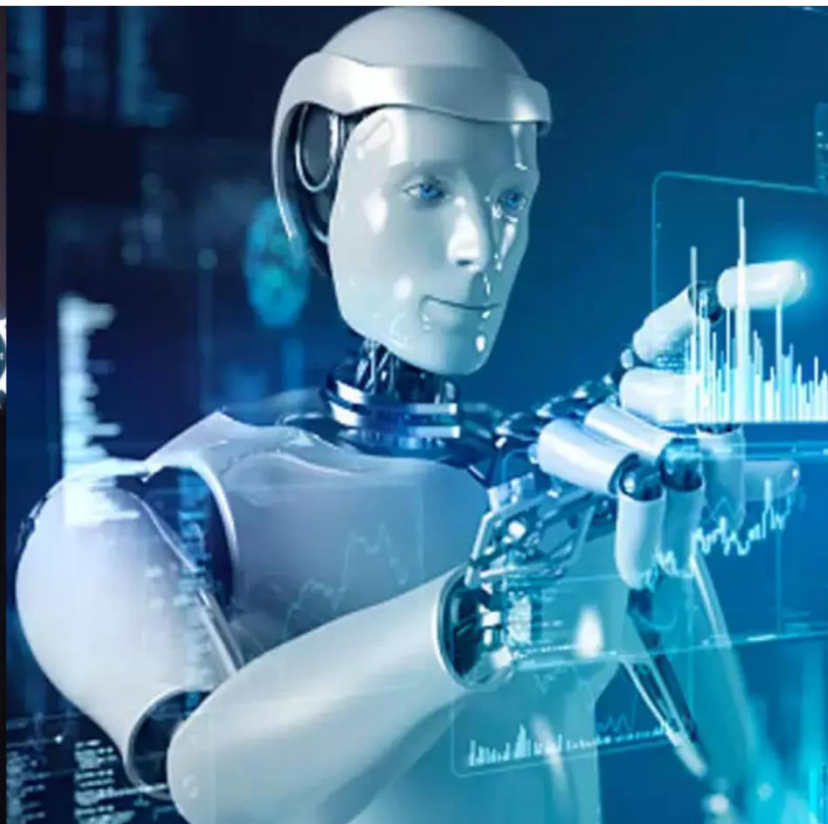




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# Associative Cognitive Enhancer Strategy (ACES) for SHS Language Arts Teaching

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**ABSTRACT:** Language Arts pertains to English language learning areas form the foundation for effective communication. The ability to construct meaning through reading, writing, listening, speaking, speaking, viewing, and the process of inquiring as well as the ability to present ideas through writing, speaking, and visual media are the bases of Language Arts. It was recorded of for having consistently got low mastery in the Makro skills such as speaking, reading, and writing in the consolidated least mastered learning competencies in SHS Language Arts, it is very alarming to the students who experienced pandemic-learning, for them to encourage its teachers to increase effort to innovate in transferring the learnings to the students. Innovative Teaching Strategy: Associative Cognitive Enhancer Strategy (ACES) aims to lessen the students with difficulties in dealing with Language Arts; improve the academic performance in the given competencies; enhance the implications of technology in its creative/ innovative way of the teaching learning process; and justify the essence of using manipulative strategies/pedagogical approach. The methods used were practical types of action research and respondents were SHS students. Data was gathered through the use of a content validated self-constructed questionnaire, and the academic performance result before and after the implementation of ACES. The statistical treatment used were the frequency, percent, mean, mean percentage score, standard deviation, and t-test. Findings were the academic performance of the respondents increases 21.93 to 32.16 mean score after the implementation of the program; and the impact is significant because ACES is used as strategy to involve students in learning. Hence, the researcher concluded that technology alone isn't only the answer but the collaboration of teachers aligning the strategies with the learning competencies can help for the transformation of learning of the students. ACES will be recommended to be utilized in the teaching and learning process of dealing Language Arts subjects.

**KEYWORDS:** Teaching Strategies; Language Arts/ English; Technology Integration; Student Engagement

## I. INTRODUCTION

Language Arts formed the foundation for effective communication. The ability to construct meaning through reading, writing, listening, speaking, viewing, and the process of inquiring as well as the ability to present ideas through writing, speaking, and visual media are the bases of English/Language Arts. These skills, essential to the health of our democracy and the quality of our culture, have become ever more important with the modern explosion of modern communication media. Effective communication is critical regardless of the devices used or the distances over which we are communicating.

The everyday demands of classroom instruction increase in complexity from year to year—with respect to curricular demands, accountability, and the diversity of the student population. New state frameworks and instructional trends require grade-level curricular standards to continually change.

Approaches in teaching were the ways of looking at teaching and learning. Underlying any language teaching approach is a theoretical view of what language is, and of how it can be learnt. An approach gives rise to methods, the way of teaching something, which use classroom activities or techniques to help learners learn. Thus, English/Language Arts has a separate list of teaching approaches' strategies compare with other learning areas that being utilized in the teaching and learning process.

In this regard, to develop an English/Language Arts' learners, students must become engaged as active learners with the aid of effective utilization of teaching approaches integrating the 21st century means of modernization which is

technology. Especially the new generation is growing up with technology experiencing the New Normal processes of educational system and gets familiar with it. Computer technologies have dramatically changed the way people reach information, do research, and communicate with people all around the world. Because of this reason, schools and teachers need to be aware of improving their teaching strategies such as technological tools and skills to be able to catch the students' attentions and interests. Integrating technology in classrooms also makes the lesson more efficient.

Meanwhile, in the class local which the researcher handling, the students gained 33.33% in Language Arts out of 75% passing rate in the First Quarter; and for having consistently got low mastery in the Makro skills such as speaking, reading, and writing that recorded in the consolidated least mastered learning competencies in SHS Language Arts, it is very alarming to the students who experienced pandemic-learning, for them to encourage its teachers to increase effort to innovate in transferring the learnings to the students.

Since my students dealt with some circumstances in their studies, the researcher noticed that learners are experiencing environmental gaps. Sometimes, a student's surroundings can become a barrier to effective learning. Some examples include unexpected learning roadblocks, missing materials, resources, or technology, no direction, and unexpected costs. With this gaps, parents-teachers communication must be on the line and to draw some attention to the learner, because if these are left unattended, there can be significant and cause major learning losses or academic setbacks. Also, the students are having struggle in learning Language Arts in both academic and professional purposes, based on the tracking of recent mean percentage scores. Hence, educators should provide learning opportunities to the learners to increase student engagement and achievement, by communication and innovative methods are the best fit for them.

In line with these facts of the problems encountered in SHS Language Arts teaching, the researcher felt the need to find necessary solutions. With this, the researcher believed that it could lessen the challenges that our teachers and students are facing today using new and innovative ways of teaching.

The present study proposed innovative teaching strategies integrating technology dealing with the least mastered skills such as Associative Cognitive Enhancer Strategy (ACES).

Associative Cognitive Enhancer Strategy (ACES) is an innovative strategy where learning takes place when several ideas integrated with technology through the utilization of Internet are introduced to a student that are mutually reinforcing. In the classroom, this means presenting students with several stimulus e-materials that help a student to recall a fact. ACES tools are educational technologies designed to promote thinking beyond what a student can do without the technology. This might include using wearable technologies to help students map out their own movements to then test their knowledge of geography, use of excel sheets to create financial statements, etc. Hence, it aims to enhance cognitive level of the Makro skills associatively. The recall of information is dependent on other associated information over the internet and stimulus e-materials. Students may also browse internet apps and/ or educational platforms that encourage students to find and process information in engaging contexts, adding an interesting spin to the research process. It may also enhance their reading through skimming, scanning and previewing; and writing skills. Video analysis activity can increase cognition for it can bolster the lesson plans by using videos as stand-alone overviews for some topics that enhance viewing and writing skills. It is also available as skill reviews and previews. Hence, ACES is a product of Direct Approach, Cognitive Approach, Audio-Lingual and Audio-Visual Approach, Oral-Situational Approach, and Community Language Teaching (CLT) Approach which every Language Arts teacher might wonder if the five approaches can be merged into one!

## II. LITERATURE SURVEY

In the 21st century, learning technologies have increasingly become pervasive within various forms of learning environments. Institutions of higher education are increasingly turning to these technologies to resource and support their teaching and learning environments under distributed circumstances, face-to-face, or blended (Kumar, 2016). Hence, teaching approaches to integrate technology in dealing with Language Arts is a must.

Technology integration greatly help to achieve it, teachers and students must access to technology in a contextual matter that is culturally relevant, responsive, and meaningful to their educational practice and that promotes quality teaching and active student learning (Steven, 2011) and having technology integration in the classroom can also support classroom instruction by creating opportunities for students to complete assignments on the computer rather than with

normal pencil and paper (Dokstader, 2008) that related to the literature of Walden University (2019) explaining that leveraging technology will help students become proficient consumers and producers of knowledge, creating learner-centered classrooms using the latest digital technologies, incorporating computer-mediated instruction across grade levels and content areas using technology to become an agent of social change.

However, some studies and literature contradict the integration of technology in teaching like Dolphins (2013) stated that introduced technology is not always preferred and technology isn't always the answer. Together with Toledo (2016) stated that this type of application of the model can result in a reduction of time, the maximization of resources, and the creation of effective faculty development programs. In addition, Autorsplit, (2003) stated that the availability of technology is not the solution. Instead, the answer is to establish an environment by using the best resources available to assure that students learn and can construct their learning environment.

Nevertheless, Hawkins (2019); Steven (2011), Cormier (2008) still, technology contributes to global development and diversity in classrooms while helping to develop upon the fundamental building blocks needed for students to achieve more complex ideas. For technology to make an impact within the educational system, teachers and students must access technology in a contextual matter that is culturally relevant, responsive, and meaningful to their educational practice and that promotes quality teaching and active student learning

Also, the studies of Heick (2018; Prishtina (2016), Young (2016); Bandyopadhyay (2013); and Jhuree (2005) about the integration of teaching approaches and methods in teaching and learning Language Arts recommended that the learning process should integrate interactive, proactive, and productive. Where the findings revealed that teachers must identify in which teaching approaches and strategies are appropriate to their class or students.

The present study is not identical in nature and scope with any of the aforementioned studies. Since most of them focus only on the technology integration itself and/ or focus on the strategies itself while the present study concentrated on both of the teachings approaches utilized in the teaching and learning of Senior High School Language Arts; and technology integration with the proposed strategy (ACES).

All the components revealed in both conceptual and research literature provided the framework of the present study and contributed a great help to the present researcher in obtaining additional information relevant to this study. This would be the contribution of this paper to the already existing researches since this is the first piece of work to investigate these facets in Senior High School-Philippines undertakings.

### III. METHODOLOGY

The researcher made use of the practical design of action research. Practical action research "is a paradigm of inquiry whose primary purpose is to improve the capacity and subsequent practices of the researcher rather than produce theoretical knowledge" (Bell et al., 2004, p. 1). The main feature of action research is that it triggers the researcher to set in motion change based on the feeling that human conditions can only be improved if there is change. It enhances the practice of education through a systematic study of a local problem. During the research process, the researcher learns together with the students. In addition, the researcher must identify the problems and analyze them in order to identify gaps. The researcher is the head of the process who steers the analysis of results and identification of actions needed. The realization of the anticipated change requires collective responsibility. Whilst the researcher takes charge of the processes of problem identification, data collection and analysis, and the identification of actions needed, students are required to participate in the actualization of the identified courses action.

Respondents are the 221 SHS students handled by the researcher in Language Arts subjects.

A self-constructed questionnaire is to be devised by the researchers to gather the necessary information about the problem of the study.

In order to elicit the information needed in this study, the researcher decided to use a questionnaire. The sole source of data was a self-constructed questionnaire, composed of the learning competencies.

In calculating the answers, appropriate statistical tools and methods will be applied. Rest assured that one hundred percent (100%) retrieval of test papers and questionnaires will be recorded in the e-class record to be computed to get the academic profile before and after the implementation of ACES.

The researcher will use the statistical treatment of data that will be stated below in order to come up with accurate and legitimate information that the researchers will use in the presentation of the data analyzed as an interpretation of the information gathered by the researchers. The frequency was used to determine the distinction of the number of responses particularly in the profiling, while weighted mean and standard deviation were to present the variation in the results of the difference before and after the implementation of the innovative teaching strategy: ACES.

#### IV. EXPERIMENTAL RESULTS

The following results revealed the answers sought in the research objectives of the study.

##### 1. Academic Profile of Senior High School students (researcher's class) in learning English/ Language Arts for the First Quarter of First Semester

**TABLE 1: SHS STUDENTS' ACADEMIC PERFORMANCE PROFILE IN LANGUAGE ARTS**

LEVEL OF PROFICIENCY	TOTAL	%
Outstanding	26	11.76
Very Satisfactory	38	17.20
Satisfactory	57	25.80
Fairly Satisfactory	100	45.24
Did Not Meet Expectations	0	0

N: 221

Table 1 presents the academic performance profile of the SHS students handling by the researcher in their First Quarter- First Semester S.Y. 2022-2023 grade in Language Arts subject. The academic profile is divided into five (5) levels of proficiency such as Outstanding (90-100); Very Satisfactory (85-89); Satisfactory (80-84); Fairly Satisfactory (75-79); and Did Not Meet Expectations (74 and below). The level of proficiency which is Very Satisfactory gained the total percentage of 17.20%; while Satisfactory gained 25.80%; and 45.24% for Fairly Satisfactory which comprised the great percentage for the academic performance. Few of them got 11.76 percentage for Outstanding level. 100 learners out of the total population of 221 learners have the highest percentage of level of proficiency which is Fairly Satisfactory.

The data shows that though, all of the students passed the Language Arts subjects, there are great number of students who have Fairly Satisfactory grade. It is alarming for there is a great percentage of the total population have the First Quarter grade ranges 75-79.

##### 2. Academic Performance before (First Quarter) and after (Second Quarter) the implementation of ACES

**TABLE 2: RESULTS OF ACADEMIC PERFORMANCE PER QUARTER**

	Non-Implementation of ACES		ACES Implementation	
	Mean	SD	Mean	SD
First Quarter	21.93	7.82		
Second Quarter			32.16	10.07
Difference	Mean: 10.23		SD: 2.25	

Table 2 shows the academic performance of the respondents before and after the implementation of Associative Cognitive Enhancer Strategy (ACES) in teaching SHS Language Arts. The mean score of the learners before the implementation of ACES in the First Quarter is 21.93 increases of 10.23 after the utilization of and gained 32.16 in the Second Quarter. Also, the standard deviation increases from 7.82 to 10.07 with the 2.25 difference.

The application of modern technology represents a significant advance in contemporary English language teaching strategies manifested in ACES.

Effective technology integration must happen across the curriculum in ways that research shows deepen and enhance the learning process. In particular, it must support four key components of learning: active engagement, participation in groups, frequent interaction, and feedback, and connection to real-world experts. Technology helps change the student/teacher roles and relationships: students take responsibility for their learning outcomes, while teachers become guides and facilitators. Therefore, the increase in the gained mean after the implementation of ACES truly plays vital role in the improvement of the academic performance of the SHS students.

Furthermore, teaching approaches with teaching strategies integrating technology is a response to the call of the Department of Education order no. 42 series of 2016 that Information and Communication Technology (ICT) must integrated into the learning areas; and also, the continuation of the previous studies stated in Olan, 2020.

### 3. Test of significant difference between non implementation and implementation of the innovative teaching strategy: ACES in the Senior High School students in learning English/Language Arts

TABLE 3: TEST OF DIFFERENCE BETWEEN NON-IMPLEMENTATION AND IMPLEMENTATION OF THE INNOVATIVE TEACHING STRATEGY: ACES

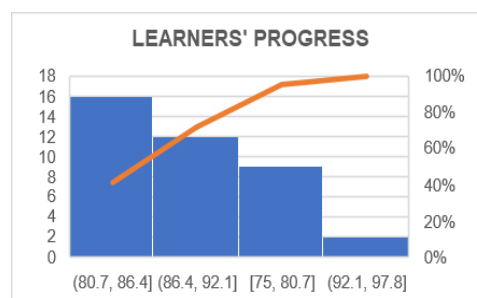
Innovative Teaching Strategy: ACES					
Respondent's Academic Profile	WM	T	P-value	Decision	Conclusion
First Quarter	5.59	1.825	0.012	Reject Ho	Significant
Second Quarter	18.36				

\*  $p < 0.05$  Reject Ho  
 $p > 0.05$  Fail to Reject Ho

Table 3 interprets the test significant difference between the respondents' academic profile for the first and second quarter of the First Semester of the Senior High School students in learning Language Arts. The decision is to reject the null hypothesis (there is no significant difference between the assessment of two quarters) if the p-value exceeds the level of significance (0.05). Hence, reject the hypothesis if the p-value does not exceed the level of significance. The researcher reject the null hypothesis since the p-value of the respondents  $> 0.05$ . Therefore, at 5% level of significance, the researcher has sufficient evidence to conclude that there is significant difference between the non-implementation and implementation of the innovative teaching strategy: ACES in the SHS Language Arts.

### 4. Impact of the innovative teaching strategy: ACES in the academic performance of Senior High School students in learning English/Language Arts

FIGURE 1: IMPACT OF THE INNOVATIVE TEACHING STRATEGY: ACES



Generally, the curriculum drives the use of technology and not vice versa. Curriculum and the teaching approaches in Language Arts with the integration of technology in the teaching strategies involve the infusion of technology as a tool to enhance the learning in a content area or multidisciplinary setting. Effective integration of technology is achieved when students can select technology tools to help in obtaining information promptly, analyze and synthesize the information, and present it professionally to an authentic audience. The technology should become an integral part of how the classroom functions—as accessible as all other classroom tools.

The present study utilized innovative teaching strategy integrating technology dealing with the least mastered skills which is Associative Cognitive Enhancer Strategy (ACES) in the whole Second Quarter of the First Semester for SY. 2022-2023.

As one of the most important goals of using new ways of teaching language in secondary schools is to promote students' motivation towards learning, we can see in this study that teaching strategies integrating technology operates as a powerful pedagogical tool in English classes. This study supports the effect of the superiority of technology-based lessons as compared to traditional lessons. English teachers should consider their students' needs and interests, and the questionnaire results indicate that the majority of the students show their positive perceptions of using technology in English classes. This study is supported by the results of the earlier studies of Heick, (2018), Prishtina, (2016), Pedaste, (2014), Kazzim and Ali, (2015), Hawkins, (2019), and the like.

It only means that the level of performance improved will give an impression of there is a need to develop the teaching and learning process of Language Arts subjects through the integration of technology in such strategy such ACES. For, information technology has broadened our concept of the learning environment. It has made it possible for learning experiences to be extended beyond the confines of the traditional classroom. It can help students to improve Makro skills such as listening, reading, speaking, writing, and viewing if they are aided by the technology. Technology alone isn't only the answer but the collaboration of teachers aligning the strategies with the learning competencies can help for the transformation of learning of the students.

## V. CONCLUSION

Based on the findings of the study, the following conclusions were drawn:

1. The results is alarming for there is a great percentage of the total population have the First Quarter grade ranges 75-79.
2. This innovative teaching strategy: ACES- supports the effect of the superiority of technology-based lessons as compared to traditional lessons.
3. It concludes that ACES is using wearable technologies that aims to enhance the cognitive level of Makro skills associatively.
4. Technology alone isn't only the answer but the collaboration of teachers aligning the strategies with the learning competencies can help for the transformation of learning of the students.

Based on the findings and conclusions, the following were recommended:

1. The proposed teaching strategies integrating technology in the least mastered learning competencies to aid the Fairly Satisfactory students may be utilized by the teachers of Language Arts in Senior High School.
2. Language Arts teachers should consider their students' needs and interests, and the questionnaire results indicate that the majority of the students show their positive perceptions of using technology in Language Arts classes.
3. The transformation of the Language Arts class utilizing ACES is all about the recall of information is dependent on other associated information over the internet and stimulus e-materials may continually facilitated and cultivate.
4. Language Arts teachers need to integrate technology seamlessly into the curriculum instead of viewing it as an add-on, an afterthought, or an event.
5. Future researchers may conduct other similar studies on technology integration in other teaching approaches in different learning areas and related innovations may be pursued.

“If we teach today as we taught yesterday, we rob our children of tomorrow.” – John Dewey  
Do not confine your children to your own learning, for they were born in another time.

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