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ACCEPTABILITY OF E-COURSEWARE IN THE TEACHING OF ARTS: INPUTS TO ACTION PLAN TOWARDS DEPED'S COMPUTERIZATION PROGRAM

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Abstract:
This study aimed to determine the Acceptability of e-Courseware in the Teaching of Arts: Inputs to Action Plan Towards DepEd's Computerization in the Division of City Schools, Manila, that will provide teachers and learners with the 21st century skills which involve the Technological Pedagogical Content Knowledge (TPACK) framework attuned to the needs of the learners.
The respondents of the study were selected Grade 3 teachers from Districts I – VI in the Division of City Schools, Manila. This study employed the quantitative descriptive method of research. Frequency and percentage, Weighted Mean and Test of Difference were used to answer the problem of the study.
Based on the findings of the study, the respondents rated all the five indicators; content, pedagogy, usability, adaptability, design and layout as "Highly Acceptable".
In the light of the significant findings and conclusions of the study, the following recommendations are hereby offered: 1.) It is highly recommended that the e-Courseware should be adopted by the Department of Education and utilized this Learning Management System (LMS) toward teaching arts subject among grade 3 learners in the country during and after pandemic time. 2.) A mixed-method design of research through focus group discussion including the stakeholders like administrators, parents and education technology specialists/experts can be conducted by future researcher/s towards enhancement of the e-Courseware material. 3.) Further validation, evaluation and enhancement of the e-Courseware must be done in order to come up with exemplary, efficiency standards for learning and teaching art lessons. 4.) Valid and reliable technological, pedagogical, content knowledge research tool that can be used by the future researcher/s in assessing and modifying the content, pedagogy, usability, adaptability, layout and design. 5.) Create another version of e-Courseware which can give more features to enhance the interest of the learners. 6.) Create an Action Plan as Inputs towards DepEd's Computerization Program for it serves as a Learning Management System (LMS) for teachers and learners in the effective utilization of the e-Courseware in the teaching arts education attuned to the needs of the learners to become worthwhile and productive individuals of this ever-changing society.

Keywords: Adaptability; content; e-Courseware; pedagogy, design and layout.

1. INTRODUCTION

Over the years, the computer has been an indispensable tool in everyone's day-to-day activities. However, this event abruptly changed human lifestyle and adopted the profound changes in technology--from business to education. Therefore, the new technology constantly controlled things around us. Time has come that even education needs to be more focused on computerization.

People at work used computers to perform their tasks and make their transactions at ease and faster than the usual or traditional way. Therefore, the Education sector imposed guidelines to its members on upskilling and acquiring competency in computers. In this scenario teachers were forced to learn the trends of computer technology, innovates new things in the context of e-Courseware development for the advancement and betterment of learners.

As stated on the guidelines of Department of Education computerization program implementations (D.O. No. 78 s. 2020), the legal mandate of promoting the right of all citizens. Therefore, the Department of Education Computerization Program (DCP) aims to provide appropriate technologies to all public schools that enhance the teaching-learning process and meet the challenges of the 21st century.

On the other hand, the DCP program shall respond to the computer backlog of all public schools by providing hardware and software and training on simple troubleshooting. And, this program combines the efforts of other government agencies and the private sector. Almost 5,409 public secondary schools have been provided with at least one computer laboratory each. From 10-20 computer units including other peripherals depending on the agencies provide the computer units. The DCP program objectives are as follows a.) Provide computer laboratory packages to secondary schools; b.) Provide e-classroom to elementary schools; c.) Provide laptop units to mobile teachers; d.) Integrate ICT in the school system; e.) Raise the ICT literacy of learners, pupils, students, teachers, and school heads; and Reduce computer backlog in public schools. e-Courseware is a good platform for various educational information digitally in Graphical User Interface (GUI). Visualization and interaction techniques allow teachers and learners to view and communicate on the screen. Information in the e-Courseware supports students' self-knowledge, self-evaluation, self-motivation, and social awareness. Furthermore, e-Courseware is expected to support the smart learning environment, in the perspective that students receive personalized and automatically-generated information on a real-time base, by Use of the log files in the Learning Management System (LMS).

Development and evaluation of e-Courseware as educational tools support students and teachers through educational data mining techniques and visualization technologies. Today, the principles of e-Courseware design provide tool to evaluate whether or not the Content, design and layout, usability and adaptability function is working properly, in both pedagogical and visual way.

2. REVIEW OF RELATED LITERATURE

As cited by Joke Voogt & Susan McKenney (2017), the five teacher educator examined in the focus group discussion on how to help students to develop the technological pedagogical content knowledge needed to effectively use technology for early literacy. In findings, the teacher educators need to foster early literacy through the use of technology. Additionally, teacher educators themselves struggle with the effective use of technology in their courses. And although technological and early literacy specialists are available in teacher training colleges, pre-service educators note a distinct lack of integrated expertise in their institutions. Based on these findings, recommendations are given for research, policy, and practice.

TPACK and the Pre-Service Curriculum

Voogt (2013) conducted a multiple case study. TEIs were struggling with the integration of TPACK in the curriculum. In relating TPACK to subject domains, it decreased attention to ICT in the teacher education curriculum. Tondeur et al. (2013) concluded that Information and Communication Technology should be infused into the entire curriculum so that pre-service teachers can understand the educational reasons for using ICT and experience how Information and Communication can support the teaching-learning process across different disciplines (p.24).

Technology, Pedagogy, and Education For over a decade, the need to bolster pre-service teacher knowledge about using ICT in the classroom has been recognized in both research and policy agendas.

Aim of the Study

According to Hutchinson and Woodward (2014), TPACk is significant to enabling teachers to implement Information and Communication Technology in their teaching. It allows teachers to choose and utilize hardware and software, affordable to have specific features of the computer to be used in their teaching strategy in effective and appropriate ways. Tondeur et al. (2013) recognized that TEIs struggle to provide student-teacher with learning opportunities to develop the TPACK needed to serve learners optimally.

As Cviko, McKenney, and Voogt (2014) mentioned, a collaboration of teacher-educators is responsible for technology, and early literacy has seen a potential solution to these problems. Cyiko, Mckenney, and Voogt (2014) showed the potential of teachers who collaboratively (re)designed their early literacy curriculum to improve and enhance it with the Utilization of technology. Polly et al. (2010) have a similar approach to have the potential for teacher-educator.

The TEIs agree that the main barrier to utilizing technology for early literacy is their limited knowledge of using it for early literacy. The teacher shall explore to use but lament the lack of time to do it. The lack of exploration and experimentation of technology in pre-service programs is consistent with findings from the previous research (Enochsson & Rizza, 2009).

Luan, Bakae, and Tang (2006) found that information and communication technology courses' involvement positively influenced student-teacher attitudes to technology. But if the technological advancement, pedagogical and content knowledge, and skills are not integrated during pre-service education, they remained isolated and exploited (Polly et al., 2010).

Issues of Reflective Language Teaching

Creating Remarkable e-Courseware Content

Courseware is educational material and technology combined either through software or the Internet. It is intended as either kits or packets for educators or actual eLearning independent lessons for students. The first thing

you need to do is set a goal that you want the courseware to accomplish. After you have that established, work backward from the goal and create lessons that will achieve this. This is called Backwards Design. The idea behind this is to teach and plan towards the "end goal" or learning point. We all learn in different ways. Some are visual learners, while others may be auditory learners. It is something that starts in childhood and continues into our adulthood. Some people can learn solely from reading the words, while others might need a video explaining it. Keep this in mind when planning your perfect courseware. Have something in place for each learning style possible. It include links to various sites and videos that you believe will benefit their learning and allow you to create fantastic courseware with many different media types and reuse Content and update your courseware when you need to (Hassey (2018).

Benefits of Arts Education for Students

Aguinaldo (2012) mentioned Computer Assisted Instruction Courseware in Algorithm and Logic Formulation, and it eventually satisfied the requirement of highly acceptable courseware in terms of its Content, instructional and technical attributes. Therefore, the courseware is recommended to use as an instructional learning tool in teaching and learning Algorithm and Logic Formulation in Basic Programming subject.

Villalobos (2013) cited that Interactive Modular Instruction is an alternative way to the traditional approach. Interactive module instruction capitalizes on the facilitation of effective and efficient learning which is relevant to the real world of work. It employs the followings: the learning principles of motivation, individualization, reinforcement of learning, self-pacing, recognition of different learning styles provision of frequent feedback, opportunities for practice and active participation.

Aro (2014) investigated in his study entitled "Pupils Appreciation for Computer Assisted Instructions (CAI) in learning English and their Academic Achievement" found out that pupils can learn more efficiently and effectively on their additional resources, which technology makes available. This is because pupils become technologically updated, and their minds become absorbent to the digital world.

De Manuel (2016) developed a Computer Courseware in Mathematics 3 using Tagalog as a medium of instruction. The study showed highly acceptable results in terms of (1) Instructional Content; (2) Graphics/Multimedia; (3) Layout; (4) Technical Aspects; (5) Accessibility; and (6) Flexibility. Furthermore, the study helped develop the child's logical minds and enhanced their learning skills.

The Importance of Art Education

Researchers who studied creative development in young people and used visual art in experimentation, exploration, invention, and imagination become the foundation for higher-level thinking skills.

Ojindah, Lyte O. et al. (2017) revealed in their study that multimedia facilities influence teaching-learning of fundamental technology in the following ways: it enhances the quality of work of both teachers and students; it makes teachers up-to-date in their teaching and learning of basic technology; it helps teachers to reach out to colleagues in other parts of the country; it enhance the efficiency of teachers and students interest; it helps teachers to evaluate the students efficiently and also improves classroom management. This finding corroborates Kwache (2007) study who submitted that multimedia facilities make the teaching and learning process more efficient, productive and facilitate pedagogical activities.

There is no doubt that multimedia facilities influence the instructional process and facilitate teaching and learning, fundamental technology in UBE schools. The paper, therefore, concludes that multimedia facilities enhance and enable students to learn more effectively. Thus, the report recommends the following among others. It is believed that it will go a long way if employed accordingly to improve the teaching and learning and learning of basic technology.

According to Matt Bower (2017), the proposed user risk model, risk seekers preferred to pay for multimedia quality. On the other hand, the risk adverse user preferred to switch to a lower multimedia quality when the monetary cost is involved.

Derek Woodgate (2019) established his paper in addition to multimedia learning environment and tools to foresight-based learning. It creates an immersion spatial narrative to increase creativity and the learner's ability to project him/her into a simulated future landscape.

3. METHODOLOGY

Method

The design and methodology used in realizing the aims of this study was discussed in this chapter. Population and sample of the study was also defined. The instruments of the study were enumerated in terms of the preparation, validation, administration and retrieval done by the researcher.

Participants/Respondents

Survey questionnaire were distributed via google forms to a total 150 selected teachers in Districts I-VI Division of City Schools, Manila. These respondents were chosen for they are familiar of the scenario in teaching arts. Likewise, they are likely to have full grasp of the curriculum and were able to handle art classes.

The objective in having selected teachers as respondents was to evaluate the Acceptability of the e-Courseware in the Teaching of Arts: Inputs to Action Plan Towards DepEd's Computerization Program on the five indicators; content, pedagogy, design & layout, usability and adaptability.

Sampling Technique

Purposive sampling was used in this study. The researcher focused on particular characteristics of the respondents, who have specific knowledge, experience and full grasp of the program/curriculum of the Department of Education. The chosen respondents provided best answer to the research questions.

Instrument

To gather the data for this study, the researcher prepared a questionnaire after the statement of the problem was formulated. The survey questionnaire was conducted via google forms to selected arts teachers. Items were developed and modified appropriate to the given indicators and to suit the level of understanding of both respondents specially art teachers to enable the researcher to compare their responses. The issues, concerns and problems experienced and encountered by the respondents were the topics of the discussion. It also included beta testing and pilot testing to determine the acceptability of the e-Courseware.

Data Gathering Procedure

To respond to the requirements of this study, standard operating procedures were observed by the researcher such as securing permission through a written communication addressed to the Schools Division Superintendent and to the School Heads.

After the approval of the request, the researcher scheduled the date of the administration of the survey. On the scheduled date, the researcher gave a brief explanation to the chosen respondents regarding the purpose of the survey and assured them that their responses were to be observed with strict confidentiality. Respondents were given ample time to answer the survey questionnaire via google forms and it were retrieved on the same day using the same platform. One hundred percent of the total numbers of questionnaire were successfully retrieved. After the retrieval of the accomplished questionnaire, the researcher proceeded with the tallying and summarizing of data. The gathered data was subjected to appropriate statistical analysis to answer the specific problems of the study. Presentation, analysis and interpretation of data were in accordance with the statement of the problems, conclusions and recommendations were derived from the findings.

Data Analysis and Interpretation

The statistical tools used to substantiate the findings of the study were the following: The Likert Scale was used in rating the acceptability, and corresponding interpretation of the data gathered, was done.

Frequency. It was the actual responses to a specific item/question questionnaire where the respondents tick choices.

Percentage. This was used as descriptive statistics which described a part of a whole.

Weighted Mean. This was used to measure the respondent's assessment. Mean was used to get the average response in each weighted item. Obtained weighted mean for the level of acceptance was interpreted using the five point Likert Scale. Below is its adjectival rating with range means.

Descriptive Rating	Weights	Index Limits
Highly Acceptable	5	4.20 – 5.00
Very Acceptable	4	3.40 – 4.19
Acceptable	3	2.60 – 3.39
Slightly Acceptable	2	1.80 – 2.59
Not Acceptable	1	1.00 – 1.79

Analysis of Variance (ANOVA) was used to recognize the significance difference in the ratings of the respondents when they are grouped according to their demographic profile.

Test of Difference. A test on the P-value both parametric and non-parametric statistics were used to test the significant difference between the level of e-courseware acceptability as assessed by the groups of respondents in terms of content, pedagogy, usability, adaptability, layout and design.

Materials and Methods are written in this area. Describe in detail the technic used, the Name and the references of laboratory materials used should be cited.

4. RESULT

The study reflects the analysis and interpretation of the gathered data from the questionnaires distributed by the researcher. Data were tallied, presented, interpreted, and analyzed in accordance with the specific questions posited on the statement of the problem.

The study population consisted of 150 public school teachers in the division of Manila, during the first quarter of School Year 2020 – 2021. Majority of respondents were female, bachelor's degree holder and who's aged were at the late twenties and early thirties of age. Furthermore, they are knowledgeable in using Microsoft office such as MS Word, MS Excel & MS PowerPoint.

Table 1
Respondents' Profile

Age	Frequency	Percentage
21 to 30 years old	48	32
31 to 40 years old	53	35.4
41 to 50 years old	27	18
51 to 60 years old	22	14
61 years old and above	1	0.6
Total	**150**	**100**
Gender		
Male	20	13.3
Female	130	86.7
Total	**150**	**100**
Educational Attainment		
Bachelor' degree holder	82	54.7
With MA unit	62	41.3
Master's degree holder	6	4
Total	**150**	**100**
Skills		
Arts/Theater Aptitude	2	1.3
Communication (Oral &Written)	11	7.3
Computer Literate/Skills	59	39.3
Cooking/Baking	10	6.7
Dancing	4	2.7
Drawing/Sketching	28	18.7
Mathematics	2	1.3
MS Office Skills	6	4
Playing Ball Games	3	2
Playing Musical Instrument	3	2
Singing	6	4
Teaching	13	8.7
Swimming	3	2
Total	**150**	**100**

Table 1 shows that the majority of respondents' profile were 31 years old up to 40 years old having almost thirty-five percent (35%). Moreover, there were forty-eight (48) or almost thirty-two (32%) of respondents aged 21 years old up to 30 years old and 1 respondent have an aged bracket of 61 years old up to 65 years old. Furthermore, there were twenty-seven (27) or eighteen (18%) of public-school teachers from the division of manila who were in early their early forties and late fifties. Also, there were twenty-one (21) or fourteen (14%) of respondents aged late fifties and early sixties. Finally, it can be gleaned on the table that each age group of public-school teachers in the Philippines were represented properly in this study.

With regard to gender it was revealed that the majority of respondents in this study were female garnering one hundred thirty (130) or almost eighty-seven percent (86.7%). Additionally, twenty (20) or approximately thirteen percent (13.3%) of respondents were male. The real and unequal gender ratio of public-school teacher in the division of Manila, that there dominantly numbers of female teachers compared to male group.

In terms of the educational attainment, majority of the respondents were bachelor's degree holder whose total frequency is eighty-two (82) or almost fifty five percent (54.7%). Furthermore, there were forty-one percent (41.3%) or sixty-two (62) respondents have pursued their master's degree on their chosen profession. Moreover, demographic profile of respondent highest educational attainment shows 4% or 6 public school teachers have successfully earned their master's degree. Lastly, this significantly shows that public school teachers have passion to relearn, unlearn and learn new things in the academic world.

With regard to the skills, sixty-five (65) or forty-three percent (43.3%) of respondents were computer literate and knowledgeable in Microsoft Office like MS Word, MS Excel & Power Point. Loveless (2020) stated in her article, a study conducted by learning.co. From 2012 to 2017 found that 75% of fifth and eighth grade students were not proficient in 21st century technological skills. Above all, digital literacy is a key factor in education today. The success of students depends on them becoming digitally literate. An individual should involves developing his/her skills and knowledge to enable them to safely navigate and discern all forms of digital technology. Teaching digital literacy in primary and secondary schools is all about understanding that today's children need different types of skill and technological knowledge in order to think critically, evaluate their work and engage with a global community.

Drawing or sketching was the second highest interest of the respondents collecting almost nineteen percent (18.7%) or twenty-eight (28). The third highest common interest of respondents was verbal communication skills in oral and written having a frequency of eleven (11) or 7.3%. On the other hand, thirteen (13) or 8.7% have teaching skills. Moreover, cooking, baking and mathematical logic were interest of thirteen (13) or 8% of the total respondents. Furthermore, 9 or 12.7% of respondent have skill in playing musical instrument and singing. Kinesthetic passion like dancing, swimming and playing ball game was also manifested with accumulated frequency and percentage of 10 and 6.7% respectively. Finally, arts and theater aptitude have the least frequency and percent distribution. Lastly, we can say that the public-school teachers are well rounded individuals and talented academicians.

2.0 Level of Acceptability

2.1 Content of e-Courseware

Table 2.1
Respondents' Level of Acceptability in terms of Content

Content indicators of e-courseware	Mean	SD	Verbal Interpretation
1. I find the e-Courseware to be most useful and interesting	4.67	0.57	Highly Acceptable
2. Competencies were arranged in a clear and logical way	4.65	0.57	Highly Acceptable
3. Content adequately explain the knowledge, skills, and concepts it presented	4.66	0.56	Highly Acceptable
4. The quiz feedback in the e-Courseware timely and relevant	4.69	0.55	Highly Acceptable
5. I understand where to click to move forward to next lesson	4.69	0.62	Highly Acceptable
6. e-Courseware cover the competencies from 1st to 4th Quarters	4.69	0.55	Highly Acceptable
7. I have confidence level for completing the knowledge or skill presented	4.53	0.73	Highly Acceptable
8 Drill and review of the e-Courseware before the quizzes were useful	4.64	0.61	Highly Acceptable
9 It took amount of time to complete this e-Courseware	4.37	0.80	Very Acceptable
10 Practice questions make good learning tools	4.65	0.62	Highly Acceptable
Over-all content of e-courseware	4.62	0.52	Highly Acceptable

Table 2.1 revealed that the content of e-Courseware was highly acceptable. Competencies covered all academic quarters, ability to understand and move forward to the next lesson and providing relevant and timely quiz feedback got the highest mean of 4.69 and standard deviation of 0.55 respectively that were verbally interpreted highly acceptable. The use of electronic courseware allows for students to access information on an ongoing basis. Computer storage systems, databases, and the Internet, remove the need for the traditional focus on text–based knowledge of high quality. A comprehensive NEA survey of educators found that a majority agreed that quality of information was higher with electronic resources (National Education Association, 2000). Furthermore, the respondents find the e-Courseware useful and interesting in content because it gives adequate explanation to knowledge, skills and concepts presented. Moreover, indicator 2 & 10 "Competencies were arranged in a clear and logical way" and "Practice questions make good learning tools" both obtain a mean value of 4.65 which is verbally interpreted highly acceptable content. Meanwhile, the lowest indicator in the content as perceived by the respondents was indicator 9 "It took the amount of time in complete this e-Courseware" the mean of 4.37 & standard deviation of 0.80 verbally interpreted as very acceptable content. This shows that the acceptability content of e-Courseware from learning activities up to formative assessment cover all the competencies for grade 3 arts subject.

2.2 Pedagogy of e-Courseware

Table 2.2
Respondents' Level of Acceptability in terms of Pedagogy

Pedagogy indicators of e-courseware	Mean	SD	Verbal Interpretation
1. e-Courseware includes a variety of instructional approaches	4.65	0.52	Highly Acceptable
2. It addresses the needs of visual, auditory and kinesthetic learners	4.60	0.59	Highly Acceptable
3. e-Courseware includes pedagogies for learners	4.62	0.60	Highly Acceptable
4. Learning takes place in a real-world context, simulation, mentorship	4.62	0.56	Highly Acceptable
5. Learning provides experience beyond the classroom addressing real world issues and problems	4.61	0.61	Highly Acceptable
6. Cooperative learning skills are explicitly taught, practiced and assessed	4.58	0.60	Highly Acceptable
7. Tools were provided that help students and teachers to capture formative and summative information about students' learning and performance	4.67	0.57	Highly Acceptable
8. Incidental teaching arises from cooperative learning and presentations	4.54	0.65	Highly Acceptable
9. Learning is made concrete using real sources of information	4.62	0.59	Highly Acceptable
10. Provides opportunities for students to actively present their knowledge and skills to peers and/or act as teachers and mentors	4.65	0.59	Highly Acceptable
Over-all pedagogy of e-courseware	4.62	0.49	Highly Acceptable

The over-all pedagogy of e-Courseware as perceived by the respondents was highly acceptable. Pedagogy indicator 7, "Tools were provided that help students and teachers to capture formative and summative information about students' learning and performance" got the highest mean value of 4.67 and verbally interpreted highly acceptable.

The variety of instructional approaches found in e-Courseware and the opportunities that were actively present for teachers or mentors for their students both have a mean value of 4.65 and verbally interpreted as highly acceptable. Learning is made concrete using real sources of information or real-world context, simulation and

mentorship addressing real world issues and problems got a mean above 4.60 indicating highly acceptable pedagogy of e-Courseware.

Variety of instructional approaches that addresses visual, auditory and kinesthetic learners. Furthermore, pedagogical indicator 3, 4 & 9 "e-Courseware includes pedagogies for learners", "Learning takes place in a real-world context & simulation mentorship" and "Learning is made concrete using real sources of information" obtained a mean acceptability value of 4.62 that is verbally interpreted highly acceptable. Methods of innovative, yet sound, instructional design abound today. Some of these methods are clearly facilitated by the electronic courseware, such as the use of multimedia and computer-based instruction like tutorial, drills, online assessments with immediate feedback, and so on

The important issue here is that curriculum need to be revised to include these methods that work with, and take advantage of, technology. Finally, indicator 2 & 6 "It addresses the needs of visual, auditory and kinesthetic learners" and "Cooperative learning skills are explicitly taught, practiced and assessed" were also assessed by the respondents highly acceptable.

2.3 Design & Layout of e-Courseware

Table 2.3

Respondents' Level of Acceptability in terms of Design and Layout

Design and layout indicators of e-courseware	Mean	SD	Verbal Interpretation
1. Animations used in the e-Courseware gives interest to the learners	4.73	0.50	Highly Acceptable
2. Text and fonts were legible in the e-Courseware	4.74	0.48	Highly Acceptable
3. Designs help gained a clearer understanding of the lessons	4.72	0.50	Highly Acceptable
4. Drawing tools, command buttons and images were accurate to facilitate learning	4.70	0.50	Highly Acceptable
5. Colors, text, images used to elicit and capture information	4.77	0.47	Highly Acceptable
6. Layout was arranged in an orderly style	4.71	0.52	Highly Acceptable
7. Design was consistent and suitable for learning	4.68	0.56	Highly Acceptable
8. Captions and other titles were well-defined	4.68	0.52	Highly Acceptable
9. Design was simple and attractive	4.75	0.48	Highly Acceptable
10. Overall visual design of the e-Courseware were user-friendly	4.77	0.45	Highly Acceptable
Over-all design and layout of e-courseware	4.73	0.50	Highly Acceptable

It can be deduced from table 4 that design & layout indicator 5 & 10 "Colors, text, images used to elicit and capture information" and "Overall visual design of the e-Courseware were user-friendly" marked the highest mean value of 4.77 and was verbally interpreted highly acceptable. On the other hand, design & layout indicator 7 & 8 "Design was consistent and suitable for learning" and "Captions and other titles were well-defined" got the lowest mean value of 4.68 and also verbally interpreted as highly acceptable. Respondents also appreciate the simplicity & attractiveness of text and fonts in the e-Courseware making learning suitable and accurately clear in each lesson were highly acceptable in design and layout.

Moreover, title caption was well-defined and orderly styles in the layout of the e-Courseware relatively add to its acceptability thus making the overall design layout of e-Courseware highly acceptable. The overall visual design of e-Courseware was user- friendly in terms of colors, text images used, captured information the design layout have notably high weighted mean value and were highly acceptable.

of e-courseware

2.4 Usability Table 2.4

Respondents' Level of Acceptability in terms of Usability

Usability indicators of e-courseware	Mean	SD	Verbal Interpretation
1. I have gained insights on the relative value of the e-Courseware	4.72	0.51	Highly Acceptable
2. I have noticed the most important feature of the e-Courseware	4.66	0.53	Highly Acceptable
3. I experienced of using the e-Courseware to complete the task	4.50	0.67	Highly Acceptable
4. I found it easy to navigate the e-Courseware	4.60	0.65	Highly Acceptable
5. It takes the user to complete the task	4.65	0.62	Highly Acceptable
6. I highly recommended this e-Courseware to your students	4.74	0.50	Highly Acceptable
7. I found it user's friendly in some aspects of operation	4.71	0.51	Highly Acceptable
8. Graphical user interface provided enough information to communicate with the user.	4.65	0.54	Highly Acceptable
9. Features encouraged user to explore the e-Courseware	4.69	0.52	Highly Acceptable
10. I found the activities more interesting and challenging	4.72	0.50	Highly Acceptable
Over-all usability of e-courseware	4.66	0.55	Highly Acceptable

Table 2.4 shows the usability of e-Courseware among one hundred fifty (150) public school teacher in the division of Manila. They have found the e-Courseware interesting, easy to navigate and user-friendly. Furthermore, the graphical user interface and navigation provided enough information to communicate to the learner were significantly found highly acceptable in terms e-Courseware usability. The ability of e-Courseware to provide insights,

exploration to each lessons were important usability feature of e-Courseware thus making highly acceptable to teachers and learners. Moreover, usability of e-Courseware indicator 6 "I highly recommended this e-Courseware to your students" obtained the highest mean value of 4.74 that implies highly acceptable. Meanwhile, the 3rd indicator usability of e- Courseware "I experienced of using the e-Courseware to complete the task" got the lowest mean level 4.50 but still verbally interpreted as highly acceptable. Lastly, the over-all mean value and standard deviation usability of e-Courseware is 4.66 and 0.55 that is verbally interpreted highly acceptable that significantly implies e-courseware is usable to any type of learners & teachers across all the ages and to any grade 3 arts lesson. This means that the graphical user interface of e-courseware provides enough information to both learners and teacher.

2.5 Adaptability of e-Courseware

Table 2.5
Respondents' Level of Acceptability in terms of Adaptability

Adaptability indicators of e-courseware	Mean	SD	Verbal Interpretation
1. Learners gave opportunities to collaborate face-to-face and virtually	4.57	0.64	Highly Acceptable
2. Learners assisted in developing their own personal learning network	4.64	0.56	Highly Acceptable
3. Learners provided with opportunities to speak and write using their own unique and genuine voices	4.53	0.62	Highly Acceptable
4. Promote and reinforce doing things that haven't been done before	4.68	0.52	Highly Acceptable
5. Learners have to rethink and think anew	4.67	0.55	Highly Acceptable
6. Learners assisted in meaningful work	4.67	0.55	Highly Acceptable
7. Learners used a variety of tools to solve new problems	4.62	0.56	Highly Acceptable
8. Learners added their own personal touches to their learning experiences	4.62	0.57	Highly Acceptable
9. Learners gave the time, resources, and opportunity to identify and pursue their dreams	4.65	0.54	Highly Acceptable
10. Learners model and assisted in developing and understanding their own metacognitive process	4.63	0.58	Highly Acceptable
Over-all adaptability of e-courseware	4.63	0.49	Highly Acceptable

Table 2.5 revealed that all indicator of e-Courseware toward its adaptability were highly acceptable. All respondents find the e-Courseware reinforcing and promoting in accomplishing things that haven't done before. Also, e-Courseware assists the learner in coming up with meaningful work and help them to rethink and think anew from the box. Moreover, e-Courseware gave the learner time, resources, and opportunity to identify and pursue their dreams which are important in developing own persona learning network.

Furthermore, through e-Courseware the learners can use the variety of tools to solve new problems by assisting them in developing and understanding metacognitive process. Finally, e-Courseware provides opportunities to speak and write using their own unique and genuine voices thus making the adaptability of e-Courseware highly acceptable to the respondents.

3.0 Differences on the Level of Acceptability when Grouped According to Profile

Table 3.1
Differences in Ratings when Grouped According to Age

Items Considered	Age Group	Mean (x)	Std. Dev. (s)	F - Value	Decision on Ho	Sig. p-value	Interpretation
Content	21 to 30 years old	4.857	0.354	2.667	Reject Ho	0.003	Significant
	31 to 40 years old	4.849	0.361				
	41 to 50 years old	4.500	0.655				
	51 to 60 years old	4.667	0.492				
	61 years old and above	4.750	0.452				
Pedagogy	21 to 30 years old	4.898	0.306	2.866	Reject Ho	0.004	Significant
	31 to 40 years old	4.792	0.409				
	41 to 50 years old	4.417	0.649				
	51 to 60 years old	4.917	0.289				
	61 years old and above	5.667	0.995				
Design and Layout	21 to 30 years old	4.878	0.331	2.548	Reject Ho	0.003	Significant
	31 to 40 years old	4.717	0.718				
	41 to 50 years old	4.639	0.506				
	51 to 60 years old	4.750	0.217				
	61 years old and above	4.750	0.217				
Usability	21 to 30 years old	4.720	0.488	2.473	Reject Ho	0.0014	Significant
	31 to 40 years old	4.660	0.475				
	41 to 50 years old	4.500	0.700				
	51 to 60 years old	4.600	0.665				
	61 years old and above	4.640	0.640				
Adaptability	21 to 30 years old	4.573	0.656	4.718	Reject Ho	0.090	Significant
	31 to 40 years old	4.640	0.525				
	41 to 50 years old	4.527	0.539				
	51 to 60 years old	4.013	0.843				
	61 years old and above	4.673	0.550				
Overall F-value				**3.054**	**Reject Ho**	**0.025**	**Significant**

It can be seen in table 3.1 that in terms of age, it obtained significant difference in the ratings of the respondents in all indicators. This was evident that the age of respondents on level of acceptability of the e-Courseware was observed as to different age group. User's acceptance towards this type of courseware has been assessed and understood thoroughly as presented in the above table. The result of significant p-value analysis shows a positive indication on the acceptance of e-Courseware among respondents with the adaptability features affect respondents' intention to use the courseware.

Table 3.2
Differences in Ratings when Grouped According to Gender

Items Considered	Gender	Mean (x)	Std. Dev. (s)	F - Value	Decision on Ho	Sig. p-value	Interpretation
Content	Male	4.650	0.572	2.473	Reject Ho	0.000	Significant
	Female	4.692	0.576				
Pedagogy	Male	4.650	0.627	3.947	Retain Ho	0.937	Not Significant
	Female	4.646	0.488				
Design and Layout	Male	4.700	0.470	2.473	Reject Ho	0.302	Not Significant
	Female	4.692	0.485				
Usability	Male	4.700	0.475	2.400	Reject Ho	0.004	Significant
	Female	4.723	0.665				
Adaptability	Male	4.550	0.640	2.127	Reject Ho	0.302	Not Significant
	Female	4.577	0.529				
Overall F-value				**2.684**	**Reject Ho**	0.309	**Not Significant**

Table 3.2 shows the respondents demographic profile towards their gender. It was revealed that the majority of the respondents in this study were female garnering one hundred thirty (130) or almost eighty-seven percent (87%) as presented in the previous table. Additionally, it was presented in the previous table and confirmed twenty (20) or approximately thirteen percent (13%) of respondents were male. Table 1 illustrated the real and unequal gender ratio of public-school teacher in the division of Manila, that there dominantly numbers of female teachers compared to male group.

With regard to gender, three of the indicators: the pedagogy, design, and layout, adaptability obtained no significant difference in ratings from the respondents. Both respondents identified the level of acceptability of e-Courseware. Whereas, the other two indicators: content and usability obtained no significant difference in ratings from the respondents. It was evident that both respondents were tested in the mentioned indicators. On the other hand, they are willing to learn and share knowledge to their learners, to school and community.

Table3.3
Differences in Ratings when Grouped According to Educational Attainment

Items Considered	Educational Attainment	Mean (x)	Std. Dev. (s)	F - Value	Decision on Ho	Sig. p-value	Interpretation
Content	Bachelor's degree holder	4.718	0.564	2.473	Reject Ho	0.004	Significant
	With MA units	4.744	0.584				
	Master's degree holder	4.709	0.538				
Pedagogy	Bachelor's degree holder	4.676	0.843	3.947	Reject Ho	0.005	Significant
	With MA units	4.617	0.550				
	Master's degree holder	4.687	0.534				
Design and layout	Bachelor's degree holder	4.746	0.566	2.473	Reject Ho	0.044	Significant
	With MA units	4.756	0.529				
	Master's degree holder	4.798	0.484				
Usability	Bachelor's degree holder	4.890	0.700	2.473	Reject Ho	0.003	Significant
	With MA units	4.715	0.665				
	Master's degree holder	4.773	0.640				
Adaptability	Bachelor's degree holder	4.748	0.541	2.473	Reject Ho	0.019	Significant
	With MA units	4.867	0.485				
	Master's degree holder	4.826	0.446				
Overall F-value				**2.7678**	**Reject Ho**	**0.015**	**Significant**

Table 3.3 revealed that the majority of the respondents were bachelor's degree holder whose total frequency is eighty-two (82) or almost fifty-five percent (55%). Furthermore, there was forty-one percent (41%) or sixty-two (62) respondents have pursued their master's degree on their chosen profession. Moreover the demographic profile table of respondent highest educational attainment shows 4% or 6 public school teachers have successfully earned their master's degree. Lastly, this table significantly shows that public school teachers have a passion to relearn, unlearn, and learn new things in the academic world.

In terms of educational attainment, it obtained a significant difference in the ratings of the respondents. Differences lie in the F-value and p-value, which demonstrate that the respondents highly accepted the e-Courseware. Overall, the result of the survey revealed that the respondents' educational attainment has a significant difference in the acceptability of the e-Courseware as to content, pedagogy, design, and layout, usability and adaptability.

4.0 Respondents' Perceptions on the Use of e-Courseware

In the open-ended survey made by the researcher, two answers floated as mainstream in the acceptability of e-Courseware. This includes learning arts through e-Courseware is engaging, fun, helpful, relevant & easy to use whether online or offline session and e-Courseware have an attractive and colorful interface. Almost all participants agreed and highly accepted that e-Courseware makes learning more interesting and promote collaboration on the part of the pupils. Thus, creating a learning environment for our students that are flexible, effective and personalize. Furthermore, teaching and learning is student centered, which help learners catch up to the lesson, gain more knowledge about topics and deepen their mastery on each learning competencies.

The good interface feature of e-Courseware was floated second mainstream. Above ninety percent (90%) of the participants also agreed and high accepted that e-Courseware is an effective tool and highly educational interactive multimedia platform.

The graphic and art interface feature can motivate learners to learn while playing, enhances the learner's creativity to arts and help them develop their own personal learning network. Several forms of learning through learning activities and summative assessment help the learner to enjoy and motivated to finish the learning task. Lastly, e-Courseware is a relevant, timely, cost-efficient and accessible solution in the academic world in this pandemic time.

5.0 Proposed Action Plan on the Utilization of e-Courseware in the Teaching of Arts

The Proposed Action Plan for the Utilization of e-Courseware in the Teaching of Arts should be adopted by the Department of Education and utilized this Learning Management System (LMS) toward teaching arts subject among grade 3 learners in the country during & after a pandemic time. This process flow and action plan will serve as a guide and direction for the grade 3 teachers for their effective implementation and delivery of arts education lessons attuned to the needs of the students to become worthwhile and productive individuals of this ever-changing society.

5. DISCUSSION

Ojindah, Lyte O. et. al (2017) revealed in their study that multimedia facilities influence teaching-learning of basic technology in the following ways: it enhance quality of work of both teachers and students; it makes teachers to be up-to-date in their teaching and learning of basic technology; it helps teachers to reach out to colleagues in other part of the country; it enhance efficiency of teachers and students interest; it helps teachers to efficiently evaluate the students and also enhances classroom management. This finding corroborates the study of Kwache (2007) who submitted that multimedia facilities makes teaching and learning process more efficient, productive and facilitate pedagogical activities.

There is no doubt that multimedia facilities influences instructional process and facilitate teaching and learning, especially basic technology in UBE schools. The paper therefore concludes that multimedia facilities enhance and enable students to learn in a more effective way. The paper therefore recommends the followings among others and it is believed that if employed accordingly will go a long way to improve the teaching and learning and learning of basic technology.

Hui-Yun Sung and Ssu-Han Chen (2019) revealed the statistical analysis has (non)differences in story comprehension between multimedia and print storybooks, with and without adult support. Also, the content analysis had several important themes affecting children's reading enjoyment. These are multimedia elements (particularly motion and sound effects), haptic perception and the pause function.

Derek Woodgate (2019) established his paper in addition of multimedia learning environments and tools to foresight-based learning that creates immersive spatial narratives. In this way, it increase creativity and learner ability to project him/her into a simulated future landscape. In all, 75% of the respondents stated that having to think about the future and place themselves in a practicing landscape increased their creative skills.

Genç, Z. and Aydemir, E. (2015) mentioned whether the use of online puzzles in the instructional process has an effect on student achievement and learning retention. They wanted to examine students ' perception and experiences on use of puzzle as an alternative evaluation tool. In achieving the objectives, the following hypotheses were tested: using puzzle activities in lessons increases student achievement, using puzzle activities in lessons increases retention of information learned by the students and students have positive attitudes toward using puzzle activities in lessons. And the research was used an online puzzle system (OPS) by which instructors can prepare puzzle activities for students to solve online. The technical and functional properties of the OPS developed and used are beyond the scope of this study.

6. CONCLUSION

From the findings, the following analyses are drawn:

The arts e-Courseware shows high acceptability content of learning activities to formative assessment because it covers all the competencies for grade 3 arts subject. e-Courseware includes a variety of instructional approaches and provides opportunities for students to actively present their knowledge and skills to peers and/or act as teachers and

mentors. Animations used in the e-Courseware give interest to the learners and drawing tools, command buttons and images were accurate to facilitate learning. e-Courseware assists students in developing their own learning model and gauges their own metacognitive processes in arts lessons. Graphical User Interface (GUI) provided in e-Courseware gained enough information to communicate with the user and makes activities more interesting and challenging. There is no significant difference in the assessment level of e-Courseware to respondents' aforementioned profile variables namely, age, gender, skills, and demographic profile.

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