THE MIDDLE ADULT EDUCATORS: STRUGGLES AND SUCCESS IN THE INTEGRATION OF TECHNOLOGY IN TEACHING

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ABSTRACT

This study was undertaken to determine the several challenges experienced by middle adult educators in integrating technology into the teaching-learning process in schools. It also evaluated how learning institutions, through the school administrators, provide support in developing the teachers' technical skills as well as the necessary equipment and facilities in conducting online learning.

The study involved the participation of thirty-three (33) middle adult educators who are conducting online classes from five (5) private higher education institutions (HEIs) located in the City of Meycauayan, Bulacan in the first semester of Academic Year 2021- 2022.

The findings of the study bring to light that there are several challenges experienced by the middle adult educators in the use of technology to facilitate instructions. It was also revealed that schools provided enough support to sustain their needs in conducting online learning. As an output of the study, a professional development program has been formulated to consistently update the technical skills needed by the educators to consistently enable them to provide efficient and effective use of instructional technology as educators continuously embrace the modernization of our education system.

KEYWORDS - *struggles, success, integration, technology, teaching*

INTRODUCTION

In the 21st century, Information and Communications Technology (ICT) plays a crucial role in society's progress. In the field of education, it becomes a must-consider thing in order to ensure that academic deliverables are rendered with efficiency. The use of technology helps to improve the teaching and learning process which serves as an important instrument in molding young minds. The teaching and learning process has been empowered by the integration of technology in teaching by using its features in its instructional delivery. Thus, availing the continuing program on ICT is inevitable for the upkeep of literate teachers and learners, as much as the ICT facilities and training will contribute to cultivating the basic skills needed by the learners of this technological era. This results to a productive human capital that contributes to nation building. According to United Nations Educational, Scientific and Cultural Organization (UNESCO), ICT is a scientific, technological, and engineering discipline and management technique used in handling information, its application, and association with social, economic, and cultural matters (Bhattacharjee, B & Deb K, 2016). It serves as an aid for educators to improve their instructional delivery by adapting it to the needs of digital learners. Thus, requires them to have professional training and skills in the use of technology in teaching in cooperation with the government and multiple agencies.

The Philippine education system has undergone reforms through the years. The Department of Education (DepEd), Technical Education and Skills Development Authority (TESDA), and Commission on Higher Education (CHED) are three government agencies that dominate the facets of such reforms which have been based on addressing the utmost need of the country. The reforms were aimed at addressing the call to produce graduates who are globally competitive.

In addition to the structural changes in the education system is the introduction of Republic Act 10157 which is also known as the "Kindergarten Education Act", enacted in 2012, it made pre-elementary year of education mandatory. Furthermore, the K to 12 basic education program was introduced in 2011. This has been enacted into law as Republic Act 10533 or also known as Enhanced Basic Education Act and which was implemented in the school year 2012-2013. The enactment of the K to 12 basic education law extended the elementary and secondary education cycle from 10 to 12 years. This added two-year senior high school program offers academics and technical vocational courses. In addition, the basic education now includes programs that address the needs of the out-of-school youth, school dropouts, and adults through formal and nonformal education through the program that is aptly called the Alternative Learning System (ALS). The Basic Literacy Program (BLP) is a program that is an element of ALS which develop the basic literacy skills of reading, writing, and numeracy among children and youth. Moreso, it aims to eradicate illiteracy among out of school youth and adults.

To create education standards competitive with other industrialized countries, the government has promulgated Republic Act 11448, also known as The Transnational Higher Education Act. This Transnational Education (TNE) features growth in higher education which has been aided by globalization and free trade of goods and services around the world. The TNE promotes access to foreign education, and also motivates Philippine universities, colleges, and other training institutions to offer their program and qualifications abroad in partnership with their counterparts overseas through the development of information and communication technologies.

The Philippine education system has been swift in adopting educational reforms due to the fast technological advancements. These reforms aim to provide a responsive stance to make this ICT infrastructure in place and accessible to all stakeholders of the education industry to assure the promotion of quality instructional services. The use of technology in improving quality of instruction brings not only costs of the equipment and facilities, but also requires training and skills especially for middle adult educators who experienced digital divide. They struggle in its incorporation in the improvement of their teaching methodology since it can easily be superseded by the new one. Our education system must help mold the 21st century learners to improve their abilities in science and technology, and nurture critical thinking, creativity, and entrepreneurial spirit. Hence, this growing need for middle-adult educators to equip themselves with technical know-how and related skills as required by the reforms on Philippine education system.

With the health crisis brought by the COVID-19, instructional digitization becomes a must. Adoption of a flexible learning modality requiring innovative teaching methodologies was introduced to address the unprecedented disruption in instructional delivery of schools. Schools have to be responsive in transitioning to online modalities in order to address the need of continued instructional services lest they might end up to closure or shutdown.

This study is relevant to the present condition where technology plays a great role in facilitating the learning process. This is a transition from the previous teacher-centered to a student-centric type of learning wherein the teacher is a facilitator in the teaching and the learning process. A new learning environment where the learners were permitted to choose the time and place that is convenient for them to learn. However, this requires both the learners' and the educators' technical literacy.

Finally, through the findings, the researcher came up with technology-oriented programs that may help middle adult educators continuously update their technical skills on the use of technology in teaching. This in turn will help capacitate them in overcoming encountered problems and difficulties in its use. In addition, other educators may refer to this study to give

them motivations to help themselves continue to grow professionally by improving their technical skills through continuously adapting to the ever-changing educational landscape.

METHODOLOGY

To obtain comprehensive findings, this study made use of the mixed methods type of research utilizing thematic design to evaluate the struggles and success of middle adult educators in integrating technology in teaching. The term "mixed methods" refers to a prominent systematic method of research that improves the integration, or "mixing," of quantitative and qualitative data in one study or sustained program of inquiry. This method of research allows a more comprehensive and uninterrupted consumption of both quantitative and qualitative data in data collection and analysis. (Creswell, 2013). This is a convergent parallel design of mixed method research which involves collecting both qualitative and quantitative data simultaneously, analyzing them separately, and then merging the findings to draw conclusions. The findings of quantitative and qualitative data are integrated in the process of obtaining more detailed evaluation.

This research has started out with a quantitative problem and arrived with search for primary quantitative results through qualitative shift, for a sounder data collection and analysis. The quantitative part begun with gathering quantitative data on the educational profile of the middle adult educators and the school administrators. It is followed by the support provided for the middle adult educators in the integration of technology by the school administrators. Furthermore, for the assessment of how the middle adult educators succeeded in the integration of technology in teaching based on the learning competencies of the students, quantitative approach was likewise employed. More so, quantitative data was also used to evaluate the teaching performance of the middle adult educators within the school year service. Then, the quantitative findings were utilized to find out why such results took place. It was followed by the qualitative part using interview guide questions to obtain more comprehensive results. The qualitative approach was utilized to evaluate the experienced difficulties by the middle adult educators and how they have been supported by the school administrators in overcoming their experienced difficulties in the integration of technology in teaching. For ethical considerations codes were used to hide the identity of the participants. PSA1, PSA2, PSA3, PSA4, and PSA5 were used as a code for Private School Administrators. For middle adult educator participants, code MA1 to MA33 were used. And finally, both the quantitative and qualitative results were both interpreted to figure out how the middle adult educators integrate

technology in teaching and overcome various challenges they experienced through the support from their school administrators.

RESULTS AND DISCUSSION

The general problem of the study is: How do middle adult educators keep themselves abreast in integrating technology in teaching? The researcher made use of mixed methods generate answers to this main problem and the hereunder enumerated specific problems.

1. How may the middle adult educators be described in terms of

1.1. educational qualification

Out of the 33 middle adult educators, 23 or 70% of them who answered are female, while the remaining 10 or 30% are male participants. Only 5 are graduates of Doctor's degree with 15.15%, and nobody were undergraduates of Doctor's degree while 10 are graduates of Master's degree with closed to 30.3 %, and 6 are undergraduates of Master's degree with roughly 18.18% and lastly, 12 or 36.36% of the 33 graduated with bachelor's degree.

1.2. years of experience in service

On teaching experience, 14 out of 33 or 42.42 % of the majority of the middle adult educators have been teaching for 25 years and above, followed by 10 or 30.3% who have 1-5 years' experience and next are the 5 or 15.15% with 6-10 years and lastly, both has 2 or 6.06% for 10-15 and 16-20 years of experience which has occupied the least place.

1.3. in-service training programs attended

Based on the findings, 10 out 33 middle educators cared to attend at least 1-5 training/seminars while 12 out of 33 attended webinars on the school year 2019-2020. Only 3 of them have participated both webinars and training/seminar activities within that said school year. Similarly, for the school year 2020-2021, only 7 out of 33 have 1-5 participated training/seminars while at least 15 of them have engaged themselves on webinars. Only 4 out of 33 has participated 6-10 training/seminars, while only 3 of them have attended 6-10 webinars in that same year.

1.4. preparedness on the use of technology in teaching

The use of technology has great impact in the present education system. The teachers are expected to display readiness in the use of technology by showing competencies in its use. Out of the 6 indicators used to measure the preparedness of teachers on the use of technology in teaching, item number 2 has obtained the highest computed mean of 4.7 and has been interpreted as *highly prepared.* On the other hand, item number 5, obtained the lowest computed mean of. 3.73 and was interpreted as *prepared*. However, with its weighted average mean of 4.10 which was interpreted as *prepared*, generally showed that the middle adult educators displayed preparedness in the use of technology in teaching. Contrarily, a room for improvement should always be set to achieve excellence and become more effective and more efficient in performing their duties as classroom managers.

2. How do the learning institutions provide support for the integration of technology on the basis of:

2.1. Learning Management System

The Learning Management System is a software application which allows to facilitate instructional delivery. Regarding the support provided by the administrators in terms of the Learning Management System, 2 among the 7 indicators both obtained the highest computed mean, and each was interpreted as *very evident.* These are: *The activities and instructions provided by the school's learning management system are easy to comprehend and are user friendly,* and, *The platforms offered by the schools' learning management system are versatile and familiar to the users as well as protective of the intellectual property of educators and the learners* respectively which vividly illuminated that most of their institutions are capable to provide a Learning Management System which enabled the teachers and students to conduct the teaching and learning process conveniently. Conversely, *There is a strong and dependable internet connection provided by the learning institution,* obtained the lowest computed mean and was interpreted as *moderately evident.* Furthermore, the vital support for the middle adult educators can be assumed that those are generally provided by the school administrators, and it was supported by the obtained weighted average mean with an *evident* verbal interpretation.

2.2. Learning Modalities

Online learning is one of the many learning modalities which allows instructional delivery despite the students and teachers distance.

Out of the 5 indicators, item number 2 obtained the highest computed mean of 4.33 with an interpretation of *evident* signified the middle adult educators understands the use of the learning modalities catered by their learning institutions. And generally, based on the results of

the study, the achieved weighted average mean of 4.29 and which was interpreted as *evident* showed that most of the school administrators where the study was conducted showed that they were able to provide learning modalities to be used for remote learning.

2.3. professional growth and development of faculty members

Based on the findings 2 of the 6 indicators got the highest computed mean of 4.27 and which was interpreted as *evident.* These are item numbers 2; *The school provides adequate number of seminars and training pertaining to the use of technology in teaching* and item number 3, T*he school administrator invites speakers with expertise on the use of technology in teaching.* Contrarily, one indicator got the least computed mean value of 4.09 with an *evident* interpretation. More so, it stipulated that the support needed by the middle adult educators in terms of their professional growth and development, especially for their necessary adjustments in the use of technology in teaching, is provided. The weighted average mean of 4.22 with the verbal description of *evident* affirmed how the administrator advocates the middle adult educators in their professional growth and development.

Providing the middle-level teachers with training on the use of technology as part of their professional growth and development activities will help them adjust with the current trends and requisites of learning in the 21st century. Likewise, it will help them improve their pedagogical skills as well as boost student learning outcomes.

2.4. availability of technological equipment and facilities

The study revealed that tools, gadgets, and equipment are being utilized for better structured instructional delivery especially in the new learning environment. Thus, school administrators must provide this assistance to educators to equip them for students' more meaningful learning experience.

From the 5 indicators, item number 5, *The school coordinates and cooperates with multiple agencies and other stakeholders such as the Government, Enterprises, and Schools (G-E-S) to be able to provide access to technological equipment,* obtained the highest computed mean of 4.33 and interpreted as *evident.* Consequently, one indicator got the least computed mean of 4.03 and it was interpreted also as *evident.* This is from item number 3, *The school creates programs that provide financial assistance for teachers in order to acquire the needed technological equipment (such as laptop, tablet, smart phones, etc.) and internet access, to be used in facilitating online learning.* Correspondingly, the weighted average mean of 4.22, with the verbal description of *evident* affirmed that in terms of availability of technological equipment and facilities, the middle adult educators were supported by their administrators.

It is of no doubt that the use of mobile device, laptops and computers are fascinating and advantageous in improving instructional delivery. Thus, school administrators must consistently ensure that these needs are promptly met.

3. What difficulties have been experienced by the middle adult educators in the integration of technology in teaching?

The different difficulties experienced by 33 the middle educators in integration of technology in performing their duties have been identified through interviews. They are categorized into 5 namely: the availability of technical equipment and devices, the convenience of using Learning Management System/platforms, internet connections, training, and technical support from the administrators and lastly, the other contributing factors that hinder the integration of technology in teaching.

Middle adult educators have expressed having been confronted with other areas of concern that hinder them from integrating technology in teaching. MAE2 pointed out that students apparently lack the will to seriously study online because modules, activities, and answers to assignment can be easily copied and pasted from the internet. MAE3 expressed her difficulty in converting her lectures into power point presentation during the transition phase. MAE5 emphasized preparedness in the application of technology in teaching. MAE7 stated that open communication between the students affect him in the integration of technology in teaching. He added that some students are not that knowledgeable on technology, and it is quite difficult for him to introduce different platforms or application to get them engaged. MAE8 expressed that limited screen time is his concern. This was affirmed by MAE 11, who said that "limitation of time" somehow presents problems as he cannot oblige the students to stay connected for three hours which is the normal allotted time for a 3-unit subject, because many of them have limited financial resources to pay for the internet access.

4. How do the school administrators support to the middle adult educators in overcoming the difficulties in their integration of technology in teaching?

Based on the responses, it was found out that the school administrators were able to provide various type of support to their middle adult educators, professionally, financially, technically, and emotionally to equip them in every area in the facilitation of learning which will help them overcome the experienced difficulties in the integration of technology in teaching.

Twenty-nine out 33 or 87.87% of the middle adult educators said that they are being supported by the administrators by providing them with up-to-date webinars and training, conducting open forum, support system and even e-learning modules. However, 8 out of 33 or 24.24 % claimed that they are being provided with technical assistance by experts and even

financial assistance as well as other learning materials and equipment they needed. MAE2 stated that they are conducting round-the-clock mental health awareness campaign among the students, teachers, and other employees of the school. MAE 3 told that their school loaned laptops to faculty members who needed them the most at the onset of transition to online modality. He also added that the administrator also provided internet allowance to faculty members. Importantly, according to MAE 32, their administrator motivates them to teach harder despite that "they are online" which means that they conduct online classes to facilitate instructions.

5. How may the success of the middle adult educators in the integration of technology be described as evidenced by the learning competencies of the students, and performance rating by the school administrators?

-the learning competencies of the students

From the 8 given indicators 2 garnered the highest computed mean of 4.24 which was interpreted as *most of the time.* Item number 1, *I can assist my students in using computer applications for the preparations of their assignments/papers (e.g., word processing),* and item number 7, *I can utilize innovative strategies and provide online activities that will keep my students engaged in online learning which will help develop 21st century skills such as critical thinking/problem-solving, communication, collaboration, and creativity among them.* Similarly, 3 indicators also got the lowest computed mean of 4.0 and was interpreted as *most of the time*. This therefore showed that of the middle adult educators perceived themselves as successful in the integration of technology in teaching which was supported by the computed weighted mean of 4.10 and which was interpreted as most of the time also. Nevertheless, teachers should always be more skilled in productively merging technology into teaching to make them more effective to facilitate education process.

-performance rating by the school administrators

To evaluate teaching performance rating within the school year service of the middle adult educators 12 indicators were provided. Out of the 12 indicators, 3 of them has obtained the highest computed mean value of 4.2 respectively and was interpreted as *good.* However, the least computed value of 3.8 from one item has been interpreted also as *good.* In general, this denoted that the middle adult educators have a good teaching performance particularly in the use of instructional technology which was supported by its computed weighted mean of 4.02 which has been interpreted also as *good*. Moreover, since technology is fast-phase and continuously evolve, the middle adult educators should also have constant updates and upgrade of its use to keep them from having an effective teaching performance.

CONCLUSIONS

The middle adult educators are experiencing several struggles in integrating technology in teaching which greatly affect their instructional delivery. Proper training and skills of the middle adult educators, through the support of the school administrators, made them succeed the several struggles faced in the integration of technology in teaching.

RECOMMENDATIONS

With the adequate amount of transcribed data, responses from the participants of the study and through in-depth examination of the findings, the researcher is humbly submitting the following recommendations:

1. The learning institutions must continuously refresh and upgrade educators with new features of the use of instructional technology. They must continuously motivate and promote professional growth and career development of the teachers in this new era of technology. They should initiate diverse instructional technology training programs that will help the teachers boost their teaching career, improve their pedagogical approach since education and experience are not enough right through their profession. Hence, will help them spontaneously deliver culturally relevant teaching methodologies to capture students' involvement relative to the type of learners.

2. The learning institutions, through the School Administrators, must encourage peer collaboration between and among teachers to share their best practices with one another and to give experienced-yet-technology-lacking teachers the opportunities to learn from other teachers who are well-versed in technology and therefore, promotes camaraderie among teachers as well as an awareness on the use of instructional technology.

3. The school administrators must guarantee that there are enough computer experts who can provide technical support for the teachers whenever they experience technical difficulties. They must initiate to provide necessary expertise, supports and facilities for this new and gigantic educational transformations. They should reflect how the budget for information technology will prepare both the teachers and the learners for self-directed learning in distance education. In addition, they need to plan what important educational technological facilities to purchase, which are vital to accommodate online learning.

4. The private school administrators should provide financial assistance program to support the teachers' technological needs in distance learning. Thus, will enable them to own a more sophisticated device suited for instructional technology.

5. Private school administrators should provide suitable LMS which will facilitate instructions and will help keep the students engaged while learning and monitoring their progress during online discussions. In the same manner, appropriate training and workshops should be spontaneously conducted to update them with some applications which are difficult for the middle adult educators to administer.

6. There must be consistent monitoring and evaluation of the Learning Modalities used by the learning institutions which will help evaluate the academic progress of the learners.

7. The middle adult educators must be given importance in the transformation of education system by continuously retooling them in the use of instruction technology.

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