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Effectiveness of Subject Courseware in Teaching Araling Panlipunan for Grade 8 Students in Tanay National High School

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Abstract: The study aimed to determine the level of effectiveness of subject courseware in teaching Araling Panlipunan to Grade 8 students at Tanay National High School, Tanay Sub-Office, Division of Rizal during the School Year 2024–2025. The respondents of the study were the 42 Ggade 8 students from the said school. They were described in terms of sex, sibling position, number of children in the family, monthly family income, parents' educational attainment, and parents' occupation. They were exposed to the subject courseware in the teaching of Araling Panlipunan. A pretest was administered at the beginning of the study, and a posttest was given at the end of the experiment. The experimental research method employing a single-group design was used, as the students' test scores were scientifically gathered to determine the level of effectiveness of the subject courseware in teaching Araling Panlipunan. The respondents were chosen using a purposive sampling technique. The study found out that : There is an equal number of male and female students. Most of them are second-born and only children in their families, belonging to the income bracket of ₱30,000 and above, with parents who are high school graduates or college undergraduates, and are either self-employed or government employees. The performance of the Grade 8 students in Araling Panlipunan was interpreted as Did Not Meet Expectations in their pretest results and Outstanding in their posttest results. There is a significant difference on the level of performance in Araling Panlipunan of the Grade 8 students before and after exposure to subject courseware as revealed by their pretest and posttest results. There is no significant difference on the level of performance in Araling Panlipunan of the grade 8 students after exposure to subject courseware as revealed by their posttest results in terms of their sex, sibling position, number of children in the family, monthly family income, parents' educational attainment, and parents' occupation. The study concluded that : Performance in Araling Panlipunan of the grade 8 students improved after exposure to subject courseware. Sex, sibling position, number of children in the family, monthly family income, parents' educational attainment, and parents' occupation are not contributory on the level of performance in Araling Panlipunan of the grade 8 students after their exposure to subject courseware. The study recommended that : School administrators may consider having continuous professional development programs provided to train teachers in effectively implementing and maximizing the use of subject courseware in classroom instruction. School administrators may consider having regular assessment and evaluation of student outcomes should be conducted to monitor the long-term effectiveness of courseware and identify areas for improvement. Teachers may consistently use courseware as a supplementary tool alongside traditional teaching methods to cater to diverse learning styles and ensure better understanding of concepts. Teachers may continue to use inclusive teaching strategies, such as courseware, to bridge learning gaps and promote equity among students. Students may take full advantage of the subject courseware by exploring its features, engaging with interactive content, and revisiting lessons to reinforce learning. Students may regularly assess their own progress by reviewing their scores and performance in activities, identifying areas for improvement, and making necessary study adjustments. The proposed action plan is recommended for implementation. Further studies on the effectiveness of subject courseware in teaching Araling Panlipunan using other variables may be conducted.

I.   THE PROBLEM AND ITS BACKGROUND

A.   Introduction

Education helps provide students better learning environment by equipping them with the latest technology. This effort has encouraged instructors to use various technologies such as computers and the Internet in their classrooms especially over the last decade; this process is called integration of information and communication technologies. Education, in the general sense is any act or experience that has a formative effect on the mind, character, or physical ability of an individual. In its technical sense, education is the process by which society deliberately transmits its accumulated knowledge, skills, and values from one generation to another. Education is not all about study; it really means to discover new things which expected to increase one's knowledge.

As stipulated in the 1987 Philippine Constitution, Article XIV, Section 2 that:

"The State shall establish, maintain, and support a complete, adequate, and integrated system of education relevant to the needs of the people and the society."

The cited provision emphasizes that there is a need for continuous improvement and reform within the Philippine educational system, particularly in ensuring that the curriculum, teaching methodologies, and access to educational resources remain relevant to the evolving demands of society. Department of Education aims to extend quality education to all through discovering different learning styles that will help to develop quality learners using computer technology. It aims to provide public schools with appropriate technologies that would enhance the teaching-learning process and meet the challenges of the 21ˢᵗ century. Learning materials are examples of technological advancement that revolutionized education.

The K to 12 curriculum aims in accelerating Filipino workers and empower them for lifelong learners. The learners are expected to develop learning competencies by focusing them with new technology tools. It focuses in the attainment of functional literacy and historical competency. Being in the competitive age of learning, traditional way of studying is not enough. By using new technology tools will enhance the learning of the students that can lead to raising pupil achievement.

At present, teaching needs sophistication and satisfaction as a teaching device, equipment, methods, strategies, and techniques to facilitate an effective teaching-learning process. Likewise, as mentioned in the DepEd Order No. 21, s. 2019, Section 38 that:

"The Department of Education envisions Information and Communications Technology (ICT) as a powerful tool and an important medium in delivering curriculum content. To identify possible areas for ICT integration in the teaching-learning process, the ICT Framework will be discussed in detail in a separate policy issuance. Included in the framework are the types of contexts and situations wherein ICT integration takes place. (i.e., classroom instruction, distance learning, education services for learners with disabilities and digital literacy"

The mentioned DepEd Order highlights that a teacher is in having a true impact on students' intellectual, emotional, physical, and social growth. A teacher can use educational technology to improve the teaching-learning process for their school students.

This reiterates the thrust of the government in the use of technology inside the classroom in the form of utilization of various electronic based instructional materials like subject courseware. Subject courseware has complete transformation in the traditional methods of learning. The system understands the pupil's requirement and provides innovative learning solutionsusing digital instruction material, through the use of projectors, internet, whiteboards, and computers making the learningprocess student-centric. The use of subject courseware changed the approach and methodology that teachers use. With the use of subject courseware, students think critically, since Araling Panlipunan is a history subject that contains general information about Philippine history, culture and values.

Moreover, the researcher noticed that students with prior exposure to technology adapt quickly, showing improved performance in assessments. However, in schools with limited resources, the effectiveness of courseware is lessened by insufficient access to devices or internet connectivity. The researcher noticed that there is a need to address these inequalities to ensure fair learning opportunities for all students. Despite these challenges, educators often appreciate how courseware enables differentiated instruction, allowing them to cater to students' diverse learning paces and styles.

Also, she recognized the importance of evaluating courseware regularly to ensure its relevance and effectiveness. Conducting pretests and posttests to measure the courseware's impact on students' knowledge retention and critical thinking skills. She believed that integrating different elements in the courseware may help sustain student interest, particularly in topics perceived as challenging, such as the Philippine revolution or governance systems. She also valued feedback from students, which often reveals insights about usability and engagement. The use of subject courseware in Araling Panlipunan is important to address the needs of 21st-century learners and improve the teaching-learning process in this subject. Araling Panlipunan encompasses complex topics like history, geography, economics, and governance, which can sometimes be challenging for students to grasp through traditional teaching methods. Courseware, which often integrates multimedia elements such as videos, simulations, and interactive maps, makes these topics more relatable and engaging.

The researcher believes that in using subject courseware it can cater to different learning styles and needs. In a classroom setting, students have different paces and preferences for learning—some thrive on visual aids, while others benefit from hands-on activities. Courseware allows for differentiated instruction, enabling teachers to provide customized content and activities that suit various learners. For instance, quizzes, games, and role-playing simulations embedded in the courseware can make lessons in Araling Panlipunan more interactive and appealing, encouraging participation even among less motivated students.

With the cited reasons, the researcher, being an Araling Panlipunan (AP) teacher was prompted to conduct a study to determine the effectiveness of subject courseware in teaching Araling Panlipunan.

B. Setting of the Study

The study was conducted in Tanay National High School, Tanay Sub-Office, Division of Rizal. The school Offers complete high school education from grade 7 to grade 12. Figure 1 shows the vicinity map of Tanay National High School .

The schools are guided by the Department of Education's vision of dreaming Filipinos who passionately love their country and whose values and competencies enable them to realize their full potential and contribute meaningfully to building the nation. As a learner-centered public institution, the Department of Education continuously improves itself to better serve its stakeholders. The mission of Department of Education is to protect and promote the right of every Filipino to quality, equitable, culture-based, and complete basic education where students learn in a child-friendly, gender-sensitive, safe, and motivating environment. Teachers facilitate learning and constantly nurture every learner. Administrators and staff, as stewards of the institution, ensure an enabling and supportive environment for effective learning to happen. Family, community, and other stakeholders are actively engaged and share responsibility for developing lifelong learners.

The school conducts different activities in connection with Araling Panlipunan. These activities include United Nations Celebration, Supreme Student Government, Quiz Bee, Poster Making Contest, Slogan Making Contest, role playing and other activities. These different contests were formulated to enhance the skills and abilities of students.
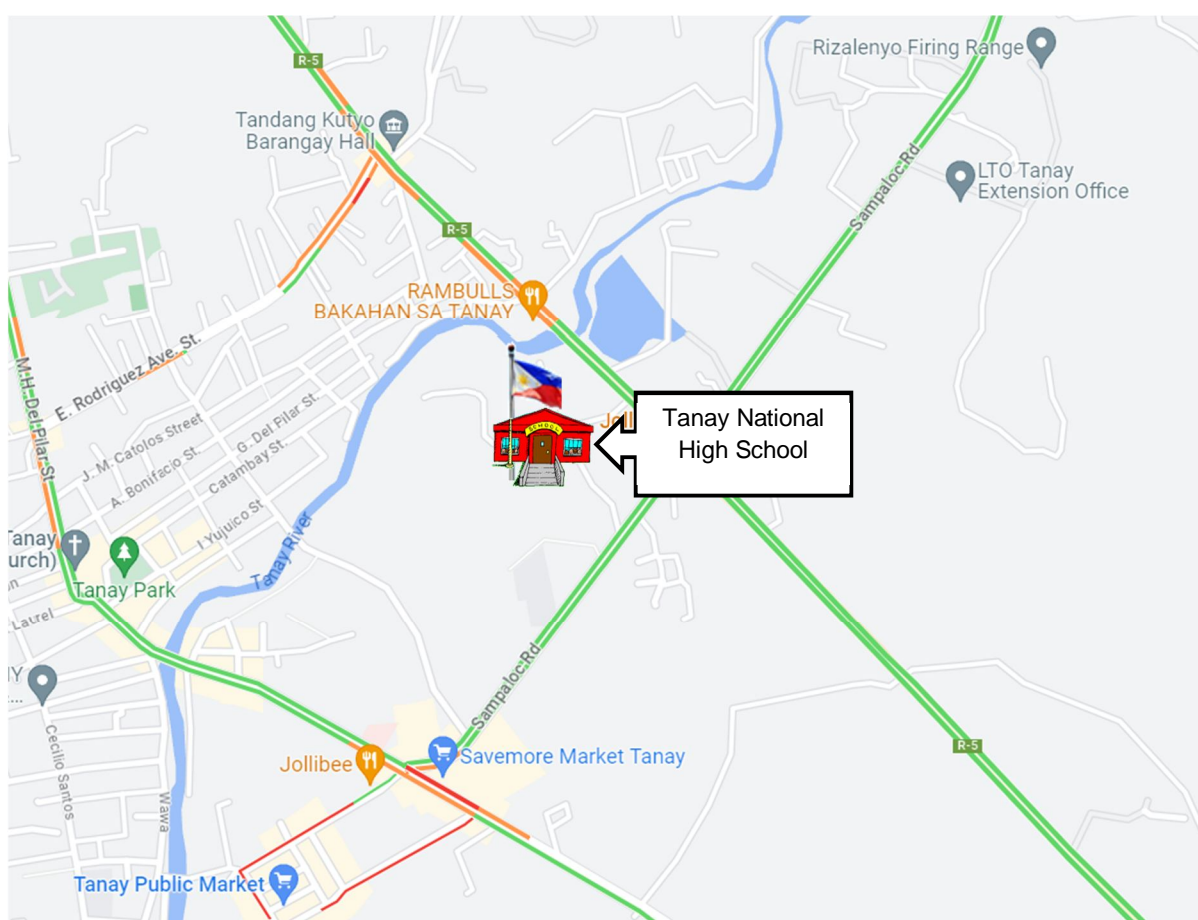

Figure 1 Vicinity Map of Tanay National High School

C. Theoretical Framework

The study is anchored on the Theory of Cognitive Development of Dewey as cited in the book of Lucas and Corpuz (2022) which includes the principle of learning by doing wherein the child is led to explore and discover his environment through experience, by utilizing intellectual skills of observation and inferring. For Dewey, learning by doing practices in classrooms around the world and has changed the way educator's present knowledge and students learn. Dewey proposed a new educational theory, which highlighted the role experience are the results of two fundamental principles: continuity and interactions.

Continuity refers to how experiences, both past and present, influence the future while interaction refers to how one's current situation influences their experiences. Dewey combined these two principles, stating that one's present experiences are a direct result of how their previous experiences interact with and influence their present situation. For education to be most effective. content must be presented in a way that allows the student to relate the information to prior experiences, thus deepening the connection with this new knowledge. These ideas made by Dewey one of the most famous advocates of hands-on-learning or experiential education. Dewey stated that human experiences- past, present, and future- influence the capacity to learn. He once said that: Education is a social process. Education is growth. Education is, not a preparation for life; education is life itself. There is an intimate and necessary relation between the processes of actual experience and education. Recognizing that not all experiences are educational, challenged educators to begin providing learners with experiences that resulted in growth and learning, believing that these experiences would someday result in growth and creativity in learners' future experiences. In other words, a good experience now would impact future decisions and experiences. In addition, the teacher plays a very significant role in developing cognitive speech; Moreover, utilization of subject courseware in teaching Araling Panlipunan will enhance the learning capabilities of the students.

The cited theory is related to the present study because this view would motivate the learners to learn with the use of subject courseware as an instructional tool of a teacher, the students learn by their own, the learner will be focused on the subject matter by using computer provided by the school. Students can explore, get the idea, using some uploaded clip art, pictures, videos. The use of subject courseware serves as an instructional tool that can help the study in determining the effectiveness of subject courseware on the performance of students in Araling Panlipunan.

D. Conceptual Framework

The study used the Coombs' Systems Approach which is composed of the input, process and output. Figure 2 shows the effectiveness of subject courseware on the performance of students in Araling Panlipunan. The first box represents the input of the study which consists of the grade 8 students, they were exposed to the subject courseware with their personal variables such as sex, sibling position,
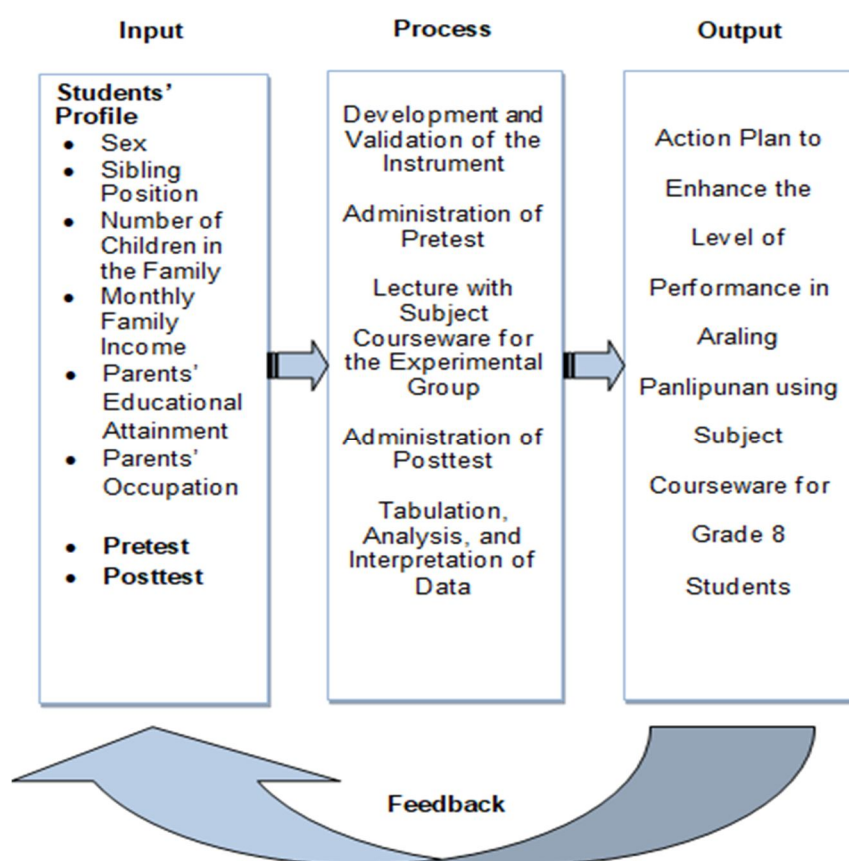

Figure 2 Conceptual Model Showing the Effectiveness of Subject Courseware in Teaching Araling Panlipunan for Grade 8 Students

Number of children in the family, monthly family income, parents' educational attainment, and parents' occupation. This also includes the pretest and posttest as instruments in gathering the needed data on the performance of performance of the grade 8 students. The second box represents the process which includes the development and validation of the instrument, administration of pretest, lecture of chosen subject matter with subject courseware, administration of posttest, and tabulation, analysis, and interpretation of data. The third box stands for the output which is an action plan to enhance the level of performance in Araling Panlipunan using subject courseware for grade 8 students. The line from the output going back to the input and the process is the feedback which implies that the study is also a continuous process until the expected output is attained.

E. Statement of the Problem

The study aimed to determine the effectiveness of subject courseware in teaching Araling Panlipunan for grade 8 students in Tanay National High School, Tanay Sub-Office, Division of Rizal during the School Year of 2024-2025.

Specially, it sought answers to the following questions:

1) What is the profile of the respondents in terms of:

    1.1 sex;

    1.2 sibling position;

    1.3 number of children in the family;

    1.4 monthly family income;

    1.5 parents' educational attainment; and

    1.6 parents' occupation?

2) What is the level of performance in Araling Panlipunan of the grade 8 students before and after exposure to subject courseware as revealed by their pretest and posttest results?

3) Is there a significant difference on the level of performance in Araling Panlipunan of the grade 8 students before and after exposure to subject courseware as revealed by their pretest and posttest results?

4) Is there a significant difference on the level of performance in Araling Panlipunan of the grade 8 students after exposure to subject courseware as revealed by their posttest results in terms of their profile?

5) What action plan may be proposed to enhance the level of performance in Araling Panlipunan using subject courseware for grade 8 students?

F. Hypotheses of the Study

This study tested the following hypotheses:

1) There is no significant difference on the level of performance in Araling Panlipunan of the grade 8 students before and after exposure to subject courseware as revealed by their pretest and posttest results.

2) There is no significant difference on the level of performance in Araling Panlipunan of the grade 8 students after exposure to subject courseware as revealed by their posttest results in terms of their sex, sibling position, number of children in the family, monthly family income, parents' educational attainment, and parents' occupation.

G. Significance of the Study

The importance of conducting the study can be explained by citing the different stakeholders who will benefit from it. The study will be beneficial to the following:

1) Curriculum Planners. This study can be research-based in the implementation of K to 12 curriculums on integrating the use of subject courseware in different learning areas.

2) School Administrators. The school administrators will benefit from this study having to consider the teachers will be more effective if they will be using subject courseware in teaching.

3) Araling Palipunan Coordinators. This will guide as mentors' partners to support new teachers in improving their teaching skills in Araling Panlipunan. Also, the study can provide coordinators and teachers with evidence-based insights into how subject courseware improves teaching effectiveness.

4) Teachers of Araling Palipunan. This will enable them to vary their teaching strategies according to the needs of the students. The study can highlight areas where they may need further training or support in integrating courseware effectively.

5) Students. The result of the study would allow them to use effectiveness of subject courseware and perform more active in Araling Panlipunan. This could also enable the students to realize the importance of subject courseware.

6) Parents. They will be aware of their duties and responsibilities in the education of their children. They may feel awake to the reality that teacher alone cannot do the different tasks of educating the youth without the support and cooperation of parents.

7) Future Researchers. This can be a stepping stone for other researchers to explore more about utilization of subject courseware and how it can be used in the teaching- learning process.

H. Scope and Limitation of the Study

The study aimed to determine the level of effectiveness of subject courseware in teaching Araling Panlipunan to Grade 8 students at Tanay National High School, Tanay Sub-Office, Division of Rizal during the School Year 2024–2025. The respondents of the study were 42 Grade 8 students from the said school. They were described in terms of sex, sibling position, number of children in the family, monthly family income, parents' educational attainment, and parents' occupation. They were exposed to the subject courseware in the teaching of Araling Panlipunan. A pretest was administered at the beginning of the study, and a posttest was given at the end of the experiment. The experimental research method employing a single-group design was used, as the students' test scores were scientifically gathered to determine the level of effectiveness of the subject courseware in teaching Araling Panlipunan. The respondents were chosen using a purposive sampling technique.

I. Definition of Terms

For better understanding of the study, the following terms will be defined operationally:

1) Araling Panlipunan. This refers to the subject in K to 12 curriculum with emphasis in history, geography and civics.

2) Effectiveness. This refers to the quality of having an impact in the utilization of subject courseware.

3) Exposed. This refers to the group of students who utilized subject courseware in Araling Panlipunan.

4) Monthly Family Income. This refers to the combined income of the members of the family of the grade 8 students.

5) Number of Children in the Family. This refers to the number of siblings of the grade 8 students.

6) Parents' Educational Attainment. This refers to the highest educational degree attained by the parents of the grade 8 students.

7) Parents' Occupation. It refers to the work engagement of the parents of the grade 8 students.

8) Pretest. It refers to the test administered before the utilization of subject courseware to determine the level of performance of the grade 8 students in Araling Panlipunan.

9) Posttest. It refers to the last test given by the researcher to the respondents of the study after the utilization of subject courseware to determine the students' learning.

10) Sibling Position. This refers to the order of birth of the grade 8 students who are involved in the study.

11) Subject Courseware. These refer to the module developed by the researcher to enhance the performance of the grade 8 students in Araling Panlipunan.

12) Unexposed. This refers to the group of students who did not utilize subject courseware in Araling Panlipunan.

II. REVIEW OF RELATED LITERATURE AND STUDIES

The study contains the review of related literature and studies, both foreign and local which are considered significant and relevant to the present study.

A. Foreign Literature

Schroeder et al. (2022) mentioned that while research in the learning sciences has spurred advancements in educational technology, the implementation of those learning resources in natural learning contexts advances teaching and learning. In this paper, two faculty members at the University of Central Florida used courseware generated with artificial intelligence as the primary learning resource for their students. The selection and enhancement of this courseware is contextualized for each course.

Instructor implementation practices over multiple semesters are described and related to resulting student engagement and exam scores. Finally, benefits of the adaptive courseware are discussed not only for student outcomes, but the qualitative changes faculty identified and the impact that iterative changes in teaching practice had on instructors as well as students.

Moreover, students were encouraged to utilize the courseware to further enhance their interest, knowledge and skills about the specific lesson which they believe beneficial on their cognitive development. Having that scenario will further improve the flow of learning on the part of the students.

Atwood et al. (2022) mentioned that digital distance course materials can be used across different forms of education delivery. In particular, courseware designed for asynchronous digital distance education can serve as the basis for blended learning, which features a different teaching role and fuller interpersonal experience. Blended learning can be used to extend programme opportunities across population regions where a full, lecture-based model might not be viable. This case study explores the experiences of three regional polytechnics in New Zealand that adopted and modified courseware created for digital distance learners studying asynchronously.

The courseware was used to provide local students with more flexible study options, drawing on high quality courseware that had been centrally created by a team of experienced courseware designers and Subject Matter Experts (SMEs). Using asynchronous digital distance courseware as the basis for blended learning provides opportunity to extend education provision where it might not otherwise be viable. While implementation activities need to be carefully considered, the professionalism of managerial, support and teaching staff were able to establish a viable and learner-centred education solution.

According to Falode and Mohammed (2023), most educators' inability to provide learning contents that suit different learning styles has caused a lot of problems in terms of performance. Thus, to cater to students' preferences in terms of access to learning contents, the distance learning regulatory body in Nigeria emphasized that course materials should be developed in mixed-media formats. This study was carried out to compare the effects of printed, video, and Moodle-based courseware on educational technology students' achievement, retention, and satisfaction in a distance learning course. A quasi-experimental design was employed for the study involving 108 participants from three experimental groups. The learning content and instruments, subjected to validation and reliability tests, where values of 0.78 and 0.86 were obtained using the Pearson product moment correlation and Cronbach's alpha for achievement and satisfaction inventory, respectively, were administered within a four-week period. Data collected were analyzed using descriptive and inferential statistics.

Findings indicated that the printed, video, and Moodle-based courseware formats improved students' achievement with mean gain scores of 47.92, 40.89, and 43.03, respectively. A significant difference was observed in the achievement ($F_{(2,104)} = 8.67$, $p < 0.05$), retention ($F_{(2,104)} = 29.406$, $p < 0.05$), and satisfaction scores ($F_{(2,104)} = 5.662$, $p < 0.05$) of the three groups. Open and distance learning administrators in Nigeria are recommended to produce and deploy printed, video, and Moodle-based formats of courseware to meet different students' learning preferences.

Lou et al. (2021) emphasized that humans are able to practice writing messages and picture information via different tracks through visual sense. Each way has a limited information processing capacity. Regarding active processing humans can transform or rebuild related information, set information into steady mental modules, and then make the learned information meaningful or bring a bit change with the already existing information.

Also, these processes will respond or send new knowledge into long term memory. Multimedia teaching concentrates on helping learners to be organized and to conduct meaningful coding as well as to make best use of information, pictures, animation, and audio effects make students more attentive and thus received information processed and stored in long term memory as well as link with old knowledge. The purpose of multimedia is to deliver multiple communication channels to address the differences between learners and to present teaching content through best modalities, including text, narration, presentation, graphics, illustrations, photographs, charts, animations, videos, essential reality, and interactive programs. Each multimedia teaching material has its own goals. If multimedia is used well, students' learning efficiency may be enriched.

Brecht, et al. (2020), technology supported collaborative learning, assists individuals to work as a team for a common purpose or mission by using computer, internet and such technologies. Technology has revolutionized the field of education. The importance of technology in schools cannot be ignored. In fact, with the onset of computers in education, it has become easier for teachers to impart knowledge and for students to acquire it. The use of technology has made the process of teaching and learning all the more enjoyable. To really utilize these tools, teachers should ask themselves why students want technology in the classroom, not just why they need it. It can definitely help education professionals in the monitoring of individual development and innovative lesson planning. But the students who learn through technology can create a set of skills that will help them throughout their own future careers. By incorporating modern technology like interactive learning materials, for instance, teachers can develop more creative and innovative lesson plans to hold the attention of their classes. Not to mention, as new methods of teaching develop, so does the need for specialized professionals both within and outside of the education field.

Meanwhile, as mentioned by Hicks (2020), stated that digital tools will surely help students prepare for their future careers. It enables them to improve their instruction methods and personalize learning, thus increasing their productivity and efficiency as instructors. Through these helpful tools, teachers can provide exciting activities. These include watching videos to further delve into the topic and creating robots to apply their learning. It's also great content that helps spark and boost curiosity in kids.

Technology is transforming education, changing how, when and where students learn, and empowering them at every stage of their journey. Using interactive learning materials in enhancing the learning performance, students are inspired to become problem-solvers, critical thinkers, collaborators, and creators. Where technology has been successfully integrated into classrooms, students develop a lifelong love of learning.

According to Kishore (2020) stated that using technology is an effective yet easy way of acquiring knowledge. Technology in the classroom enables students to learn faster, mostly because of the engaging nature of multimedia devices. Technology can help students by making learning more engaging and collaborative. With the incorporation of technology into schools, the main purpose is to change how teachers and students gather, access, analyses, present and transmit information. This can democratize information in classrooms as well as help differentiate instruction, particularly for students with special needs.

Technology affects the way individuals communicate, learn, and think. It helps society and determines how people interact with each other on a daily basis. Technology plays an important role in society today. It has positive and negative effects on the world, and it impacts daily lives, especially young learners. When teachers effectively integrate technology into subject areas, teachers grow into roles of adviser, content expert, and coach. Technology helps make teaching and learning more meaningful and fun.

Serth et al. (2022) mentioned that many participants in Massive Open Online Courses are full-time employees seeking greater flexibility in their time commitment and the available learning paths. They recently addressed these requirements by splitting up our 6-week courses into three 2-week modules followed by a separate exam. Modularizing courses offers many advantages: Shorter modules are more sustainable and can be combined, reused, and incorporated into learning paths more easily. Time flexibility for learners is also improved as exams can now be offered multiple times per year, while the learning content is available independently. In this article, we answer the question of which impact this modularization has on key learning metrics, such as course completion rates, learning success, and no-show rates.

Furthermore, they investigate the influence of longer breaks between modules on these metrics. According to the analysis, course modules facilitate more selective learning behaviors that encourage learners to focus on topics they are the most interested in. At the same time, participation in overarching exams across all modules seems to be less appealing compared to an integrated exam of a 6-week course. While breaks between the modules increase the distinctive appearance of individual modules, a break before the final exam further reduces initial interest in the exams. They further reveal that participation in self-paced courses as a preparation for the final exam is unlikely to attract new learners to the course offerings, even though learners' performance is comparable to instructor-paced courses. The results of the long-term study on course modularization provide a solid foundation for future research and enable educators to make informed decisions about the design of their courses.

B. Local Literature

As cited by Cabaluna (2022) the effectiveness of multimedia courseware optimizes teaching care management will provide knowledge in the global world. The progress of students' rights and civilization is acceptable and is universal and effective in influencing the standard quality of learning among the care management students. The study identifies the effectiveness of interactive multimedia courseware in teaching care management and aims to know its importance, effectiveness and enhancement of students' learning process. The study employed the qualitative and quantitative descriptive approach which is a mixed-method to identify the effectiveness of interactive multimedia courseware in care management practices, using the Focus Group Discussion (FGD) among the Clinical Instructors who have the capacity and ability to analyze the effectiveness of interactive multimedia courseware for the improvement program of the care management students.

Purposive sampling is utilized in the study which closely resembled and synthesized the objectives of the study. The study comprised (90) respondents only. Results show that interactive multimedia courseware enhances the difference from teaching traditional to high-tech of teaching which is interesting for the students inside the classroom and it shows that multimedia courseware enhances students in their learning process through exposure to technology, innovation and promotion, concept and control, and its effectiveness in the improved and delivery of course outline and output. Findings show that is a significant correlation on the interactive multimedia courseware in teaching care management as observed by the respondents.

Gaddi et al. (2024) explores the transformative role of courseware development in contemporary education, examining its integration of informative content and formative practice questions. Emphasizing the significance of interactive multimedia and game-based approaches, the study delves into trends catering to diverse learning styles and showcasing the adaptability of courseware across disciplines, including power electronics, special education, preschool education, mathematics, and physical education.

Utilizing a qualitative descriptive method with literature study techniques, the research critically examines the current state of courseware development, addressing key questions on pedagogical foundations, adaptive learning technologies, and challenges faced by educators. This provides insights into the challenges, opportunities, and implications of courseware development, serving as a valuable resource for educators, policymakers, and researchers navigating the dynamic landscape of education in the digital age. In the article of Fernandez (2021), he stated that the most innovative ways to support students learning is by integration of technology, innovative teaching requires the students to use technology and by themselves, realize the significance of the lesson. Education had changed and brought technology to new generation of students. The teacher's role now is to guide the students on the proper use of technology. In developed countries, technological advancement is not a problem. In the Philippines, though we are not that behind in terms of technological advancements, the scarcity problem in computers hinder in learning the technology, Furthermore, Fernandez added that the greatest advantages are the design apps that teacher and students use to gain knowledge in the lesson and at the same time improving skills in technology. With the use of technology, students can improve their learning and the work of the teacher become easier.

Moreover, he added that technology must always be a part of the education system to ensure that the students are ready for the 21st century. Hence, the Government of the Philippines, together with private institutions, provided computers for public schools through DeEd Computerization Program (DCP). Other private companies such as Globe, Coalition for Better Education, Ayala Foundation, People Ignite and Microsoft Philippines provided ICT trainings for teachers to learn how to integrate technology in education and internet connectivity for public schools.

Meanwhile, Corpuz et al. (2022) cited that instructional materials are various classes. They are audio or aural, visual or interactive learning materials. Thus, audio instructional materials refer to those devices that make use of the sense of hearing only, like the television, radio, audio tape recording, etc. Visual instructional materials are those devices that appeals to the sense of sight only such as the chalkboard, chart, slide, filmstrip etc. Interactive learning materials therefore is a combination of devices which appeal to the sense of both hearing and seeing such as television, motion picture and the computer. Among the instructional materials the classroom teacher uses, the visuals out-number the combination of the audio and the audio visual.

In the classification of the visuals, two distinct groups emerge and they are the iconic and the digital. The iconic visuals look like the objects they stand for as in drawing, painting, sculpturing, etc. for example, when we draw a computer, the image gives the impression of what a computer look like. On the other hand, a visual is digital when the representation does not resemble what the object stands for. The inexperience is at a loss when digital rather than iconic visual is used. Apart from classifying instructional materials based on sensory models, there are four other ways of classification, and they are printed and non-printed, Hardware/Equipment, and software/materials, first, second and third generations and high technology/high cost and low technology/low cost instructional materials.

Perez and Tolentino (2021) cited that it is evident how the pandemic has confronted the country with massive disruption in the education system, thus restraining students in all levels to acquire the knowledge and skills that physical school's endeavor to deliver- opening opportunities for the development of digital tools. Students are compelled to acquire education through home-based learning where course contents are packaged into digital forms called courseware which are accessed by students through the LMS to gain knowledge and skills required of their discipline of choice.

This study aimed to examine the insights of students who use courseware as their primary medium of acquiring education obtained using a descriptive survey method in the form of questionnaires. Undergraduate students of Pangasinan State University were the respondents. The computed sample size from the population was analyzed by getting the weighted mean of the survey results. The results showed that the courseware utilized by the students of Pangasinan State University through MS Teams has high impact that promotes self-directed learning - guiding students to learn independently at their own pace without assistance from others, fostering favorable learning environment/ platform also gained high impact hence moderate impact in terms of the learning growth of students with a grand mean of 3.44 which was described as "high" and interpreted as "impactful. Thus, it is recommended that the Instructors or Professors need to maximize the use of courseware to improve learning process consistently in order to achieve higher level of learning growth.

Vilbar (2021) cited that UNESCO's 2014 report on education for sustainable development (ESD), Shaping the Future We Want, shows that there have been worldwide advances in integrating ESD into school curriculums. Although there is a global curriculum in ESD, children as the end users of the curriculum are not actively involved in constructing sustainable discourses. Cognisant of children's role in materials development, this research investigates how teachers can collaborate with children in producing teacher-made courseware using participatory action research (PAR). The study was conducted with 37 teachers enrolled in a graduate course on second-language teaching.

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Its goal was to produce courseware that promotes ESD and science concepts, such as global warming and the environment. Using PAR, the children collaborated with the teachers in designing the content. Interviews, focus-group discussions and surveys show that the courseware promoted excitement, science and ESD concepts, but suggested revising and trimming some videos and reading texts.

CBI promotes an interdisciplinary approach in developing IMMC because it develops a dual com-mitment to the learning of English language and the learning of science- and ESD-based concepts. The IMMC content does not only focus on the superficial structures of language but also empowers the users to critically reflect on sustainability issues and per-form sustainable actions. The integration of sustain-ability in the IMMC before, during and after the lessons promotes explicit instruction on the obliga-tory science content. The contents become the springboard and motivation for review lessons for language instruction. They become the topic in dis-cussing English-language competencies and grammar and the theme for written assessments or quizzes. The IMMC aims to develop communicators with scientific knowledge of sustainability and a willingness to take greater responsibility for creating a sustainable world.

In addition, San Mateo (2021) mentioned that Covid-19 Pandemic had brought drastic changes within the Philippine education system, schools shifted from the normal face-to-face to blended distance learning. one among the main concerns to those new normal modalities is enhancing the performance of the scholars within the least learned competencies. This study assessed the effectiveness of the Department of Science and Technology (DOST) courseware modules on the smallest amount learned competencies in Arithmetic and Geometric sequences as remediation materials to reinforce students' performance in Grade 10 Mathematics within the "New Normal" educational setting. An evaluation of the motivational effects of the DOST courseware modules on Arithmetic and Geometric sequences was conducted among the Grade 10 students of Los Baños NHS-BM. Instructional Materials Motivation Survey (IMMS), open-ended questions, and one sample pretest-posttest design were utilized in this study.

The results were analyzed and explained using descriptive statistics, measures of central tendency, and t-test on paired samples. This study showed that students had a positive perception of the motivational effects of the DOST Courseware modules in Arithmetic and Geometric sequences and proved that DOST courseware modules were effective "New Normal" remediation tools. Future research could also be undertaken to further analyze the utilization of the DOST Courseware modules in evaluation and correlation between perception and purpose of instruction, usability, and sustainability.

C. Foreign Studies

In the study of Singaravelu et al. (2020) highlights the effectiveness of Multimedia courseware to enhance English grammar among the learners of upper primary level. Grammar has unique place in development of English language or any other languages. Teachers are facing problems in teaching grammar at upper primary level in rural area .Due to the parents of the learners are uneducated, learners of the rural area have opportunity to get the experience of the language learning only in the class room. As indicated by Wendy (2012), educating and learning methods in syntax should expand to guarantee they emphatically affect educators and understudies. There is no significant differences in achievement mean score between post-test of the control group and post-test of the First- Experimental group, pre-test of the First-Experimental group and post-test of the First Experimental group, pre-test of the Second-Experimental group and post-test of the Second-Experimental group and post-test of First-Experimental group and post-test of Second-Experimental group.

An Experimental study method was adopted in the study. One control group and Two Experimental groups design were adopted in the study. The researcher's self-made achievement test was employed as a tool for the study. Findings of the study is Multimedia courseware is more effective than conventional methods in learning grammar in English in rural areas. Educational implications are it may be helpful to eradicate the troubles in learning grammar at other levels.

The reviewed study is in relation to the present study since both studies share a common emphasis on utilizing technology to improve student engagement, comprehension, and retention of subject material. They also highlight how multimedia-based learning strategies cater to diverse learning styles, making complex topics more accessible and engaging across different disciplines.

Septiani et al. (2020) found the development of information technology rapidly has an impact on the changing paradigm of education. On the other hand, education holds an important responsibility to create students who have a good and strong character. This research aims to: 1) describe the concept and framework of interactive multimedia courseware; 2) test the feasibility of interactive multimedia courseware by experts and practitioners; 3) test student responses to the use of interactive multimedia courseware. This research and development involved experts, teachers, and students. The data were collected using expert validation sheets, teacher questionnaires, and student questionnaires. They were then analyzed using the descriptive statistics analysis based on mean and percentage.

This research yielded interactive multimedia courseware called IMONEC (Interactive Multimedia courseware integrated with Bandura's Observational learning model and National historical Event to strengthen students' Character) that integrates three important components: the principles of interactive multimedia learning; Bandura's observational learning model; and the noble values and messages of national historical events to strengthen students' characters. The framework of the interactive multimedia courseware consists of the title, user instruction, home, core competency and basic competency, concept map of material, learning material, and quizzes. The results of the expert validation, teacher questionnaire, and student questionnaire showed that the interactive multimedia courseware is feasible for use in learning and effective in strengthening students' characters.

The cited study is in relation to the present study since both studies demonstrate how interactive courseware can engage learners, cater to diverse learning needs, and address broader educational goals, such as character development and subject mastery.

Zhang et al. (2024) that in order to effectively improve the effectiveness of the operation and management of the traditional college education online management system, this paper proposes to optimize the college education online management system based on cloud computing technology. Improve the system hardware configuration based on B/s network management structure and at45db80 chip.

In order to ensure the operation of hardware configuration, optimize the information classification management algorithm of college education online management system combined with cloud computing, improve the information classification algorithm and information management process according to the algorithm, and realize the design of College education online management system. Finally, experiments show that the online management system of college education based on cloud computing technology has higher effectiveness than the traditional management system, and the detection results can reach more than 90%, which fully meets the research requirements.

Both studies highlight the importance of integrating technology to streamline educational processes, enhance teacher productivity, and improve student engagement.

This study of Baser and Valdois (2020) attempted to explore various aspects of the use of visual aids by Teacher Training Colleges (TTCs) teachers in two provinces of Afghanistan. The research focus was to find out if the teachers use visual aids, to what extent do they use visual aids in teaching and finally what are the teachers' perception of the visual aids use. The findings of the study reveal that all teachers use and know the importance of visual aids in teaching. They regard the visual aids as means to promote students learning. The findings also show that more teachers lean towards the use of locally available visual aids which anecdotally indicates teachers' creativity in efficiently utilizing the available resources. This also implies that the TTCs do not have sufficient financial resources to purchase more advanced and commercially prepared visual aids. A shortage of materials and less facility is the main barrier to the use of visual aids in TTCs classrooms. Because the intention of 100 percent of teachers stated in questionnaires that visual aids are good and helpful for teaching and learning process. But when it comes to the use of visual aids it decreases and it shows that the TTCs cannot afford to provide them. Therefore, it can be concluded that other factors which are mentioned above cause less use of this type of materials. When it comes to male and female teachers views about the use of visual aids, both acknowledge the importance and use the visual aids about the same level. The difference in opinions is not to a considerable extent. Furthermore, both male and female teachers use the visual aids to the same extent. An interesting finding has been that teachers' experience does not contribute to the use of visual aids.

The study revealed that teachers with many years of experience use visual aids less than the ones with few years of experience. It can be anecdotal evidence of the impact of teacher training on newly recruited teachers. The teacher training packages target newly recruited teachers more compared to experienced teachers and mainly promotes the modern teaching methods. The same is the case for Kabul TTC teachers compared to Wardak TTC teachers i.e. Kabul TTC teachers use visual aids to a greater extent than Wardak TTC teachers. This could also imply that Kabul teachers compared to Wardak teachers have undergone more training and have access to materials. The findings of the study correspond to the literature review except the fact that less experienced teachers use visual aids to a greater extent compared to more experienced teachers.

The main and new finding of this study is to show that, independent from phonological processing, the visual attention span contributes to reading performance all through primary school. Because of its involvement in the identification and parsing of relevant sub-lexical orthographic units, the visual attention span might play a critical role in the acquisition of spelling-to-sound mappings. Furthermore, a visual attention spans large enough to process all the letters of a word simultaneously is further required for the orthographic sequence of the input word to be memorised and consolidated. Accordingly, visual attention span abilities are likely to contribute to the enrichment of specific orthographic knowledge all through primary learners.

The reviewed study is related to the present study since it tried to find out the level of effectiveness of subject courseware in teaching Araling Panlipunan for grade 8 students utilizing experimental method. Moreover, the reviewed study used elementary pupils while the present study used grade 8 students.

The main purpose of this research of Mamun (2020) was to find out how the use of audio-visual aids facilitates language teaching and learning. After the data analyses it has been found that both the teachers and the students show favorable attitude toward the use of audio-visual aids, agreeing that they facilitate language teaching and learning in diverse ways. Both parties benefit by the use of audio-visual materials. By using audio visual aids in the classroom, teachers can teach languages making the class interesting. Different visuals bring variation in the classroom teaching which are helpful to draw the attention of the students toward the lessons. According to the concern of the teachers and the students, the use of audio-visual aids provides the learners opportunity to have background knowledge of any topic which is necessary for the learners. Also, use of audio-visual aids gives the learners extended language exposure to the learners giving them better idea of the target language culture.

All the findings from the data collection support that audio-visual aids facilitate language learning. Both the teachers and learners benefit from different audio-visuals materials in language classrooms. Audio-visuals make language teaching and learning effective, making the class interactive and interesting, motivating the learners, facilitating language skills and so many. If teachers can utilize the audio-visual aids prudently, language teaching and learning become effective.

The reviewed study is related to the present study since both studies focused on the use of visual aids in teaching. The previous study focused on facilitating the teaching of English language while the present is on the level of effectiveness of subject courseware in teaching Araling Panlipunan for grade 8 students.

Usman and Yusuf (2020) found that media are considered very important to meet the objectives to be achieved during the teaching and learning process. Media is used so that the students can enthusiastically participate in the learning process. However, due to the situation during this pandemic, all teaching and learning activities were carried out online. This research aims to determine students' interest in participating in the online way when given learning videos. This study used a pre-experimental quantitative method with one group pre-test post-test design.

The results of this study have shown that there was an increase in the learning process when using learning videos. After giving the treatment, students eagerly want to know and were highly motivated in taking part in the learning process. Besides they were not bored when doing assignments given by the teacher. The increase in student learning that occurs is included in the moderate category, namely 0.42 based on the results of the normalized gain test (N-Gain). Based on the data analysis using a Gain test, the result is 0.41. The second class experienced an increase in participating in learning activities when given a learning video in the medium category. It is also said to be in the medium category because $0.7 > g \geq 0.3$. the, from the result of the questionnaire regarding the use of interesting and educational learning videos, the parents and students agreed to use instructional videos. It is because by using learning videos of sufficient time, students easily understand the material taught by the teacher. The conclusion obtained is that the application of using interesting instructional videos can increase children's interest in taking lessons during online learning.

The reviewed study is related to the present study since both focused on the use of instructional material to improve the level of academic performance of students. Difference is noted since the reviewed study used descriptive research design while the present study used experimental research design.

In addition, Yu and Guo (2020) found that the main requirements of the design and development of interactive courseware for distance learning system are discussed in the paper. Firstly the system structure of SCORM standard and its constitution are introduced, and then the advantages of constructing SCORM courseware are proposed.

This paper focuses on the development of learning management system based on SCORM standard, and discusses the architecture of learning management system, the elements of SCORM and the key technologies of the development of this system. The developed interactive courseware is portable, reusable, renewable and easy to operate, and it can be used to develop distributed training system for distance learning system.

In the system of higher occupation education, the distance education is the mainstream direction of its development, and the development of shared, reusable educational resources and contains interactive courseware description of teaching sequence is an important direction for the development of distance education. In the production of ideas and methods of studying the content organized, the interactive courseware based on SCORM is more flexible, and enhances the portability of the courseware, which is different from the traditional courseware to obtain advantages and versatility, and it is more suitable for the characteristics of network learning and to seek and carry out tailored standardization learning tools.

The reviewed study is in relation to the present study as both emphasize the creation and use of effective digital learning tools in education. SCORM (Sharable Content Object Reference Model) ensures that courseware is interoperable, reusable, and compatible with various learning management systems, which aligns with the need for efficient, standardized teaching tools.

D. Local Studies

The study of Mañanita (2021) aimed to assess the adequacy and utilization of instructional materials in teaching Technical-Vocational and Livelihood Subject in Obando Senior High School during the School Year 2020-2021. The respondents of the study were the one (1) teacher and eleven (11) learners in cookery and bread and pastry making of Obando School of Fisheries, and one (1) teacher and nineteen (19) learners in bread and pastry, and sixty one (61) learners in cookery of Obando Stand Alone Senior High School.

The study revealed that the adequacy and utilization of instructional tools and equipment in Cookery 1 and 2 are in the moderate level. In terms of adequacy of the tools and equipment is in the moderate level, while there is no evidence that the equipment were utilize in Cookery 1 and 2. It is concluded that there is a significant relationship between the adequacy of equipment and materials used and the students' academic performance in Cookery, while no significant relationship exist between the adequacy of equipment and materials and the students' academic performance in Bread and Pastry Production.

The reviewed study and the present study are similar since both studies determined the effectiveness of instructional materials in teaching. Moreover, both studies applied experimental method of research. Likewise, both used researcher- made test in the conduct of the experiment.

Rodriguez (2020) aimed to analyze the teacher's point of view toward using audio-visual aids like projectors, animation videos, films, and videos to enhance students' literary skills. The research was conducted using a qualitative approach; a close-ended questionnaire was developed for this purpose. The population targeted for this study was the teachers and the students from the public elementary schools in Valenzuela City.

The primary data were used to analyze the quality of the research. The SPSS software was used to validate the data, and it was presented in the form of a line graph, pie chart, and bar chart so that the reader could visualize the predicted score the research has contributed to the study's success. Thus, the data gathered from the research shows that the teachers and the students are positively motivated to use audio-visual aids for teaching and learning processes as it makes things more interactive and engaging.

The reviewed study and the present study are similar since both studies determined the effectiveness of teaching materials in improving the performance of students. Moreover, both studies applied experimental method of research. Likewise, both studies focused on the improvement of the teaching-learning process.

Lapada (2020) aimed to determine the effects of audio-visual aided instruction on Grade 8 students and correlate their profile and attitudes to their academic performance in Science. The data were drawn using a self-structured achievement test for students' academic performance in Science and a survey questionnaire which included profile, attitude towards technology, media, study habits and motivational practices of the family. The gathered data were correlated to the Science academic performance of the respondent. It was found out that the students taught by audio-visual aided instruction performed better compared to the students taught by the conventional method. The profile and over-all attitudes of the students taught by audio-visual aided instruction did not affect their academic performance. The profile and attitudes towards technology, media and study habits of the students taught by conventional method did not affect their performance as well; however, the students' attitude towards motivational practices of their family had negative causal relationship to their academic performance.

Based on the findings of the study, the researcher recommends that the parents should support and encourage their children to study well. The advancement of technology is inevitable; hence, parents should have active roles in explaining and choosing things found in the mass media since it can positively or adversely affect their children's academic performance; Audio-visual aided instruction could be used to increase the retention of knowledge and skills of the students in Science; This study can be replicated using audio-visual aided instruction in various subjects. Future researchers who will conduct the same study may include the profile and attitudes of the respondents since the results of this study may not be similar with the future studies because of the factors affecting learning. To ascertain the effectiveness of audio-visual aided instruction, thorough study on a wider scope is suggested.

The reviewed study and the present study are similar since both studies determined how teaching materials will improve the performance of students. Moreover, both studies applied experimental method of research. Likewise, the reviewed study recommends the use of a wider scope. According to the study of Sta. Maria (2020), on her study focused which focused on the level of effectiveness of digital storytelling on the literary appreciation in Filipino among grade five pupils in Pineda Elementary School, Division of Pasig City during the School Year 2019-2020.

The study revealed that there are more female respondents than males, first born with 2 – 3 children in their family whose parents are college graduates belonging to income bracket of ₱8,001 - ₱22,000. In the pretest, performance of the respondents in the exposed and unexposed groups are both satisfactory. Likewise, in the posttest, both groups obtained Very Satisfactory performance. Performance of the respondents in the unexposed group as revealed in the pretest and posttest results differ significantly. Likewise, there is a significant difference on the level of performance of the control group unexposed to digital storytelling on the literary appreciation in Filipino as revealed in the pretest and posttest results. Level of performance of the pupils exposed and unexposed to digital storytelling on the literary appreciation in Filipino differ significantly as revealed in the posttest results. Performance of the pupils exposed to digital storytelling on their literary appreciation in Filipino do not differ significantly when they are grouped according to sex, sibling position, number of children in the family, parents' educational attainment and monthly family income.

The study concluded that utilization of digital storytelling and traditional method of teaching improved the literacy appreciation skills in Filipino of the pupils. Pupils exposed to the utilization of video lessons have better reading comprehension skills than those pupils who were taught utilizing the traditional method of teaching. Sex, sibling position, number of children in the family, parents' educational attainment and monthly family income are not contributory on their level of performance in literacy appreciation in Filipino.

The reviewed study and present study are parallel since both studies focused on the effectiveness of utilization of instructional materials in teaching and learning; However, the reviewed study is on the teaching of Filipino while the present study is on utilization of interactive learning materials s in teaching Araling Panlipunan.

Vidal (2020) determined the effectiveness of interactive instructional materials in teaching Mathematics for kindergarten learners in Penafrancia Elementary School during the School Year 2019-2020.

Two sections of kindergarten learners in the said school were included as respondents. The experimental group consists of 20 kindergarten learners and the control group also consists of 20 kindergarten learners. They were described in terms of sex, sibling position, number of children in the family, monthly family income and parents' educational attainment. The experimental group was exposed to interactive instructional materials while the control group was taught using the traditional method of teaching. Experimental method of research utilizing parallel group design was used. Pretest and posttest were administered to both groups.

The study found out that kindergarten learners exposed to interactive instructional materials obtained Fairly Satisfactory performance in Mathematics in the pretest and Very Satisfactory performance in the posttest. Meanwhile, kindergarten learners unexposed to interactive instructional materials obtained Fairly Satisfactory performance in the pretest and Satisfactory performance in the posttest. Performance in Mathematics of the kindergarten learners differ significantly before and after exposure to interactive instructional materials. Likewise, there is a significant difference on the performance in Mathematics of the kindergarten learners unexposed to interactive instructional materials as revealed in the pretest and posttest results. Performance in Mathematics of the kindergarten learners exposed and unexposed to interactive instructional materials differ significantly as revealed in the posttest results. Performance in Mathematics of the kindergarten learners exposed to interactive instructional materials differs significantly when they are grouped according to monthly family income and parents' educational attainment. On the other hand, sex, sibling position and number of children in the family are not contributory to their performance.

Vidals' study and the present study are similar since both studies determined the effectiveness of instructional materials in teaching. Moreover, the reviewed study used descriptive research design while the present study used experimental method of research.

Mata (2022) determined the level of effectiveness of digital materials on the performance of kindergarten learners in public elementary schools in Morong Sub-Office during the School Year 2021-2022.

Descriptive survey research design was applied utilizing a questionnaire-checklist as a tool in gathering the needed data. The instrument measured the level of effectiveness of digital materials on the performance of kindergarten learners with respect to early language literacy development, numeracy skills development and socio emotional development. Documentary analysis was also used since the results of Early Childhood Development Checklist as rated by teachers were obtained as basis of the level of performance of kindergarten learners.

The teachers are relatively young, all females and mostly married and Bachelor degree holders. Most of them are Teacher I , with 1-10 years length of service and attended Webinars in the District, Division and National Levels. On the other hand, most parents are relatively on their maturity level and mostly female and married. Most of them are college graduate and have 2-3 children. Most of them has variety of occupations and belong to low-income family. Digital materials are much effective on the performance of kindergarten learners with respect to early language literacy development, numeracy skills development and socio-emotional development.

Effectiveness of digital materials on the performance of kindergarten learners with respect to early language literacy development, numeracy skills development and socio-emotinal development do not differ significantly when grouped according to age, civil status, educational attainment, position title, length of service, and Webinars attended, however, parents' educational attainment and monthly family income significantly differ. The pupils perform satisfactorily as revealed in the results of Early Childhood Development Checklist as rated by teachers. There is no significant correlation between the perceived level of effectiveness of digital materials and performance of kindergarten learners.

The study concluded that teachers' age, civil status, educational attainment, position title, length of service and Webinars attended are not contributory to the effectiveness of digital materials and the parents' educational attainment and monthly family income are determinants to the effectiveness of digital materials and performance of learners; and Digital materials are not associated with the level of academic performance of kindergarten learners.

The reviewed study and the present study are parallel since both studies dealt with the effectiveness of instructional materials on the performance of learners. However, the cited study considered kindergarten learners while the present study considered grade 8 students.

Ceñidoza (2020) determined the effects of modern gadgets on the attitudes and performance of grade 7 students in selected public secondary schools in the District of Binangonan III, Division of Rizal, during the School Year 2020-2021.

The study revealed that Grade 7 student-respondents are predominantly females; majority belong to low income families. Mostly are first born and fourth and above child of the family; belong to families with one child and four children and above. Majority of their parents' college graduates and college undergraduates. Several of them have cellphone and tablet. Modern gadgets has much effect on the attitudes of Grade 7 students with respect to motivation, study habits, communication and task accomplishment. Modern gadgets has significant effects on the attitudes of the Grade 7 students with respect to motivation, study habits, communication and task accomplishment in terms of their monthly family income, sibling position, number of children in the family, parents' educational attainment and modern gadgets owned; however, when sex do not differ. The Grade 7 students have a satisfactory academic performance as revealed by their average grades. There is a significant correlation between the perceived effects of modern gadgets on the attitudes of the respondents and their scholastic achievement.

The study concluded that monthly family income, sibling position, number of children in the family, parents' educational attainment and modern gadget owed are contributory to the effects of modern gadgets on the attitudes of the students. Academic performance of students is significantly affected by their frequent use of modern gadgets. The study recommended that school administrators may provide more computers and free internet access to students so as to equip them in the proper usage of internet. School administrators may give more opportunities to teachers for professional growth and development particularly in the use of modern gadgets to enhanced and upgrade their teaching competencies. Teachers may continuously use effective technology-based instructional materials in teaching and provide active learning approaches designed to enhance the academic performance of students. The administrators, teachers and parents should collaborate to encourage the students to engage more in their school related activities rather than to dependently rely on the use of modern gadgets.

The cited study is similar to the present study since it dealt with the effects of instructional materials on students' performance. However, the cited study considered grade 7 students while the present study considered grade 8 students.

The concepts presented from the literature and studies contributed relevant discussions and gave better insight on the topic being investigated. It served as a guide in giving significant relationships which strengthened the findings and conclusion of the present study.

III. METHODOLOGY AND SOURCES OF DATA

This chapter discusses the research design, respondents of the study, instrumentation and validation of the instrument, procedure of the study and statistical treatment of data gathered.

A. Research Design

The experimental research method was used in the study. According to Calmorin (2020), experimental research is a problem-solving approach that the study is described in the future on what will be when a certain variables are carefully controlled or manipulated. It is expected to reveal cause and effect relationship. The problem is to know the conditions under which an event occurs and to observe the whole transaction loosely so that one can be reasonably sure causation is present.

Experimental design is a research wherein the researcher manipulates and controls one or independent variables for variation concomitant to the manipulation of the dependent variable.

Experimental research utilizing one-shot design will be utilized. This experimental study involves groups of respondents with focus on the use of subject courseware in teaching Araling Panlipunan. Since the researcher is concerned with the effectiveness of subject courseware in teaching Araling Panlipunan, the experimental research using one-shot design is the most appropriate method.

B. Respondents of the Study

The respondents of the study are 42 grade 8 students in Tanay National High School. They were described in terms of sex, sibling position, number of children in the family, monthly family income, parents' educational attainment, and parents' occupation. They were chosen using purposive sampling technique.

C. Instrumentation

The researcher-made tests consisted of two sets of 50 items that were used to determine the performance of the students. These served as the pretest and posttest and were based on the Table of Specifications in Araling Panlipunan. The pretest and posttest were administered to the students before and after their exposure to the subject courseware in teaching Araling Panlipunan. The researcher-made tests were aligned with the K to 12 competencies.

Below is the scale that was used in interpreting the test scores.

Scores	Verbal Interpretation
45 – 50	Outstanding
43 – 44	Very Satisfactory
40 – 42	Satisfactory
38 – 39	Fairly Satisfactory
Below 38	Did not meet expectations

D. Validation of the Instrument

The test that was used by the researcher underwent content validation as she presented it to the Araling Panlipunan teachers at Tanay National High School, as well as to experts in the field of research such as the research adviser, professorial lecturer, statistician, master teacher, school head, and the Dean of the Graduate Studies Program. She incorporated all the suggestions provided by the teachers to come up with a more improved pretest. After writing the test items, Araling Panlipunan coordinators were consulted. The items were revised based on their observations, comments, and recommendations. The test was also presented to the Araling Panlipunan (AP) Consultants. Additionally, the test was tried out with 20 students at Aldea National High School for internal validation. After getting the scores, it was arranged from highest to lowest in order to find out the difficulty index for each item through item analysis. The reliability of the test was determined through the split-half method. The scores were divided into two halves, odd and even scores were correlated using the Pearson-product Moment Correlation and Spearman-Brown formula to determine the reliability coefficient. The obtained r-value of .86 in the half test and .89 in the whole test indicate that the test has high reliability.

E. Procedure of the Stud

This study followed the Gantt Chart of Activities. It covered everything from developing the research question to editing the draft and submitting the finished version. The instrument was content-validated. Permission for the study to be carried out was granted by the Office of the Schools Division Superintendent. The respondents were given the questionnaire checklist after the instrument was validated. The Statistical Package for the Social Sciences (SPSS) was used to analyze and interpret the data collected in accordance with the sub-problems. A summary of the results, conclusions, and suggestions was developed. The Data Privacy Act also served as a guide for the researcher.

Following the oral defense, the manuscript was revised based on the comments, suggestions, and recommendations of the Oral Examination Committee. At the statistical center, the manuscript was also checked for plagiarism. The manuscript was submitted after the final revision, editing, and bookbinding. Hardbound copies were then submitted to the Office of the Dean of the Graduate Studies Program and other relevant offices.

F. Statistical Treatment

For the analysis and interpretation of data, the following statistical tools will be applied:

To determine the profile of the respondents in terms of sex, sibling position, monthly family income, and parent's educational attainment, frequency and percentage distribution were used.

To determine the level of performance in Araling Panlipunan of the grade 8 students before and after exposure to subject courseware as revealed by their pretest and posttest results, mean and standard deviation was used.

To determine the significant difference on the level of performance in Araling Panlipunan of the grade 8 students before and after exposure to subject courseware as revealed by their pretest and posttest results, dependent t-test was used.

To determine the significant difference on the level of performance in Araling Panlipunan of the grade 8 students after exposure to subject courseware as revealed by their posttest results in terms of their profile, one-way analysis of variance (ANOVA) was utilized.

IV. PRESENTATION, ANALYSIS AND INTERPRETATION OF DATA

This chapter presents the results, analysis and interpretation of data relative to the questions aimed to determine the effectiveness of subject courseware in teaching Araling Panlipunan for grade 8 students in Tanay National High School, Tanay Sub-Office, Division of Rizal during the School Year of 2024-2025.

A. Profile of the Grade 8 Student Respondents in Terms of Selected Variables

Table 1 presents the profile of the students in terms of sex, sibling position, number of children in the family, monthly family income, parents' educational attainment, and parents' occupation.

As shown in the table, in terms of sex, there is an equal number of male and female students. Regarding their sibling position, the highest percentage of 40.5% are second children, while only 4.8% are fourth children. With regard to the number of children in the family, 35.7% are only children, while 4.8% come from families with five or more children.

In addition, regarding their monthly family income, the highest percentage of 30.9% belong to the income bracket of ₱30,000 and above, while only 2.4% fall within the ₱20,000–₱24,999 bracket. Likewise, the majority of their fathers are high school graduates at 45.2%, while 9.5% are either college graduates or high school undergraduates.

Table 1
Profile of the Student Respondents

Profile	Frequency	Percent	Rank
Sex			
Male	21	50.0	1.5
Female	21	50.0	1.5
Total	42	100.0	
Sibling Position			
First	4	9.5	4
Second	17	40.5	1
Third	12	28.6	2
Fourth	2	4.8	5
Fifth or higher	7	16.7	3
Total	42	100.0	
Number of Children in the Family			
1	15	35.7	1
2	13	31.0	2
3	7	16.7	3
4	5	11.9	4
5 or more	2	4.8	5
Total	42	100.0	
Monthly Family Income			

₱30,000 and above		13	30.9	1		
₱25,000 - ₱29,999		6	14.3	4.5		
₱20,000 - ₱24,999		1	2.4	6		
₱15,000 - ₱19,999		6	14.3	4.5		
₱10,000 - ₱14,999		9	21.4	2		
Below ₱10,000		7	16.7	3		
Total		42	100.0			
Parent's Educational Attainment	Father			Mother		
	f	%	R	f	%	R
College Graduate	4	9.5	3.5	2	4.8	4
College Undergraduate	15	35.7	2	16	38.1	1
High School Graduate	19	45.2	1	15	35.7	2
High School Undergraduate	4	9.5	3.5	9	21.4	3
Total	42	100.0		42	100.0	
Parent's Occupation						
Government Employee	6	14.3	4	14	33.3	1
Private Employee	3	7.1	6	11	26.2	2
Self-employed	11	26.2	1	9	21.4	3
OFW	4	9.5	5	1	2.4	5.5
Skilled workers, craftsmen and others	8	19.1	3	6	14.3	4
Unemployed	10	23.8	2	1	2.4	5.5
Total	42	100.0		42	100.0	

As for their mothers, most are college undergraduates at 38.1%, while 2.5% are elementary undergraduates. In terms of their parents' occupations, 26.2% of the fathers are self-employed, while the lowest percentage of 7.1% are private employees. For the mothers, most are government employees at 33.3%, while 2.4% are either OFWs or unemployed.

B. Level of Performance in Araling Panlipunan of the Grade 8 Students Before and After Exposure to Subject Courseware as Revealed by their Pretest and Posttest Results

Table 2 presents the level of performance in Araling Panlipunan of the grade 8 students before and after exposure to subject courseware as revealed by their pretest and posttest results.

Table 2

Level of Performance in Araling Panlipunan of the Grade 8 Students Before and After Exposure to Subject Courseware

Scores	Verbal Interpretation	Pretest		Posttest	
		f	%	f	%
45 – 50	Outstanding	-	-	35	83.3
43 – 44	Very Satisfactory	-	-	6	14.3
40 – 42	Satisfactory	1	2.4	1	2.4
38 – 39	Fairly Satisfactory	6	14.3	-	-
Below 38	Did Not Meet Expectation	35	83.3	-	-
Total		42	100	42	100
Highest Score			42		49
Lowest Score			30		42
Mean			34.6 (DNME)		45.8 (O)
Std. Deviation			2.830		1.694

The table reflects the level of performance in Araling Panlipunan of the grade 8 students before and after exposure to subject courseware as revealed by their pretest and posttest results. In their pretest scores, it shows that 83.3% of them got scores from below 38 who Did Not Meet Expectations while 2.4% obtained a score from 40 – 42 with Satisfactory performance. Meanwhile, in the posttest results, first in rank at 83.3% obtained scores ranging from 45 – 50 with Outstanding performance while last in rank at 2.4% remained in the Satisfactory category.

This means that the results led to an observation that the grade 8 students have different levels of performance before and after the conduct of the experiment which indicates that prior to the use of courseware, students may have struggled with understanding the concepts, possibly due to traditional teaching methods that lacked engagement, interactivity, or sufficient reinforcement. Meanwhile, after the implementation of the subject courseware, the posttest results showed an increased in their performance. The courseware helped in enhancing student understanding and retention of Araling Panlipunan concepts. The interactive and multimedia features of the courseware likely contributed to increased student engagement, individualized learning, and better concept reinforcement.

Findings imply that implies that integrating interactive and multimedia-based instructional tools in teaching Araling Panlipunan such as subject courseware can enhance student learning. The traditional methods alone may not sufficiently address diverse learning needs, and that educational technology can play an important role in increasing engagement, improving concept retention, and promoting learning. Moreover, pupils' improvement indicates that the courseware was effective in making the lessons more engaging and accessible. Its interactive features, multimedia content, and structured lessons likely catered to various learning styles, enabling students to better understand, retain, and apply the concepts taught in Araling Panlipunan.

This is somewhat in relation with the citation of Perez and Tolentino (2021) that the courseware utilized by the students of Pangasinan State University through MS Teams has high impact that promotes self-directed learning - guiding students to learn independently at their own pace without assistance from others, fostering favorable learning environment/ platform also gained high impact hence moderate impact in terms of the learning growth of students with a grand mean of 3.44 which was described as "high" and interpreted as "impactful.

C. Significant Difference on the Level of Performance in Araling Panlipunan of the Grade 8 Students Before and After Exposure to Subject Courseware as Revealed by their Pretest and Posttest Results

Table 3 presents the result of the test for the significant difference on the level of of performance in Araling Panlipunan of the Grade 8 students before and after exposure to subject courseware as revealed by their pretest and posttest results.

Table 3

Significant Difference on the Level of Performance in Araling Panlipunan of the Grade 8 Students Before and After Exposure to Subject Courseware

Test	Mean	SD	t-value	p-value	Null Hypothesis	Verbal Interpretation
Pretest	34.6	2.830	20.473	0.000	Rejected	Significant
Posttest	45.8	1.694				

It is shown in the table that the level of performance in Araling Panlipunan of the Grade 8 students before and after exposure to subject courseware as revealed by their pretest and posttest results, the pretest and posttest results obtained a t-value of 20.473, hence it led to a probability value of .000 which is less than .05 level of significance, thus rejecting the null hypothesis.

It could be deduced from the results that the performance of the grade 8 students in their performance in Araling Panlipunan has improved after they were exposed to subject courseware. It means that their performance rose to a certain degree. The shift in scores from the pretest to the posttest indicates that the use of courseware had a positive impact on their academic achievement. Prior to the intervention, most students did not meet the expected performance levels, suggesting difficulty in understanding the concepts through traditional methods. However, after using the courseware, most students attained higher scores, many reaching the Outstanding level. This shows that the interactive, multimedia-rich content of the courseware effectively supported student learning by making lessons more engaging, easier to understand, and accessible to different learning styles.

Findings imply that the improvement in student performance suggests that the integration of subject courseware in teaching Araling Panlipunan can be an effective strategy to enhance learning outcomes. The courseware provided interactive and multimedia content that likely enhanced student engagement, catered to different learning styles, and promoted active participation. Through features such as visuals, audio narrations, quizzes, animations, and interactive tasks, students were better able to understand abstract or historically complex concepts that are often difficult to grasp through textbook-based instruction alone. Moreover, courseware allows students to review lessons at their own pace, which can be particularly beneficial for students who need more time to process information. These factors contribute to deeper understanding, increased motivation, and higher retention of knowledge leading to better academic performance.

This is in connection with the study conducted by Sta. Maria (2020) that there is a significant difference on the level of performance of the control group unexposed to digital storytelling on the literary appreciation in Filipino as revealed in the pretest and posttest results.

D. Significant Difference on the Level of Performance in Araling Panlipunan of the Grade 8 Students After Exposure to Subject Courseware as Revealed by Their Posttest Results in Terms of Their Profile

Table 4 presents the result of the test on the significant difference on the level of performance in Araling Panlipunan of the grade 8 students after exposure to subject courseware as revealed by their posttest results in terms of their profile.

Table 4

Significant Difference on the Level of Performance in Araling Panlipunan of the Grade 8 Students After Exposure to Subject Courseware as Revealed by Their Posttest Results in Terms of Their Profile

Profile	F-value	p-value	Null Hypothesis	Verbal Interpretation
Sex	1.201	0.280	Accepted	Not Significant
Sibling Position	0.913	0.484	Accepted	Not Significant
Number of Children in the Family	1.185	0.333	Accepted	Not Significant
Monthly Family Income	0.876	0.487	Accepted	Not Significant
Father's Educational Attainment	0.933	0.434	Accepted	Not Significant
Mother's Educational Attainment	0.130	0.942	Accepted	Not Significant
Father's Occupation	0.934	0.483	Accepted	Not Significant
Mother's Occupation	2.312	0.064	Accepted	Not Significant

As reflected in the table, the test for the significant difference on the level of performance in Araling Panlipunan of the grade 8 students after exposure to subject courseware as revealed by their posttest results in terms of their sex, sibling position, number of children in the family, monthly family income, parents' educational attainment, and parents' occupation, obtained p-values higher than .05 level of significance. Therefore, the null hypothesis is accepted.

This means that sex, sibling position, number of children in the family, monthly family income, parents' educational attainment, and parents' occupation have nothing to do with the effectiveness of subject courseware in teaching Araling Panlipunan for grade 8 students. Subject courseware makes it possible for students to learn at their own pace and get knowledge that is specifically suited to their learning preferences and skills.

Findings imply that sex, sibling position, number of children in the family, monthly family income, parents' educational attainment, and parents' occupation are not factors on the effectiveness of subject courseware in teaching Araling Panlipunan for grade 8 students. Regardless of their background or family situation, students performed similarly when given equal access to learning opportunities through subject courseware. Subject courseware empowers students to learn at their own pace, review materials as needed and engage with interactive and multimedia content that suits their individual learning styles. It reduces dependency on prior knowledge often influenced by home environments and makes learning more learner centered. As a result, students with different backgrounds can still achieve similar academic outcomes because the digital learning environment addresses differences in learning ability more effectively than traditional methods. This is somewhat in contrast to the findings of Vidal (2020) that performance in Mathematics of the kindergarten learners exposed to interactive instructional materials differs significantly when they are grouped according to monthly family income and parents' educational attainment.

E. Action Plan to Enhance the Level of Performance in Araling Panlipunan Using Subject Courseware for Grade 8 Students

Based on the findings, an action plan is hereby proposed to enhance the level of performance in Araling Panlipunan using subject courseware for grade 8 students.

V.   SUMMARY OF FINDINGS, CONCLUSIONS AND RECOMMENDATIONS

This chapter presents the summary of findings, conclusions drawn and recommendations.

A. Summary of Findings

Based on the analysis and interpretation of data, the following findings are hereby summarized:

1) *Profile of the Grade 8 Student Respondents in Terms of Selected Variables:* There is an equal number of male and female students. Most of them are second-born and only children in their families, belonging to the income bracket of ₱30,000 and above, with parents who are high school graduates or college undergraduates, and are either self-employed or government employees.

2) *Level of Performance in Araling Panlipunan of the Grade 8 Students Before and After Exposure to Subject Courseware as Revealed by their Pretest and Posttest Results:* The performance of the Grade 8 students in Araling Panlipunan was interpreted as Did Not Meet Expectations in their pretest results and Outstanding in their posttest results.

3) *Significant Difference on the Level of Performance in Araling Panlipunan of the Grade 8 Students Before and After Exposure to Subject Courseware as Revealed by their Pretest and Posttest Results:* There is a significant difference on the level of performance in Araling Panlipunan of the Grade 8 students before and after exposure to subject courseware as revealed by their pretest and posttest results.

4) *Significant Difference on the Level of Performance in Araling Panlipunan of the Grade 8 Students After Exposure to Subject Courseware as Revealed by Their Posttest Results in Terms of Their Profile:* There is no significant difference on the level of performance in Araling Panlipunan of the grade 8 students after exposure to subject courseware as revealed by their posttest results in terms of their sex, sibling position, number of children in the family, monthly family income, parents' educational attainment, and parents' occupation.

B. Conclusions

Based on the findings, the following conclusions are drawn:

1) Performance in Araling Panlipunan of the grade 8 students improved after exposure to subject courseware.

2) Sex, sibling position, number of children in the family, monthly family income, parents' educational attainment, and parents' occupation are not contributory on the level of performance in Araling Panlipunan of the grade 8 students after their exposure to subject courseware.

C. Recommendations

In the light of the findings, the following recommendations are hereby offered:

1) School administrators may consider having continuous professional development programs provided to train teachers in effectively implementing and maximizing the use of subject courseware in classroom instruction.

2) School administrators may consider having regular assessment and evaluation of student outcomes should be conducted to monitor the long-term effectiveness of courseware and identify areas for improvement.

3) Teachers may consistently use courseware as a supplementary tool alongside traditional teaching methods to cater to diverse learning styles and ensure better understanding of concepts.

4) Teachers may continue to use inclusive teaching strategies, such as courseware, to bridge learning gaps and promote equity among students.

5) Students may take full advantage of the subject courseware by exploring its features, engaging with interactive content, and revisiting lessons to reinforce learning.

6) Students may regularly assess their own progress by reviewing their scores and performance in activities, identifying areas for improvement, and making necessary study adjustments.

7) The proposed action plan is recommended for implementation.

8) Further studies on the effectiveness of subject courseware in teaching Araling Panlipunan using other variables may be conducted.

BIBLIOGRAPHY

Books

[1]   Calmorin, Laurentina P., <u>Methods of Research and Thesis Writing</u>. Manila: National Bookstore, 2020.

[2]   Corpuz, Brenda B. et al., <u>Principles of Teaching</u>. Cubao, Quezon City: Lorimar Publishing, Inc. 2022.

[3]   Lucas, Ma. Rita D. and Corpuz, Brenda B., <u>Facilitating Learning</u>. Manila: Lorimar,   Publishing, 2022.

[4]   Nolledo, Jose N., 1987 Philippine Constitution, Article XIV, Section 1, Manila: National Bookstore, 2020.

Articles, Journals, Magazines.

[1]   Atwood, Liam, "Reusing Distance Courseware to Enable Blended Delivery: A New Zealand Case Study", Open Praxis, 2022.

[2]   Brecht, H.D. et al., "Enabling Comprehensive Teaching Strategy: Video Lectures", Journal of Information Technology Education, Volume. 7, 1, 10, 2020.

[3]   Cabaluna, Johdel C., "Effectiveness of Interactive Multimedia Courseware in Teaching Care Management", European Journal of Social Sciences Studies, 2022.

[4]   DepEd Order No. 21, s. 2019, Section 38, "Department of Education's Information and Communications Technology (ICT)".

[5]   Falode, Oluwole Caleb and Mohammed, Ibrahim Abba, "Educational Technology Undergraduates' Performance in a Distance Learning Course Using Three Courseware Formats", International Review of Research in Open and Distributed Learning, Volume 24, Number 4, November – 2023

[6]   Fernandez, Vicente B., "Impact of Digitized Instructional Materials in Teaching Phonology in the New Normal", JPAIR Institutional Research Journal, Vol. 16, No. 1, 2021.

[7]   Gaddi, Jojames Arnaldo G. et al., "Courseware Development in Education: A Literature Review", International Journal of Current Science Research and Review 7(1):842-847, 2024.

[8]   Hicks, S., "Technology in Today's Classroom: Are You a Tech-Savvy Teacher?", Abhishek Publication, 2020.

[9]   Kishore, N., "Educational Technology", Abhishek Publication, 2020.

[10] Lou, S. et al., "Improving the Effectiveness of Organic Chemistry Experiments Through Multimedia Teaching Materials for Junior High School Students". The Turkish on Line Journal of Educational Technology, Vol. 11: No. 2, 2021.

[11] Perez, Carla Carmela P. and Tolentino, Cristeta G., "The Impact on the Utilization of Courseware in the New Normal among PSU Students", Proceedings of the International Conference on Industrial Engineering and Operations Management Sao Paulo, Brazil, April 5 - 8, 2021.

[12] San Mateo, Maria Lea D., "DOST COURSEWARE MODULE: A Tool in Enhancing Students' Performance in Grade 10 Mathematics", International Journal of Research Publications (IJRP.ORG), 2021.

[13] Schroeder, Kersten T. et al., "Teaching and Learning with AI-Generated Courseware: Lessons from the Classroom", OLC Conference Special Issue,   2022.

[14] Serth, Sebastian et al., "Measuring the Effects of Course Modularizations in Online Courses for Life-Long Learners", Internet Technologies and Systems Group,   Hasso Plattner Institute, 2022.

[15] Vilbar, Aurelio, "Children as Courseware Collaborators: Using Participatory   Research to Produce Courseware Integrating Science and Sustainable Development", Cultures of Science, 2021.

Unpublished Materials

[1]   Baser, Marie-Line and Valdois, Sylviane, "Influence of the Visual Attention Span on Child Reading Performance: A Cross-Sectional Study". Laboratoire de Psychologie et Neuro-Cognition (UMR 5105 CNRS) Université Pierre Mendès France, 2020.

[2]   Ceñidoza, Ma. Donna D., "Effects of Modern Gadgets on the Attitudes and Performance of Grade 7 Students in Selected Public Secondary Schools in the District of Binangonan III, Division of Rizal", Unpublished Masters' Thesis, Tomas Claudio Colleges, Morong, Rizal, 2020.

[3]   Lapada, H., "The Effects of Audio-Visual Aided Science Instruction on Grade 8 Students", 2020.

[4]   Mamun, Abdullah, "Effectiveness of Audio-visual Aids in Language Teaching in Tertiary Level". BRAC University, Dhaka 2020.

[5]   Mañanita, Maria Cecilia A., "Adequacy and Utilization of Tools and Equipment and   Students' Performance in Technical Vocational and Livelihood Education",   Valenzuela National High School, 2021.

[6]   Mata, Merrie Lann E., "Level of Effectiveness of Digital Materials on the Performance of Kindergarten Learners in Public Elementary Schools   in Morong Sub-Office" Unpublished Master's Thesis, Tomas   Claudio Colleges, Morong, Rizal, 2022.

[7]   Rodriguez, M., "The Teacher's Point of View Toward Using Audio Visual Aids", Public Elementary Schools in Valenzuela City, 2020.

[8]   Septiani, An-nisa Nur Sholihah Indah et al., "Development of Interactive Multimedia Learning Courseware to Strengthen Students' Character", Universitas Sebelas Maret, Indonesia, 2020.

[9]   Singaravelu, G., "Efficacy of Multimedia Coursewares in Learning English Grammar", Department of Education, Bharathiar University, Coimbatore-641 046, India, 2020.

[10] Sta. Maria, Marianette, "Level of Effectiveness of Digital Storytelling on the   Literary Appreciation in Filipino Among Grade Five Pupils in Pineda Elementary School, Division of Pasig City", Unpublished   Master' Thesis, Tomas Claudio Colleges, Morong, Rizal, 2020.

[11] Usman, Muhammad and Yusuf, Nidar, "The Implementation of Audio Visual Aid Media during Covid 19 Pandemic in Elementary School", Universitas Serambi Mekkah, 2020.

[12] Vidal, Gellian S. "Effectiveness   of Interactive Instructional Materials in Teaching Mathematics for Kindergarten Learners in Penafrancia Elementary School" Unpublished Masters' Thesis, Tomas Claudio Colleges, Morong, Rizal, 2020.

[13] Yu, Jing and Guo, Hang, "Design and Development of the Interactive Courseware Based on SCORM Standard", Department of Avionics Engineering, the first aeronautical college of air force, Henan, Xinyang, China, 2020.

[14] Zhang, Qian et al., "Design of Multimedia Courseware Teaching Resources Online Management System", Naval Submarine Academy, Qingdao 266000, China, 2024.

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APPENDIX A
Letter of Permission to Conduct the Study

TOMAS CLAUDIO COLLEGES
Taghangin, Morong, Rizal

GRADUATE STUDIES PROGRAM

April 5, 2025

DORIS DJ. ESTALILLA, CESO V
Schools Division Superintendent
Dep Ed Division of Rizal
Cabrera Road, Kaytikling
Taytay, Rizal

Madam:

Greetings in the name of public service and commitment!

I have the honor to request permission from your good office a permit to conduct a study regarding my approved thesis proposal entitled, EFFECTIVENESS OF SUBJECT COURSEWARE IN TEACHING ARALING PANLIPUNAN FOR GRADE 8 STUDENTS'' in partial fulfillment of the requirements for the degree Master of Arts in Education which I am presently pursuing at Tomas Claudio Colleges.

The study requires the administration of the questionnaire-checklist to students in public secondary schools in Tanay National Highschool.

Rest assured that the data to be obtained will be treated with utmost confidentiality.

Anticipating your kind consideration and most favorable action on this matter.
Thank you very much and God bless!

Respectfully Yours,

ROSE ANNE P. MALTO
Researcher

Noted:

PROF. RUBY S. SAN JUAN
Thesis Adviser

APPROVED:

DORIS DJ. ESTALILLA, CESO V
Schools Division Superintendent
Division of Rizal

EVA R. DE ROSAS, Ph. D.
Dean, Graduate Studies Program

TOMAS CLAUDIO COLLEGES
Taghangin, Morong, Rizal

GRADUATE STUDIES PROGRAM

April 5,2025

DAHLIA S. CERTEZA, Ed.D
Public Schools District Supervisor
District of Tanay Rizal
Tanay Sub-Office

Madam:

Greetings in the name of public service and commitment!

I have the honor to request permission from your good office a permit to conduct a study regarding my approved thesis proposal entitled, **"EFFECTIVENESS OF SUBJECT COURSEWARE IN TEACHING ARALING. PANLIPUNAN FOR GRADE 8 STUDENTS"** , in partial fulfillment of the requirements for the degree Master of Arts in Education which I am presently pursuing at Tomas Claudio Colleges.

The study requires the administration of the questionnaire-checklist to students in public secondary schools in Tanay National Highschool .

Rest assured that the data to be obtained will be treated with utmost confidentiality.

Anticipating your kind consideration and most favorable action on this matter.
Thank you very much and God bless!

Respectfully yours,

ROSE ANNE P. MALTO
Researcher
Noted:

PROF. RUBY S. SAN JUAN
Thesis Adviser

APPROVED:

DAHLIA S. CERTEZA, Ed.D
Public Schools District Supervisor
Tanay Sub-Office

EVA R. DE ROSAS, Ph. D.
Dean, Graduate Studies Program

APPENDIX B
Letter to the Respondents

April 16, 2022

Dear Respondents,

I am Rose Anne P. Malto, a graduate student currently pursuing the degree of Master of Arts in Education major in Educational Management at Tomas Claudio Colleges. I am currently conducting my thesis entitled " **EFFECTIVENESS OF SUBJECT COURSEWARE IN TEACHING ARALING PANLIPUNAN FOR GRADE 8''**

In this regard, may we request your assistance to answer the attached structured interview.

Rest assured that your response will be treated with utmost confidentiality as mandated by Data Privacy Act of 2012.

Thank you and God bless.

Respectfully yours,

Rose Anne P. Malto
Researchers

Noted:

Prof. Ruby S. San Juan MAED,RGC
Research Professor

APPENDIX C
Questionnaire-Checklist

Profile of the Respondents

Name: _____

Directions: Supply the needed data accurately and legibly.

Age: (as of last birthday)
(   ) 16 years and above
(   ) 14-15 years old
(   ) 12-13 years old

Sex:
    (   ) Male
    (   ) Female

Sibling Position:
    (   ) First
    (   ) Second
    (   ) Third
    (   ) Fourth
    (   ) Fifth or higher

Number of Children in the Family:
    (   ) 1
    (   ) 2
    (   ) 3
    (   ) 4
    (   ) 5 and above

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Monthly Family Income:

( ) ₱29,999 and above

( ) ₱20,000 – 29,999

( ) ₱15,000-19,999

( ) ₱10,000-14,999

( ) Below ₱10,000

Parents' Educational Attainment:

Father	**Mother**
( ) College Graduate	( ) College Graduate
( ) College Undergraduate	( ) College Undergraduate
( ) High School Graduate	( ) High School Graduate
( ) High School Undergraduate	( ) High School Undergraduate
( ) Elementary Graduate	( ) Elementary Graduate
( ) Elementary Undergraduate	( ) Elementary Undergraduate

Parents' Occupation:

Father		Mother
_____	Government Employee	_____
_____	Private Employee	_____
_____	Government Employee	_____
_____	Private Employee	_____
_____	Self-employed	_____
_____	OFW	_____
_____	Others	_____

APPENDIX D
Table of Specifications
Araling Panlipunan 8

Most Essential Learning Competencies		No. of days Taught	No. of Items	%	Easy 60%	Average 30%	Difficult 10%	Item Placement
MELC No.	The learner …							
1	Nasusuri ang mga dahilan, mahahalagang pangyayaring naganap at bunga ng Unang Digmaang Pandaigdig.	8	10	20.00	6	3	1	1-10
2	Nasusuri ang mga dahilan, mahahalagang pangyayaring naganap at bunga ng Ikalawang Digmaang Pandaigdig.	7	9	18.00	5	3	1	11-19
3	Natataya ang pagsisikap ng mga bansa na makamit ang kapayapaang pandaigdig at kaunlaran.	5	6	12.00	4	1	1	20-25
4	Nasusuri ang mga ideolohiyang politikal at ekonomiko sa hamon ng estabilisadong institusyon ng lipunan.	8	10	20.00	6	3	1	26-35
5	Natataya ang epekto ng mga ideolohiya, ng Cold war at ng Neo-kolonyalismo sa iba't ibang bahagi ng daigdig.	7	9	15.00	5	3	1	36-44
6	Napapahalagahan ang bahaging ginampanan ng mga pandaigdigang organisasyon sa pagsusulong ng pandaigdigang kapayapaan.	5	6	15.00	4	2	0	45-50
TOTAL		40	50	100.00	30	15	5	50

APPENDIX E
Pretest / Posttest
Pretest

Pangalan :   Seksyon :

Panuto : Basahing mabuti ang bawat tanong. Bilugan ang titik ng tamang sagot.

1. Ang sumusunod ay nagpapakita ng imperyalismo noong Unang Digmaang Pandaigdig maliban sa isa.

a. Paniniwala na may karapatang pangalagaan ang kalahi kayat pilit nila itong sinasamasa kanilang nasasakupan

b. Pagpapalawak ng pamabansang kapanyarihan sa pamamagitan ng pag-angkin ng mga kolnya

c. Pagpaparami ng armas na naging dahilan ng paghihinalaan ng mga bansa

d. Pagsasagawa ng malaking hukbo para sa kapayapaan

2. Alin sa sumusunod na pangyayari ang naging hudyat o dahilan sa pagsisimula ng Unang Digmaang Pandaigdig?

a. Pagkamatay ni Adolf Hitler matapos sumalakay sa Allied Powers.

b. Pagpapalabas ng labing-apat na puntos ni Pangulong Woodrow Wilson.

c. Pagpaslang kay Archduke Francis Ferdinand ng Austria sa Sarajevo, Bosnia.

d. Pagwawakas ng mga imperyo sa Europe tulad ng Germany, Austria, Hungary Russia

3. Ang damdaming nagpapakita ng matinding pagmamalasakit o pagmamahal sa baya ay ang konseptong akapaloob sa _____.

a. Imperyalismo

b. Nasyonalismo

c. Militarismo

d. Alyansa

4. Ang mga sumusunod ay mga dahilan ng pagkakaroon ng Unang Digamaang Pandaigdig MALIBAN sa isa.

a. alyansa   c. imperyalismo

b. nasyonalismo   d. renaissance

5. Tinatayang umabot sa 8,500, 000 katao ang namatay sa naganap na labanan sa Unang Digmaang Pandaigdig. Ano ang ipinahihiwatig ng pangyayaring ito?

a. Malaki ang pinsalang idinulot nito sa buhay ng mga tao

b. Nagpapatunay ito na mahuhusay na mandirigma ang mga bansang Europeo

c. Masama ang pagkakaroon ng digmaan

d. Lahat ng nabanggit

6. ang napatay na Duke Isa sa mga naging dahilan ng pagsiklab ng unang digmaang pandaigdig ay ang pagkakapatay sa Duke ng (lugar) na si _____

a. Archduke Louis

b. Archduke Franz Ferdinand

c. Archduke William

d. Archduke Charles

7. Alin sa mga sumusunod ang HINDI bunga ng unang digmaang pandaigdig?

a . Nagdulot ng matinding pinsala sa mga ari-arian.

b. Maraming tao ang nawala at nasugatan.

c. Ilang bilyong dolyar ang nagastos sa digmaan.

d. Hindi naapektuhan ang buhay ng mga tao.

8. Ang itinuturing na pinakamainit na labanan sa Unang Digmaang Pandaigdig ay ang _____

a. Digmaan sa Kanluran   c. Digmaan sa Balkan

b. Digmaan sa Silangan   d. Digmaan sa Karagatan

9. '' Ipaglalaban ko ang karapatan ng aking bansa laban sa sinumang mananakop' ay nagpapahayag ng pagiging nasyonalismo , alin sa mga sumusunod ang nagpapaliwanag nito?
a. Makabansang pananaw ukol sa sakripisyo para sa nakakarami
b. Tumutukoy sa resposibilidad ng mamamayan sa pag-unlad ng bansa
c. Pagpapahalaga sa wika bilang nasyonalismo
d. Isang pahayag ng pagkakaisa at pagtatanggol sa kalayaan

10.Pagkalipas ng Ikalawang Digmaang Pandaigdig isang bagong daigdig ang umusbong. Alin sa mga sumusunod ang hindi kabilang sa mga pangyayari pagkatapos ng digmaan?
a. Nagkaroon sa daigdig ng labanan ng ideolohiya
b. Nawala ang Facism at Nazism
c. Nagkaroon ng World War III
d.Naitatag ang United Nation

11. Bakit sumali sa Ikalawang Digmaang Pandaigdig ang United States?
a. Dahil sa pamamayani ng Nazi German sa Europe
b. Dahil binomba ng Japan ang Pearl Harbor
c. Dahil humingi ng tulong ang kanyang kaalyadong bansa tulad ng Great Britain at France
d. Dahil sa paglusob ng Germany sa Poland.

12. Ang pangunahing dahilan sa tuluyang pagsuko ng Japan sa Ikalawang Digmaang Pandaigdig ay _____.
a. Nang nabalitaan na nagpakamatay si Hitler.
b. Nang muling binagsakan ng Atomic Bomb ang isa sa kanilang Lungsod, ang Nagasaki.
c. Nang makitang sumuko na rin si Mussolini.
d. Nang naubusan na sila ng kagamitang pandigma .

13. Paano naging sanhi ang pangyayaring Pearl Harbor sa pagsali ng Estados Unidos sa digmaan?
a. Naging paglabag ito sa kapayapaan at seguridad ng Estados Unidos
b. Nagdulot ito ng pagsalungat ng mga Amerikano sa digmaang gerilya
c.Naging malaking hamon ito sa pandaigdigang ekonomiya ng Estados Unidos
d. Nagbigay ito ng oportunidad sa Estados Unidos na palawakin ang kanilang teritoryo

14. Bakit nabuwag ang Treaty of Versailles? Ito ay dahil sa_____.
a. pagkawala ng ilang teritoryo ng Germany noong Unang Digmaang Pandaigdig
b. pagkawasak ng Republika
c. Ito ang sanhi ng mga suliranin ng Germany
d. paniniwala ng mga Aleman na sila ang nangungunang lahi sa daigdig

15. Ang sumusunod na ideolohiya ay naging sanhi ng pag-usbong ng Ikalawang Digmaang Pandaigdig. Aling idelohiya ang umiiral sa US na nagpalakas ng pagiipon ng kapital para sa mga negosyante?
a. sosyalismo
b. komunismo
c. kapitalismo
d. pasismo

16.Ang mga sumusunod ay mga naging bunga ng Ikalawang Digmaang Pandaigdig Maliban sa isa.
a. Naging daan ito ng pagsilang ng mga malalayang bansa -ang East Germany, West Germany, Nasyonalistang China Pilipinas atbp.
b. Patuloy ang paglago ng ekonomiyang pandaigdig sa pagkawasak ng agrikultura, industriya, transportasyon at pananalapi ng maraming bansa.
c. Malaking bilang ng mga namatay at nasirang ari-arian.
d. Bumagsak ang pamahalaang Totalitaryang Nazi ni Hitler.

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17. "To conquer a nation, first disarm its citizens " ay pahayag na ngangahulugang?

a. Ang mga mamamayan ay wala nang kakayahan (lalo na sa armas p paninindigan) upang ipagtanggol ang kanilangbsarili laban sa paniniil o pananakop mas madali silang mapapailalim ng mga banyaga

b. Paniniwala mahalaga ang armas para sa proteksyon laban sa mga mapang abusong dayuhan

c. Pagdidisarma ng mga mamamayan upang madaling masakop at mapasunod ng mga banyaga

d. Upang mapadaling magkaraoon ng pagkakaisa ang mga mammayan kailangan alisan sila ng armas

18.Alin sa mga sumusunod ang hindi kabilang sa mga dahilan sa pagpapasabog ng Japan sa Pearl Harbor Maliban sa isa.

a. Upang pigilan ang US Pacific Fleet sa panghihimasok sa aksiyiyong military ng Imperyong ng Hapon sa Timog SilanganG Asya

b. Pagpapalawak ng Imperyo.

c. Dahil sa pagkakampihan ng mga bansang US AT Russia sa Ikalawang Digmaang Pandaigdig

d. Upang pabagsakin ang military ng Amerikano at patunayan na malakas ang kanilang bansa

19. Bakit ganoon na lamang katindi ang pagnanais ng Japan na sakupin ang kalakhang bahagi ng Asya upang buuin ang Greater East Asia Co-Prosperity Sphere?

a. Paghihiganti ng Japan laban sa US dahil sa pinasabog nito ang Hiroshima

b. Nais pabagsakin ng Japan ang Estados Unidos para maging makapangyarihan bansa ang Japan

c. Dahil ang sphere ay siyang nagbibigay ng langis,goma at lata para sa industriya ng Japan

d. Matinding pagnanais ng Japan na maging isang makapangyarihan at kinatatakutang bansa

20. Ang Pilipinas ay isang Demokratikong bansa , alin sa mga sumusunod ang nagpapahayag nito?

a. Ang lider ng bansa ay makapangyarihan sa politika at relihiyon

b. Ang mga mamamayan ay may Karapatan bumoto at magpahayag ng opinyon

c. Ang mga mamamayan ay ay pinamumunuan ng isang grupo ng tao na makapangyarihan

d. Ang mga mamayan ay ay naniniwala sa tunguhin at interes ng estado

21. Si Ferdinand Marcos ay namahala sa Pilipinas sa loob ng mahabang panahon sa ilalim ng itinakdang Saligang Batas alin sa mga sumusunod ang mga nagsasaad ng pamumuno ng isang bansang Awtoritaryanismo

a. Ang mga mamayan ay nasasakop ng estado sa maraming aspekto ng ibang pilosopiyang pampolitika,ay kinikita bilang mga bagay na pansariling pagpili

b. Ang kalayaang ng mga indibidwal ay mas mababa estado at walang konstitusyonal na pananagutan

c. Nakabatay ang paniniwala na ang mga mamamayan ay napapsailaliman lamang para sa tungkulin at interes lamang ng estado

d. Ang mga mamamayan ay may mga ideolohiyang pinaniniwalaan na naka ayon lamang sa namumuno ng bansa

   a. A at D   b. A at B   c. C at D   d. A, B, C at D

22. Bakit Itinatag ang United Nations?

a. Para mapabilis na lumago ang mga ekonomiya ng bawat bansa

b. Upang magkaroon ng sandigan ang mga kasaping bansa sa panahon ng digmaan

c. Upang mapanatili ang kapayapaan at kaayusan sa daigdig

d. Upang higit na mapaunlad ang kapayapaan at kaayusan sa daigdig

23. Anong pwersang pangkabuhayan sa politika ang nag-ugat sa bansang Russia?

A. Komunismo   c. Pasismo

b. Nasizmo   d. Sosyalismo

24. Ang mga sumusunod ay prinsipyo ng Komunismo maliban sa isa.

a. pagwawaksi sa kapitalismo

b. pagpapatunay sa kapangyarihan ng Diyos

c. pangangasiwa ng pamahalaan sa Sistema ng produksiyon at distribusyon sap ag-aari.

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d. pagtatag ng diktadurya ng mga manggagawa:

25.Ano ang kahalagahan ng Pandaigdigang Hukuman?
a. Sangay na nagpapasya na sa mga kasong may kinalaman sa alitan ng mga bansa
b. Sangay na nagpapasya at nagpapatupad ng pang araw-araw
c. Sangay na nagpapasya sa aspektio ng pangkabuhayan, panlipunan,pang-edukasyon ,siyentipiko at pangkalusugan bg daigdig.
d. Sangay na kung saan na lahat ng kasapi ay may kinatawan

26.Paano lumaganap ang Fascismo sa Italy?
a. Nilabanan ang demokrasya at parlamentaryo
b. Nang hikayat at pinalaganap ang kilusang komunismo
c. Nagkaroon ng kasunduan sa pagitan ng mga Italyano at Amerikano
d. Pinagsama -sama ang kapitalismo, sosyalismo at sistemang guild

27. Ang pamamalakad ng pamahalaan ay nasa kamay ng isang pangkat ng tao.
a. pasismpo
b. demokrasya
c. Totaltaryanismo
d. komonismo

28. Paano maaaring maipakita ang pagpapatupad ng ideolohiyang komunismo sa isang bansa?
a. Paglikha ng mga kooperatiba at pagmamay-ari ng mga industriya ng pamahalaan
b. Pagbubukas ng mga pribadong negosyo at pamamahala ng mga pribadong indibidwal
c. Pagsasagawa ng malayang kalakalan at pandaigdigang pakikipag-ugnayan
d. Pagpapatupad ng demokratikong proseso sa pamamahala ng bansa

29. Ano ang halimbawa ng kapitalismo sa pang-araw-araw na buhay?
a. Pagkakaroon ng malawak na libreng serbisyo ng kalusugan
b. Paglikha ng mga kooperatiba at samahan ng mga manggagawa
c. Pag-aari ng mga pribadong indibidwal ng mga negosyo at ari-arian
d. Pagpapalaganap ng pantay-pantay na pagkakataon sa edukasyon

30. Ano ang pangunahing layunin ng WHO- Worl Health Organization?
a. Magbigay ng tulong pinansyal sa mga bansa
b. Mapanatili ang pandaigdigang kapayapaan
c. Itaguyod ang pandaigdigang kalusugan
d. Magsagawa ng diplomatikong kasunduan

31. Alin sa sumusunod ang naging pangunahing kahinaan ng League of Nations?
a. Kakulangan sa kasaping bansa
b. Kakulangan ng pondo
c. Kawalan ng kapangyarihang militar upang ipatupad ang mga desisyon
d. Kawalan ng punong tanggapan

32. Isa sa mga binigyan halaga ng ideolohiyang Peminismo ay tungkol sa mga kababaihan alin sa mga sumusunod ang PANGUNAHING binigyan pansin para sa kanilang karapatan?
a. magkaroon ng partisipasyon sa politika
b. proteksyon sa lahat ng uri ng karahasan at diskriminasyon
c. bigyan ng mga pangkabuhayan ang mga kababaihan
d. magkaroon ng lider na mula sa mga kababaihan at bigyan gagambay

33. Ang Mga Bansang Nagkakaisa ay may anim na pangunahing sangay. Alin sa mga sumusunod na sangay ang tagapagbatas ng samahan at binubuo ng mga kinatawan ng lahat ng mga kasaping bansa?

a. Kalihim o Secretariat

b. Pangkalahatang Asemblea

c. Sangguniang Pangkabuhayan at Panlipunan

d. Sangguniang Pangkatiwasayan

34. Paano hinahamon ng sosyalismo ang umiiral na sistemang kapitalista?

A. Sa pamamagitan ng pagbuwag ng pamahalaan

B. Sa pagtutok sa pribadong pag-aari

C. Sa pagbibigay ng mas malaking papel sa estado sa pamamahala ng ekonomiya

D. Sa pagsasapribado ng serbisyo publiko

35. Alin sa sumusunod ang naging reaksyon ng mga bansang komunista sa pagkakatatag ng NATO?

A. Sumali sila sa NATO

B. Nagtatag sila ng Warsaw Pact

C. Pinaigting ang demokratikong eleksyon

D. Nagpadala ng tulong-pinansyal sa NATO

36. Ano ang naging epekto ng Cold War sa mga bansa sa Asya tulad ng Korea at Vietnam?

A. Pagkakaroon ng kapayapaan at pagkakaisa

B. Pagkakahati at pagkakaroon ng digmaan sa pagitan ng mga komunista at kapitalistang pwersa

C. Pagbabago sa kanilang sistema ng relihiyon

D. Pagbuo ng European Union

37. Ang mga sumusunod ay mabuting epekto ng Cold War MALIBAN sa isa:

a. Nabuo ang International Monetory Fund (IMF)

b. Nakapagpadala ng tao sa kalawakan ang USSR na si Yuri Gagarin.

c. Nabuo ang International Bank for Rehabilitation upang magkaron ng kasunduan ng paninil sa mga bansang nanira sa digmaan

d. Matagumpay na misyong mpangkalawakan noong Hulyo 20, 1969 ng makatapak sa buwan ang mga astronaut ng Amerika.

38. Ang mga sumusunod na bansa ay kasalukuyang nagtataguyod ng ideolohiyang komunismo maliban sa _____.

a. China   b. South Korea   c. North Korea   d. Vietnam

39. Sa pagitan ng Estados Unidos at Unyong Sobyet sa panahon ng Cold War dulot .Ano ang dahilan nito?

a. Saklaw ng teritoryo

b. Ideolohikal na mga pagkakaiba

c. Pampulitikang sistema

d. Ekonomiya at kalakalan

40. Sa iyong palagay , paano maiiwasan ang muling pagsiklab ng digmaan sa kasalukuyan?(palitan ang salitang palagay)

a. Labagin ang mga ksunduan

b. Ipailalim sa kapangyarihan ang nasasakupan ng ibang bansa

c. Pairalin ang inggit,pagiging makasarili at ang kaisipang nakahihigit ang sariling bansa kaysa sa iba

d. Pagkilala at pagunawa sa pagkakaiba ng mga bansa at pagbuo ng malalim na koneksyon at makatulong sa pag- unlad ng bawat isa

41. Ang Neokolonyalismo ay may malawak na epekto sa ekonomiya ng mga bansa maliban sa isa.

a. Pag-unlad ng industriya

b. Pagpapaunlad ng ekonomiya

c. Pagkakaroon ng kahirapan at pagka-depende sa bansang nanakop

d. Pagbibigay ng sapat na trabaho sa mga mamamayan

42. Bakit mahalagang maunawaan ang epekto ng Neokolonyalismo sa iba't ibang bahagi ng daigdig?

a. Upang malaman kung sino ang mga dayuhang bansa na naging kolonya

b. Upang maunawaan ang kasaysayan ng pag-aangkin ng mga bansa

c. Upang malaman ang mga epekto nito sa kasalukuyang kalagayan ng mga bansa

d. Upang maunawaan ang kahalagahan ng globalisasyon

43. Alin sa mga sumusunod ang nagpapaliwanag ng konsepto ng "malayang kalakalan"?

a. Pagbubukas ng mga bansa sa pag-aangkin ng ibang teritoryo

b. Pagkakaroon ng proteksyon sa lokal na industriya

c. Pagpapalitan ng kalakal nang walang hadlang o pagsasakop

d. Pagkakaroon ng pantay-pantay na ugnayan sa pagitan ng mga bansa

44. Paano hinahamon ng sosyalismo ang umiiral na sistemang kapitalista?

A. Sa pamamagitan ng pagbuwag ng pamahalaan

B. Sa pagtutok sa pribadong pag-aari

C. Sa pagbibigay ng mas malaking papel sa estado sa pamamahala ng ekonomiya

D. Sa pagsasapribado ng serbisyo publiko

45. Alin sa mga sumusunod ang tiyakang pakinabang ng matatanggap ng mga bansa kung sasanib sa sila sa Asia-Pacific Econimic Cooperation?

a. Pagpasok ng pamilihan at pag-aalis ng buwis sa mga kasaping bansa

b. Pagtutulungang ekonomiya at teknikal sa pagpapa unlad ng agham at ekonomiya

c. Tulong military laban sa magtatangkang sakupin ang kalabang bansa

d. Karagdagang ssubsidiya sa pagtatayo ng mga imprastraktura

46. Alin sa sumusunod ang nagtatakda ng pagiging kaanib ng United Nations?

a. Mga bansang nanalo sa Digmaan

b. Bansang may kakayahang magbigay ng taunang butaw

c. Anumang sukat at populasyon ng bansa na nagmamahal sa Kalayaan

d. Mga bansang naapektuhan ng Una at Ikalawang Digmaang Pandaigdig

47. Paano nakakatulong ang mga pandaigdigang organisasyon sa mga bansa na apektado ng digmaan?

A. Nagbibigay sila ng armas at kagamitan sa mga bansang kasali sa digmaan

B. Nagbibigay sila ng tulong sa mga refugees, biktima, at mga nasirang imprastruktura

C. Pinapalakas nila ang mga sistemang militar ng mga bansang kasali sa digmaan

D. Pinapalaganap nila ang mga kasunduan para sa pagsasanay ng mga sundalo

48. Alin sa mga sumusunod ang magiging epekto ng AFTA sa mga negosyo at industriya ng mga bansa sa ASEAN?

A. Pagbaba ng halaga ng kalakal sa mga bansang hindi kabilang sa ASEAN

B. Pagpapalakas ng kompetisyon sa pagitan ng mga negosyo sa mga miyembrong bansa

C. Pagtataas ng presyo ng mga produkto sa mga miyembrong bansa

D. Pagpapalawak ng merkado sa mga bansang hindi bahagi ng ASEAN

49. Alin sa mga sumusunod ang hindi kabilang sa mga pangunahing layunin ng UN?

A. Magkaroon ng pagkakaroon ng pandaigdigang kapayapaan

B. Magbigay ng tulong pang-ekonomiya at panlipunan

C. Pagtulong sa mga bansang naapektuhan ng kalamidad

D. Magtayo ng bagong pandaigdigang hukbong sandatahan

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50. Ano ang layunin ng UNESCO na bahagi ng United Nations?

A. Pangalagaan ang kapayapaan at seguridad

B. Itaguyod ang edukasyon, agham, at kultura upang mapalaganap ang kapayapaan

C. Magbigay ng pangkalusugang serbisyo sa mga bansa

D. Magtulungan ang mga bansa sa mga isyu sa terorismo

Posttest

Pangalan :   Seksyon :

Panuto : Basahing mabuti ang bawat tanong. Bilugan ang titik ng tamang sagot.

1. Alin sa mga sumusunod ang hindi kabilang sa mga pangunahing dahilan ng Unang Digmaang Pandaigdig?

a Pagtataas ng nasyonalismo sa mga bansa sa Europa

b Pag-aagawan sa mga kolonya ng mga makapangyarihang bansa

c Pagtutulungan ng mga bansang kasapi sa mga alyansa

d. Paglaganap ng ideolohiyang komunismo sa Europa

2. Ano ang direktang sanhi ng pagsiklab ng Unang Digmaang Pandaigdig?

a. Pag-atake ng Alemanya sa Pransya

b. Pagpaslang kay Archduke Franz Ferdinand ng Austria-Hungary

c. Pagpapahayag ng digmaan ng Britanya laban sa Alemanya

d. Pag-aagawan ng teritoryo sa Africa

3. Alin sa sumusunod na pahayag ang layunin ng Treaty of Versailles na nilagdaan noong 1919?

a. Magtayo ng isang pandaigdigang pamahalaan

b Magbigay ng tulong sa mga bansang natalo sa digmaan

c Magtakda ng mga parusa at kondisyon laban sa Alemanya at mga kaalyado nito

d. Magpataw ng mga parusa sa mga bansang kasapi sa Triple Entente

4. Ano ang naging epekto ng Unang Digmaang Pandaigdig sa ekonomiya ng mga bansang kasangkot?

a. Pagtaas ng ekonomiya ng mga bansa

b. Pagbagsak ng mga ekonomiya at pagbagsak ng mga imperyo

c. Pag-aangkat ng mga bagong teritoryo para sa mga makapangyarihang bansa

d. Pagbabalik sa mga sistema ng barter at kalakala

5. Bakit mahalaga ang "Balkan Peninsula" sa Unang Digmaang Pandaigdig?

a. Dito nagsimula ang unang digmaan

b. Dito nagtagal ang labanan sa pagitan ng mga Allied Powers at Central Powers

c. Dito naganap ang pagpaslang kay Archduke Franz Ferdinand

d. Dito pinirmahan ang Treaty of Versailles

6.Alin sa mga sumusunod ang hind itinuturing na mahalagang papel ng nasyonalismo sa pag-igting ng tension sa Europa?

a. Dahil sa pagnanasa ng mga bansang etniko para sa Kalayaan

b. Dahil sa pagpaparami ng mga militar

c. Pagpapalawak ng teritoryo

d. Pagpapalakas ng lider ng bansa

7. Alin sa mga sumusunod ang hindi bunga ng Unang Digmaang Pandaigdig?

a. Pagkakaroon ng Treaty of Versailles

b. Pag-usbong ng mga totalitaryang rehimen sa ilang bansa

c. Pagkakaroon ng mga bagong alyansa tulad ng NATO

d. Pagkakaroon ng mga bagong bansa sa Europa tulad ng Czechoslovakia at Yugoslavia

8. Alin sa mga sumusunod ang pangunahing layunin ng mga bansa sa Allied Powers na lumahok sa Unang Digmaang Pandaigdig?

a. Pagpapalawak ng teritoryo

b. Pagprotekta sa kanilang mga kolonya

c. Pag-aalaga sa kanilang mga interes sa ekonomiya

d. Pagtanggol sa kanilang karapatan at kalayaan laban sa agresyon

9. Sa Digmaan sa Silangan, anong imperyo ang sumuporta sa mga Central Powers sa pag-atake laban sa mga Ruso at mga kalapit na bansa sa Asya?

a. Japan

b. Ottoman Empire

c. Pransiya

d. United Kingdom

10. Alin sa mga sumusunod ang dahilan kung bakit nahirapan ang mga bansang Europeo na makabawi mula sa pagkawasak dulot ng digmaan?

a. Mataas na antas ng teknolohiya

b. Pagbagsak ng kanilang mga ekonomiya at imprastruktura

c. Pag-aangkat ng mga hilaw na materyales mula sa mga kolonyal na bansa

d. Hindi pagkakasundo ng mga lider ng bansa

11. Ano ang pangunahing dahilan ng pagsiklab ng Ikalawang Digmaang Pandaigdig?

a. Pagpatay kay Archduke Franz Ferdinand

b. Pag-agaw ng Germany sa Poland

c. Pagtatapos ng Unang Digmaang Pandaigdig

d. Pagpapalawak ng teritoryo ng Japan

12. Alin sa mga sumusunod ang naging bunga ng Treaty of Versailles na nagpasiklab ng Ikalawang Digmaang Pandaigdig?

a. Pagpapayapa sa mga bansa

b. Pagpapalakas sa Germany

c. Pagpapahirap sa ekonomiya ng Germany at pagtatanim ng galit

d. Pagtatag ng mga bagong alyansa

13. Ang ideolohiya ng "survival of the fittest" na tumutukoy sa mga bansang may karapatang mangibabaw sa mga mahihina ay tinatawag na?

a. Nasyonalismo

b. Militarismo

c. Social Darwinism

d. Imperyalismo

14. Ano ang pangunahing layunin ng Japan sa pagsakop sa mga bansa sa Timog-Silangang Asya?

a. Palaganapin ang demokrasya

b. Palitan ang Kanluraning kolonyalismo

c. Kumuha ng likas na yaman at langis

d. Magtatag ng pandaigdigang kapatiran

15. Alin sa sumusunod na pahayag ang direktang dahilan ng pagsali ng Estados Unidos sa Ikalawang Digmaang Pandaigdig?

a. Paglusob ng Germany sa France

b. Paglusob ng Japan sa China

c. Paglusob ng Germany sa Poland

c. Pag-atake ng Japan sa Pearl Harbor

16. Ang Treaty of Versailles ay mahalaga dahil_____

a. Pinayagan ang Germany na magparami ng sandata

b. Inilipat ang kapangyarihan sa League of Nations

c. Pinagbabayad ang Germany ng reparations o danyos

d. Pinalawak ang teritoryo ng Germany

17. Paano ipinakita ng U.S. ang kanilang paninindigan laban sa totalitaryanismo?

a. Pagtanggap sa mga diktador

b. Pagtutol sa Digmaan

c. Pagsuporta sa Allied Powers laban sa Axis

d.Pagpapasara ng mga paaralan

18. Ang relasyon ng mga bansang U.S at Soviet Union pagkatapos ng digmaan ay _____

a. Naging magkaibigan habambuhay

b. Nagsimula ang Cold War

c. Nagkasundo sa lahat ng isyu

d. Nagkaisa sa pagtatatag ng imperyo sa Europa

19.Pagkatapos ng ikalawang digmaan paano naapektuhan ang mga kontinente ng Asya at Aprika ?

a. Tumanggap sila ng mas maraming ayuda

b. Naging mas makapangyarihan ang mga bansang Europeo

c. Lumakas ang kilusang nasyonalismo at paglaya

d. Lalong napalalim ang kolonyalismo

20.Alin sa mga sumusunod ang isang paraan ng mga bansa upang makamit ang kaunlaran matapos ang digmaan?

a. Pananakop ng ibang bansa

b.Pagpaparami ng armas

c. Pagpapaunlad ng ekonomiya sa pamamagitan ng tulong internasyonal

d. Pagpapalaganap ng takot sa mga mamamayan

21.Ano ang pangunahing layunin ng pasismo na isinulong nina Benito Mussolini at Adolf Hitler?

a. Malayang kalakalan

b. Pagtatag ng isang pamahalaang may malayang eleksyon

c. Pagkontrol ng gobyerno sa lahat ng aspeto ng buhay ng mamamayan

d. Pagpapatalsik sa mga dayuhan

22. Alin sa mga sumusunod ang itinataguyod ng komunismo?

a. Pribadong pag-aari

b. Pantay-pantay na lipunan at kolektibong pagmamay-ari

c. Malayang halalan

d. Diktadurya ng maharlika

23. Ano ang resulta ng pagkatalo ng Russia sa Unang Digmaang Pandaigdig sa loob ng bansa?

a. Naging inspirasyon ito sa mga mamamayan

b. Tumindi ang suporta sa pamahalaan

c. Lumala ang kagutuman at kawalan ng tiwala sa pamahalaan

d. Naging maunlad ang industriya

24. Ang layunin ng komunismo bilang isang ideolohiya ay_____

a. Magkaroon ng pribadong pag-aari

b. Palakasin ang kapangyarihan ng hari

c. Lumikha ng lipunang walang uri at pantay-pantay

d. Paunlarin ang kapitalistang ekonomiya

25. Ano ang papel ng Pandaigdigang Hukuman sa pagpapanatili ng pandaigdigang kapayapaan?

a. Maghatol ng parusa sa mga krimen laban sa sangkatauhan

b.Magpasya sa mga alitan sa pagitan ng mga bansa

c. Magtakda ng mga patakaran sa pandaigdigang kalakalan

d. Magbigay ng edukasyon tungkol sa batas internasyonal

26. Aling aspeto ng ekonomiya ang binibigyang-diin sa kapitalismo?

a. Ang kapangyarihan ng estado ay magdikta sa lahat ng aspeto ng buhay ng mga mamamayan

b. Pagpapalaganap ng pantay-pantay at kolektibong kontrol ng mga yaman

c. Pagtangkilik ng mga pribadong negosyo at libreng pamilihan

d.Pagbibigay ng pantay na oportunidad sa lahat ng sektor ng lipunan

27. Ano ang pangunahing katangian ng pamumuno sa ilalim ng Fascismo?

a.Ang pagbibigay kapangyarihan sa mga manggagawa at magsasaka

b.Ang pagpapalaganap ng ideyal ng pantay-pantay at kolektibong pag-aari

c.Ang pagpapahalaga sa estado at nasyonalismo, at ang paglilimita ng kalayaan ng indibidwal

d.Pagpapalaganap ng mga demokratikong prinsipyo at karapatang pantao

28. Sa ilalim ng komunismo, paano itinataguyod ang pantay-pantay na distribusyon ng yaman?

a.Ang mga yaman ng bansa ay ipinapamahagi ng pantay-pantay sa bawat sektor ng lipunan

b.Pinapayagan ang mga negosyo na magtulungan upang mapalaki ang kita ng mga may-ari

c.Ang gobyerno ay nagbibigay ng mga insentibo sa mga negosyante upang mapabuti ang pamilihan

d. Tinutulungan ng pamahalaan ang mga mayayamang tao na magpayaman pa lalo

29. Alin sa mga sumusunod ang halimbawa ng kapitalismo sa pang-araw-araw na buhay?

a. Ang mga mamamayan ay nagtatrabaho para sa mga kumpanya na may mga pribadong may-ari.

b. Ang mga pabrika at mina ay pag-aari ng pamahalaan at hindi maaaring bilhin ng mga pribadong tao.

c.Ang lahat ng negosyo sa bansa ay pinapalakad ng gobyerno.

d.Ang lahat ng mga negosyo ay walang layunin ng kumita ng kita o tubo.

30. Paano nakakatulong ang WHO sa mga bansa na apektado ng digmaan?

a. Nagbibigay sila ng mga pinansyal na tulong para sa pagpapalakas ng militar

b. Nagbibigay sila ng mga medikal na suplay at suporta upang labanan ang mga sakit at epidemya

c. Tinutulungan nila ang mga bansa na magkaroon ng mas maraming armas at sundalo

d Nagpapadala sila ng mga misyon para sa pagpapalawak ng mga teritoryo ng mga bansa

31. Anong mahalagang pangyayari ang nagpatibay ng pagtatatag ng League of Nations?

a.Ang pagtatapos ng Ikalawang Digmaang Pandaigdig

b.Ang pagkatalo ng Alemanya sa Unang Digmaang Pandaigdig

c. Ang pagsabog ng isang nuclear bomb sa Hiroshima at Nagasaki

d.Ang pagsikò ng mga sosyalista sa Russia

32. Anong mga isyu ang karaniwang pinagtutuunan ng Feminismo?

a.Pagpapalakas ng kapangyarihan ng mga lalaki sa lipunan

b.Pagpapatibay ng tradisyonal na roles ng mga kababaihan

c. Pagtutol sa diskriminasyon at hindi pagkakapantay-pantay sa pagitan ng kalalakihan at kababaihan

d. Pagpapalaganap ng mga relihiyosong pananaw sa mga kababaihan

33. Ano ang papel ng Secretariat sa United Nations?

a. Magpatupad ng mga desisyon at resolusyon ng United Nations

b. Magbigay ng tulong pang-ekonomiya sa mga kasaping bansa

c. Magbigay ng legal na serbisyo sa mga bansa

d. Magbigay ng administratibong suporta at mag-ugnay ng mga aktibidad ng UN

34. Paano hinahamon ng sosyalismo ang sistemang kapitalista?

a.Sa pamamagitan ng pagpapatupad ng libreng kalakalan

b. Sa pamamagitan ng paggiit na lahat ng negosyo ay pag-aari ng pribado

c. Sa pamamagitan ng pamahalaan na kumokontrol sa mahalagang sektor ng ekonomiya

d. Sa pamamagitan ng pagbawas ng buwis sa mga mayayaman

35. Ano ang naging tugon ng mga bansang komunista, lalo na ng Soviet Union, sa pagkakatatag ng NATO?

a. Pagtanggap ng kasunduan bilang mapayapang alyansa

b. Pagbuo ng Warsaw Pact bilang kanilang alyansa

c. Pagbuwag ng kanilang mga puwersang militar

d. Pakikipagkasundo upang maging kasapi ng NATO

36. Alin sa mga sumusunod na ideolohiya ang humamon sa kapitalismo sa panahon ng Cold War?

a. Demokrasyang Liberal

b. Sosyalismo/Komunismo

c. Konserbatismo

d. Peminismo

37. Ano ang pangunahing dahilan ng Cold War?

a. Labanan sa teritoryo sa Africa

b. Kompetisyon sa pagitan ng komunismo at kapitalismo

c. Pagbabagsak ng Ottoman Empire

d. Pag-unlad ng pandaigdigang turismo

38. Alin sa mga sumusunod ang isang bansa na hanggang ngayon ay may pamahalaang komunista?

a. Japan

b. North Korea

c. Germany

d. India

39. Alin sa mga sumusunod ang isang modernong uri ng banta na maaaring magdulot ng digmaan sa kasalukuyan?

a. Pananakop sa mga kolonya

b. Cyber attacks o pag-atake gamit ang teknolohiya

c. Pananakot ng mga pirata sa karagatan

d. Paglalaban sa relihiyon noong gitnang panahon

40. Ang Neokolonyalismo ay may malawak na epekto sa ekonomiya ng mga bansa, maliban sa isa. Alin sa mga sumusunod ang HINDI direktang epekto ng neokolonyalismo?

a. Pagkontrol ng dayuhang kompanya sa lokal na likas na yaman

b. Pagkakaroon ng utang panlabas sa mga makapangyarihang bansa

c. Pagkakaroon ng ganap na kasarinlan sa ekonomiya

d. Pag-asa ng mga umuunlad na bansa sa dayuhang pamumuhunan

41. Alin sa mga sumusunod ang hindi epekto ng neokolonyalismo sa isang bansa?

a. Pagkabaon sa utang panlabas

b. Pag-asa sa dayuhang pamumuhunan

c. Ganap na kasarinlan sa ekonomiya

d. Pagkontrol ng dayuhan sa likas na yaman

42. Alin sa mga sumusunod ang halimbawa ng neokolonyalismo sa kasalukuyan?

a. Pananakop ng mga Espanyol

b. Pagtatayo ng base-militar ng dayuhan sa isang bansa

c. Pagboto sa isang eleksyon

d. Pag-alis ng kolonya sa isang bansa

43. Ano ang pangunahing layunin ng malayang kalakalan (free trade)?

a. Pagbabalik ng mga likas na yaman sa mga bansa

b. Pag-aalis ng mga hadlang at taripa sa pagitan ng mga bansa

c. Pagpapalawak ng mga pabrika sa buong mundo

d. Pagpapabuti ng mga polisiya sa mga maliliit na Negosyo

44. Paano nakaapekto ang ideolohiya sa mga bansang tulad ng Korea at Vietnam?

a. Nagkaisa ang mga mamamayan

b. Nahati ang bansa at nagkaroon ng digmaan

c. Naging sentro ng kalakalan

d. Lumawak ang kultura ng kanluran

45 Ano ang epekto ng pagkakaroon ng mga peacekeeping missions ng United Nations sa Asya, lalo na sa mga bansa na naapektuhan ng digmaan?

a. Nagkaroon ng mga bagong teritoryo at kolonya para sa mga bansa ng Asya

b. Nagbigay ng proteksyon sa mga sibilyan at pinigilan ang mga digmaan

c. Nagdulot ng mga hindi pagkakasunduan sa mga kasapi ng UN

d. Nakapagdulot ng mas maraming kaguluhan at digmaan sa rehiyon

46. Paano nakatulong ang APEC sa mga bansang Asyano na bahagi ng samahan?

a. Pinadali ang mga negosasyon at kasunduan sa mga isyung pangkalusugan

b. Nagbigay ng mga pautang sa mga bansa upang mapabuti ang kanilang imprastruktura

c. Pinabilis ang proseso ng malayang kalakalan at ekonomiya sa mga bansang kasapi

d. Nagbigay ng tulong sa mga bansang hindi kasapi upang

47. Paano nakatulong ang IMF sa mga bansang nasalanta ng digmaan?

a. Nagbigay ng mga direktang tulong sa mga mamamayan

b. Nagpahiram ng pera upang matulungan ang mga bansa na makabangon mula sa epekto ng digmaan

c. Nagpadala ng mga sundalo upang magbigay ng seguridad

d. Nagbigay ng mga edukasyon at training sa mga lider ng bansa

48. Paano nakatulong ang EU sa pagpapalaganap ng kapayapaan sa Europa pagkatapos ng Ikalawang Digmaang Pandaigdig?

a Pinipilit ng EU na magsagawa ng mga digmaan upang mapanatili ang kapayapaan.

b. Pinayagan ng EU ang mga bansa na muling maglaban para sa kanilang mga teritoryo.

c. Pinagtibay ng EU ang mga kasunduan at kooperasyon na nagpatibay ng diplomatikong ugnayan at nagbawas ng mga hidwaan.

d. Iniiwasan ng EU ang pakikialam sa mga hidwaan ng mga bansa.

49. Alin sa mga sumusunod ang programa ng UNICEF?

a. Pagbibigay ng loans sa negosyante

b. Pagpapalaganap ng musika

c. Pagpapabakuna sa mga bata

d. Pagpapatupad ng batas sa trapiko

50. Alin sa mga sumusunod ang hindi bahagi ng mga gawain ng UNESCO sa Asya?

a. Pagtuturo ng edukasyon para sa lahat

b. Pagpapaunlad ng teknolohiya ng armas

c. Pagpapanatili ng mga katutubong wika at kultura

d. Pagsuporta sa mga siyentipikong pananaliksik
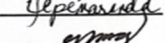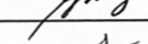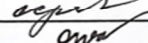
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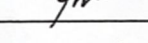
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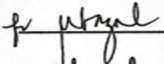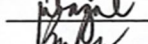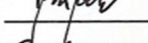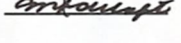**CERTIFICATE OF CONTENT VALIDATION**

This is to certify that the following persons have content validated the researcher-made questionnaire of **ROSE ANNE P. MALTO** for the study entitled, **EFFECTIVENESS OF SUBJECT COURSEWARE IN TEACHING ARALING PANLIPUNAN FOR GRADE 8.**

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9. Dr. Edith SA Delos Santos	Principal IV		3-21-2025

APPENDIX G
Certificate from the Statistical Center

APPENDIX H
Gantt Chart of Activities

ABOUT THE RESEARCHER

Activities	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug
				2024						2025				
1. Submission of Proposed Titles		➡												
2. Title Defense		➡												
3. Preparation of Chapters 1, 2, and 3			➡➡➡➡➡➡➡➡											
4. Search for Related Literature and Studies					➡➡➡➡➡➡➡➡									
5. Colloquium									▯					
6. Preparation and validation of Questionnaire-Checklist and Test										➡				
7. Permission to Conduct the Study										➡				
8. Administration of Test										➡				
9. Experiment										➡				
10. Administration of Posttest														
11. Tallying, Tabulation and Analysis of the Questionnaire-Checklist											➡			
12. Statistical Center											▯			
13. Revision of Chapters 1, 2, and 3											➡			
14. Preparation for Chapters 4 and 5												➡		
15. Final Oral Defense													▯	
16. Revision of Chapters 1-5													▯	
17. Anti-Plagiarism														▯
18. Final Printing of the Manuscript														➡
19. Book Binding														▯
20. Submission of Hardbound Copies														▯

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