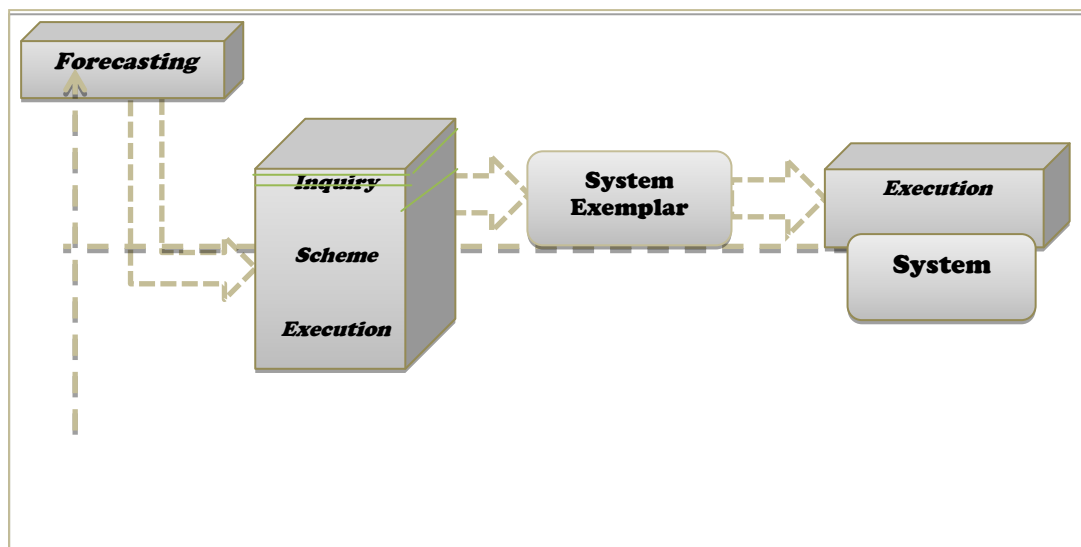


Figure 4. Proposed Online Enrolment System along e-Governance

This system exemplar approach, as elucidated by Dennis and Roth (2012) accomplishes the analysis, design, and implementation stages synchronously so that one can cultivate a well-designed application. This exemplar will primarily be used and will be exposed to interpretations and recommendations of the user so as to open the doors of improvement. During the forecasting phase, the researcher will collect the practical and non-practical structures of the system from probable users. According to Dennis and Roth (2012), efficient requirements include system stipulations relative to the progressions that the system need to be taken into account to support the user task. At any rate, Pressman (2010) conjectures non-functional necessities as behavioral possessions of the system such as performance, serviceability, aesthetics, steering features, informational structures, and user-friendly aspect.

For the inquiry and scheme mechanisms, the researcher-invented prototypical system will be presented to the possible users. In the process, a new and better-quality exemplar model will be established considering the observations and recommendations taken from the pilot testing until all logistics are integrated in the system.

User access to the system will pave the way for ICT coordinator to monitor who are logging-in to the system. This also will prevent counterfeit users of the *e-enrolment* mechanism of Marinas I Elementary School and other schools nationwide.

Discussion

Educational Implications

The current research venture has captured the essence of exploiting technology in the field of education. It is necessary not merely for modernization intents but to bring forth progress and offer quality service to its stakeholders being the chief beneficiary of the existence of schools in the community. Thus, on account of the results of the study, the researcher established that there practically is an immediate need for an operational school-based *e-enrolment* system in the Philippines where potential enrollees, transferees, and parents can browse the requirements, upload documents without requiring their personal appearance to the target school of transfer. This will prevent waste of precious time, money, and effort of the school recipients. In the same vein, it will also contribute much to the improvement of school population in the case of those with meager number of students enrolled.

This is proven by Online Transaction Processing (OLTP) which has two main benefits: effortlessness and efficacy. Condensed paper trails and the quicker, more precise forecasts for profits and expenditures are both illustrations of how OLTP creates things simpler for industries. As e-commerce and real-time communications become a progressively significant part of the contemporary business model, businesses are becoming more reliant on online transaction processing (OLTP) systems. For instance, monetary investment industry depends on on online transaction processing systems to accomplish millions of transactions and update database records promptly and precisely. Moreover, OLTP systems must be able to scale swiftly and effortlessly to handle larger data and user volumes, more complex calculations, and higher peak loads (<https://goo.gl/4Co3Pt>).

Technological Implications

To the extent that there are foreseen benefits of school-based *e-enrolment* system as illuminated by the study, its efficient execution, user-friendly operation, and modernization logistics are still dependent upon the competing networks across the islands of the Philippines. Being considered as one of the third world countries, the capacity and connectivity requirements to be able to reach all schools is far from the reality. Low signal connectivity is one of the chief complaints of the school personnel for them effectively carry-out their mandate relative to ICT integration in schools. By this study, government and authorities concerned may be reminded of their functions and duties as far as technological advancement is concerned.

These preceding statements are supported by Trucano (2015) who posited that Internet access delivers great prospects for education officials to increase the quality of education for individual students and contribute to national economic and social well-being. New ways of teaching and learning, better access to a much wider range of information and resources, new skills for the digital age: all these can metamorphose lives, helping to attain education for all and other Sustainable Development Goals. None of these gains is guaranteed; however, realizing them requires, first and foremost, reasonable access to the Internet. A legal and regulatory context that encourages investment in connectivity and services, lowers costs and fosters creativity is critical to enabling access and unlocking the Internet's value for education.

Research Implications

This research has likewise contributed to the body of knowledge as to the proposed exemplar on how to do the *e-enrolment system* in schools. It may be adopted and developed to see tangible improvements in the field of education. This research venture likewise illuminated the fact that innovative minds are necessary in order to exploit the banes side of technological inventions for better services.

Conclusion and Recommendations

This research is also anchored on the vista of Lapuz (2009) who affirms that there are many benefits to using ICT to teach literacy. ICT allows the teacher to produce and transform resources quickly and easily. It allows access to a comprehensive range of information in numerous formats, and interactive whiteboards (IWBs) have become essential tools in the classroom. Computers, software, cameras and a range of ICT devices can all make teaching and learning more operative and more fun for the pupils. But the number of activities and resources available to teachers is truly vast, and judgments need to be made about when and (more importantly) why ICT should be used. It should only be used when appropriate: meaning when, and if, it allows the teacher or the pupils to do something they would not otherwise have been able to do.

Thus, the researcher is able to come-up with his own concluding figure hereunder depicted. It also serves as a conceptual paradigm of this masterpiece.

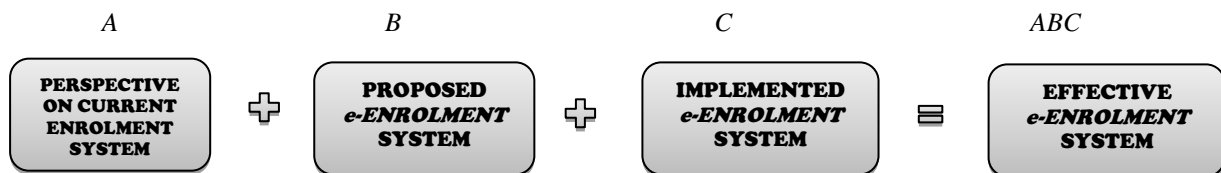


Figure 5. Estremera's ABC-ICT Integration Model (2018)

Taking into account the highlighted *ICT Integration Model (2018)*, researcher now concludes that, internal stakeholders consider the present mode of enrolment as highly effective. Nonetheless, to the extent that the mean score is near the margin of moderate efficiency, it may therefore presuppose that internal respondents have foreseen the practical side and modernity aspect of school-based *e-enrolment* system which will lessen their efforts and time spent coming to school for enrolment sake during vacation time.

Moreover, as to the perspective of external stakeholders, it is safe to conclude too that since *mean score* is interpreted as *Moderately Effective*; it succinctly denotes a positive response from external stakeholders of their patronage to the proposed new school-based *e-enrolment* system likewise to the ICT integration in education. Respondents could have foreseen the benefits and advantages it will bring to them. Moreover, the data is also symbolic of total support of any school-related initiatives in the best interest of the clientele. These conclusions clearly disconfirm the no.1 researcher's hypothesis that the present manual enrolment of the research locale is not effective. To justify the proposed ICT model, it can draw its basis from some of the indicators which earned a low mean score interpreted as *Fairly and Moderately Effective*, and based on the transcribed conversations between the researcher and the external respondents.

Inasmuch as the correlation between the sets of respondents is concerned, researcher concludes that there is no or negative correlation between the perspectives of the stakeholders which categorically confirms the researcher's hypothesis. This goes to imply that in most of the indicators, both sets of respondents negate to some degree. In view thereof, it is recommended that assessment of the present mode of enrolment to other schools and/or even nationwide must have been done to generate data relative to its practicality and modernity aspects. The generated data will serve as a basis for proposed enrolment mechanism to improve the delivery of service to the stakeholders and achieve quality in education in the long run. The developed ICT model integration also the proposed *e-enrolment* machinery may be adopted to achieve efficiency in the workplace.

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