

INTERNATIONAL JOURNAL OF MULTIDISCIPLINARY: APPLIED BUSINESS AND EDUCATION RESEARCH

2022, Vol. 3, No. 12, 2589 – 2597

<http://dx.doi.org/10.11594/ijmaber.03.12.12>

Research Article

An Assessment of 21st-Century Skills Acquisition of Alternative Learning System (ALS) Senior High School Learners Towards the Development of Capacity Building Program

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Article history:

Submission November 2022

Revised November 2022

Accepted November 2022

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ABSTRACT

The Alternative Learning System (ALS) has been found to be the new way for those who want to continue in their studies despite the challenges and current situation they are facing. Apparently however, there are studies recorded that there is a gap between the 21st-century skills of these ALS learners. With this concern, it becomes the notion of the researcher to describe and assess the 21st-century skills acquisition of enrolled Alternative Learning System Senior High School (ALS SHS) learners in one stand-alone public senior high school in the City of Meycauayan, Bulacan, for the School Year 2022-2023. The researcher made use of quantitative descriptive survey design to assess the 21st-century skills of 41 ALS SHS learners enrolled. Findings revealed that most of the respondents were female; in the age-range of 20-24 years old; and, have a monthly income of less than Php 5,000.00 a month. Alternative Learning System Senior High School (ALS SHS) learners had a moderate level of 21st-century skills acquisition. Furthermore, it showed that there is no significant difference on the 21st-century skills acquisition of ALS SHS learners when group according to gender and age-range, but there is a significant difference on the 21st-century skills acquisition of ALS SHS learners when group according to their socio-economic status (monthly income). For its recommendation, the proposed capacity building program aimed to improve further the Alternative Learning System Senior High School (ALS SHS) learners' 21st-century learning skills and to jive on the current trends and challenges of 21st-century education despite of their struggles in life.

Keywords: 21st-century Skills, Acquisition, Alternative Learning System, Assessment, Learners

How to cite:

Hero, J. L. (2022). An Assessment of 21st-Century Skills Acquisition of Alternative Learning System (ALS) Senior High School Learners Towards the Development of Capacity Building Program. *International Journal of Multidisciplinary: Applied Business and Education Research*. 3 (11), 2589 – 2597. doi: 10.11594/ijmaber.03.12.12

Introduction

The society drastically changed from the manual labor to a digitized economy. This change brought a significant impact not only to the way how people and society react from one another but also to the way how an individual will move and live as what their environment have (van Laar, 2020). More so, science and technology have advanced in recent years, and further development of information and communications technology (ICT) was highly observed in the Age Globalization and Internationalization of education. It brought about significant reforms and improvements in society and education (Zulueta et al., 2021). Hence, education was greatly affected by these changes in a positive and negative ways, but its effect is more on the positive side of improving one's skills and capacities aligned to the market demand.

Apparently, however, despite of these changes there are still who left behind. In the education sector, there are an observed numbers of increase of out-of-school children (OSC), out-of-school-youth (OSY), and out-of-school adults (OSAs) due to poverty and lack of educational opportunities in Southeast Asia. As can be gleaned from the data from Philippine Statistics Authority for 2017, there were 3.53 million or 9%, of the projected 39.2 Filipinos between the ages of 6 and 24 were considered as OSYs. 83.1 percent of those people were between the ages of 16 and 24, 11.2 percent were between the ages of 12 and 15, and 5.7 percent were between the ages of 6 and 11. The PSA data showed that marriage or family issues, a lack of personal interest, the high cost of education, or financial worries were the most frequent excuses given by OSYs for not attending school (Philippine News Agency, 2021).

As to their per capita income, 50% of OSYs come from households whose income is below 30% of the population. There are some who are unable to study because there are no school resources, latrines, or facilities for students with disabilities and inclusivity in education (Baccal & Ormilla, 2021). These uprising problems become an eye-opener to the educational leaders to look into way on how they will alleviate the illiteracy and lack of educational opportunities in the society.

Until they introduced an alternative education system. The alternative education system has been found to be the new way of those who want to continue in their studies despite the challenges and current situation they are facing. It becomes a big help to countries that have problems in accessing quality education. Thus, many countries found alternative learning education more beneficial and subjected to different studies including its implementation in the current education system. In the Philippines, the Department of Education created the Alternative Learning System. It has existed in the Bureau of Non-Formal Education. It further connotes the ALS is a parallel learning system that integrates both informal and formal sources of knowledge and skills to offer a viable alternative to the current formal education curriculum.

This action gives an impression to everyone, those who want to finish their studies, to achieve their dreams despite of the challenges and lack opportunities encountered in life. But still, analyzing and enhancing the skills of ALS learners are still in the subject of improvement since a lot of findings explain that there is a loophole on that matter. To wit, findings of Tindowen, Bassig & Cagurangan (2017) showed that those who do not attend formal education find it challenging to comprehend and acquire the 21st-century skills and capabilities necessary to succeed in today's worldwide society. Although it is commonly known that these abilities are crucial to meet the needs of employees in the twenty-first century, research has shown that there is a lack of complete understanding regarding skill evaluation (Voogt & Roblin, 2012). It is still unknown which aspects of 21st-century skills and abilities are impacted by which factors, despite the fact that many of these skills have been theorized about (Claro et al., 2012; Jara et al., 2015; Siddiq et al., 2017; Van Deursen et al., 2016). Additionally, majority of articles on digital and 21st-century skills discuss the talents conceptually with minimal support from supporting facts (Siddiq et al., 2016).

Furthermore, findings of Tindowen, Bassig, & Cagurangan (2017) showed that the ALS students have a low degree of 21st-century skill development. Additionally, the findings of the

one-way ANOVA test and independent-sample t test showed that sex, age, and work status have an impact on learners' learning of 21st-century abilities. In a similar context, findings of Zulueta et al., (2021) reported that there is a moderate level of 21st-century skills acquisition among ALS learners.

It is quietly observed from the mentioned findings that there is a gap on the 21st-century skills acquisition of ALS learners. With these findings, it serves as an eye-opener to the researcher to assess and evaluate the 21st-century skills acquisition of ALS Senior High School (ALS SHS) learners enrolled in one public stand-alone senior high school in the City of Meycauayan, Bulacan. The researcher also aims to dig further about the skills of these enrolled ALS learners since the program is new in the school system.

From there, it is the primary goal of the researcher to develop a capacity building program based on the assessment on the perception of ALS senior high school learners on their 21st-century skills acquisition, for this School Year 2022-2023. This proposed capacity building program will serve as an enhancement or retooling program for these learners to further uplift their skills and capabilities in this 21st-century.

Research Questions

This study intends to develop a capacity building program based on the assessment on the perception of Alternative Learning System Senior High School (ALS SHS) learners on their 21st-Century skills acquisition for the School Year 2022-2023.

To achieve this purpose, the following questions are being mapped:

1. What is the demographic profile of ALS senior high school learners in terms of the following:
 - 1.1 Age;
 - 1.2 Gender; and
 - 1.3 Socio-economic status?
2. What is the perception of ALS senior high school learners on their 21st-century skills acquisition in terms of the following:
 - 2.1 Critical Thinking Skills;
 - 2.2 Collaboration Skills;
 - 2.3 Communication Skills;

- 2.4 Creativity and Innovation Skills;
- 2.5 Self-Direction Skills;
- 2.6 Global Connections;
- 2.7 Local Connections; and
- 2.8 Use of Technology?

3. Is there a significant difference of the perception of ALS senior high school learners on their 21st-century skills acquisition when grouped according to profile variables?
4. How may the findings of the study, derived management implications, and identified skills be utilized to develop a capacity building program for ALS senior high school learners?

Hypothesis of the Study

The given hypothesis will be tested at a 0.05 level of significance:

1. There is no significant difference of the perception of ALS senior high school learners on their 21st-century skills acquisition when grouped according to profile variables.

Methods

This study essentially used a descriptive survey design to describe and assess the 21st-century skills acquisition of ALS senior high school learners in one stand-alone public senior high school in the City of Meycauayan, Bulacan. This study used the descriptive survey research method to gather data on the status of the phenomena to be described, or "what exist," with respect to factors acting as circumstances in a situation.

The goal of survey studies, as Bueno (2016) insinuated, is to collate in-depth factual data that describes current phenomena, identify issues or defend current conditions and practices, make comparisons and evaluations, find out what other people are doing with similar issues or circumstances, and learn from their experience when making future plans and decisions.

This study utilized a survey-instrument standardized questionnaire through Google Form as the primary data collection tool. In addition, the study's variables were analyzed and interpreted using a quantitative research approach.

Respondents of the Study

The study respondents will include 41 ALS senior high school learners who are currently enrolled for the School Year 2022 - 2023. The researcher utilized a universal sampling procedure as the study's sampling technique since the whole population from the identified local was active in a physical contact modality. The Google form will be sent to the ALS learners through their group chats to gather the necessary data needed in the study. An informed consent and the respondents' assent were secured first prior to their participation in this study.

Instrument of the Study

The researcher adopted and used a standardized questionnaire as the main data collecting instrument to get the information required for the study. The demographic profile of the respondents and the development of 21st-century skills will be the two components of the survey tool for this study.

For the first part of the survey-questionnaire, it pertains to the demographic profile of the respondents as to their age-range, gender, and socio-economic status.

The survey tool, 21st-century learners' skills, from Shear et al. (2010) is used in the second portion of the questionnaire, and it has been modified by Ravitz et al. (2012). It survey-questionnaire comprised the following domains of 21st-century skills acquisition: critical thinking skills, collaboration skills, communication skills, creativity and innovation skills, self-direction skills, global connections, local connections, and technology use. The tool is a 62-item questionnaire that measures the 21st-century skills of Alternative Learning System Senior High School (ALS SHS) learners. The survey questionnaire was evaluated by the respondents using a Likert scale with a score range of 1 (extremely low) to 5. (very high). With Cronbach's alpha values of .90, .94, .93, .94, .95, .96, .95, and .95, respectively, the domains of 21st century skills critical thinking, collaboration, communication, creativity and invention, self-direction, global connections, local connections, and use of technology were found to be reliable. The tool's overall Cronbach's alpha value was .94.

Data Analysis

The results of the initial survey questionnaire results were analyzed and tabulated, and the researcher used descriptive and inferential statistics to interpret it. The study's statistical software was SPSS v. 25, which was utilized by the researcher to analyze and interpret the data acquired. The Alternative Learning System Senior High School learners 21st-century skills would be measured using descriptive statistics such weighted mean methods. The researcher will use Analysis of Variance to examine whether there is a significant difference in how ALS senior high school students perceive their acquisition of 21st-century abilities when categorized according to profile factors (ANOVA).

Ethical Considerations

The researcher firmly observed the following actions to establish and safeguard ethics in conducting this study: the students' names were withheld from disclosure in any aspect of the study; and the students, who acted as the study's respondents, were not subjected to emotional or physical harm. The study's respondents had the option to decline taking part because they were not required to do so. In order to support copyright laws, the researcher cited literature appropriately and used citations. Prior to participating, each participant in the study signed an informed consent form. The study was carried out while adhering to all ethical standards. In doing this work, the researcher declared no conflicts of interest.

Results and Discussion

This section presents, analyzes, and interprets the data collected in the study. For an organize presentation and consistent discussion, the data are presented following the order of sequence of the questions raised on the above research questions, to wit: (1) profile of the respondents, (2) Alternative Learning System (ALS) Learners' 21st-Century Acquisition, (3) Significant difference of ALS learners' 21st-Century Skills Acquisition when grouped according to profile variables, and (4) proposed capacity building program for ALS learners.

Table 1. Demographic Profile of the Respondents in terms of Gender

Gender	Frequency	Percentage
Male	13	31.7
Female	28	68.3
Age-range	Frequency	Percentage
18-19 years old	1	2.4
20-24 years old	23	56.1
25-29 years old	8	19.5
30-34 years old	5	12.2
35 years old and above	4	9.8
Socio-economic Status	Frequency	Percentage
less than 5,000	17	48.6
5,001 to 9,999	5	14.3
10,000 to 19,999	9	25.7
20,000 to 29,999	3	8.6
30,000 and above	1	2.9
Total	41	100%

Table 1 presents the profile of the respondents in terms of gender. It shows that there are 13 (31.7%) ALS male learners and 28 (68.3%) ALS female learners. It further connotes that in this study, majority of the respondents participated in the study are female.

It also illuminates the profile of the respondents in terms of age-range. It shows that there is one (2.4%) ALS respondents who is in the age-range of 18-19 years old; there are 23 (56.1%) ALS respondents who are in the age-range of 20-24 years old; there are eight (19.5%) ALS respondents who are in the age-range of 25-29 years old; there are five (12.2%) ALS respondents who are in the age-range of 30-34 years old; and, there are four (9.8%) ALS respondents who are in the age-range of 35 years old and above.

The findings imply that most of the ALS learner-respondents are in the age range of 20-24 years old or in the young adulthood stage. The findings are associated on the findings of WorldBank (2018) that learners who are enrolled in ALS fell in this age-range. Same findings were also showed from the UNESCO’s report (2020) when it come to the age-range of the learners who are enrolled in ALS.

Lastly, Table 1 opines the socio-economic status (monthly income) of ALS learners enrolled in stand-alone public senior high school. It shows that there are 17 or 48.6% of the respondents have a monthly income of less

than P 5,000.00 a month; followed by 9 or 25.7% of the respondents have a monthly income of P 10,000.00 – P 19,999.00; then, there are 5 or 14.3% have a monthly income of P 5,001.00 – P 9,999.00; then, there are 3 or 8.6% have a monthly income of P 20,000.00 – P 29,999.00; and lastly, there is 1 or 2.9% who has a monthly income of P30,000.00 and above. The findings show that most of the respondents have a monthly income of less than PhP 5,000.00. The findings of the study opined to the results of the analysis of Ecgas & Garganera (2019), which majority of the enrolled learners under Alternative Learning System program are on the bracket of P1,000 – P5,000.

From the analysis observed in the summary of 21st-century skills acquisition of Alternative Learning System learners in Table 12, collaboration skills recorded the highest average of 3.41 among eighth 21st-Century Skills of ALS. This suggests that the SHS ALS learners are more likely to collaborate with their teachers, peers, and professor. Through collaboration they learned from each other’s ideas and perspectives and acquired new knowledge. Moreso, ALS SHS learners are very much happy to work and study in pairs or groups to complete the task together. They can view themselves as a successful learner if they are working other. Working as a team is the best strategy for them to create plans and accomplish activities. As Boyraz (2021) discussed in his study,

collaboration is one of many skills that are now required in education, in addition to reading and writing, because teamwork is essential in both the workplace and in daily life.

Table 2. Weighted Mean Scores of 21st-Century Skills Acquisition of Alternative Learning System Senior High School Learners

21 st -Century Skills Acquisition of Alternative Learning System	Average	Interpretation	Rank
1. Collaboration Skills	3.41	Moderate	1 st
2. Local Connections	3.26	Moderate	2 nd
3. Global Connections	3.22	Moderate	3.5 rd
4. Use of Technology as a Tool of Learning	3.22	Moderate	3.5 rd
5. Critical Thinking	3.19	Moderate	5 th
6. Self-Direction Skills	3.11	Moderate	6 th
7. Creativity and Creation Skills	3.08	Moderate	7 th
8. Communication Skills	3.05	Moderate	8 th
General Average	3.19	Moderate	

On the other hand, communication skill is found the least 21st-century skills acquisition of Alternative Learning System learners by the general average mean of 3.05, but still rated as moderate. This implies that ALS learners are moderately practice or incorporating their communication skills, and teachers must engage them in activities or task that requires to hone their communication skills, as it is the most essential 21st-century skills in present time.

The 21st-Century Skills Acquisition of Alternative Learning System (ALS) senior high school learners as a whole was reported as moderate as evidenced by the general weighted average of 319. This means ALS learners were doing their best to acquire the above mentioned 21st-Century Skills, as well as, it

connotes that were eager to comply and accept the changes in education. The overall results of the study are the same as the findings of Zulueta et al., (2021), which they reported that there is a moderate level of 21st-century skills acquisition of ALS learners.

Furthermore, Guilherme (2019), teaching is not merely an exchange of information but rather it's about having great communication skills as it is the core of effective student-teacher relationship in the classroom. Teachers should have the ability to clearly explain their points while listening to and understanding the thoughts and ideas of their students. They must start the lesson from simple too complex for the students learn effectively the topic or lesson you have taught.

Table 3. Test of Significant Difference on the Perception of ALS Senior High School Learners on their 21st-Century Skills Acquisition when Grouped according to Gender

Profile Variables	F-value	P-value	Interpretation	Remarks
Gender	0.142	0.708	Do not reject the Null Hypothesis	Insignificant

Table 3 shows the results of the analysis of variance on 21st-Century Skills Acquisition of ALS Senior High School Learners when Grouped according to gender revealed an f-value of 0.142 with the associated p-value of 0.708. Since the associated probability exceeds

.05 alpha, this means the 21st-Century Skills Acquisition of ALS learners does not affect when grouped according to gender. Hence, the null hypothesis is accepted. Hence, the decision is to accept the null hypothesis which states that there's no significant difference on the 21st-

Century Skills Acquisition of ALS Senior High School Learners when grouped according to gender. This implies that performance and adaptability of ALS Senior High School Learners on the variety of 21st-century skills is not determined by their gender. Gender is merely a

range traits or characteristics that make up femininity and masculinity. Furthermore, to acquire the various 21st-century skills it requires big amount of understanding and series of studying.

Table 4. Test of Significant Difference on the Perception of ALS Senior High School Learners on their 21st-Century Skills Acquisition when Grouped according to Age-Range

Profile Variables	F-value	P-value	Interpretation	Remarks
Age-Range	0.199	0.708	Do not reject the Null Hypothesis	Insignificant

Table 4 shows the results of the analysis of variance on 21st-Century Skills Acquisition of ALS Senior High School Learners when grouped according to age-range revealed an F-value of 0.199 with the associated p-value of 0.708. Since the associated probability exceeds .05 alpha, this means the 21st-Century Skills Acquisition of ALS learners does not affect when grouped according to age-range. Hence, the

decision is to accept the null hypothesis which states that there's no significant difference on the 21st-Century Skills Acquisition of ALS Senior High School Learners when grouped according to age-range. It implies that Age-range does not contributing in acquiring the various 21st-century skills of ALS learners. More so, ALS learners should focus on fostering and developing their skills to align on the world demands

Table 5. Test of Significant Difference on the Perception of ALS Senior High School Learners on their 21st-Century Skills Acquisition when Grouped according to Socio-economic Status

Profile Variables	F-value	P-value	Interpretation	Remarks
Socio-economic Status	3.011	0.031	Reject the Null Hypothesis	Significant

Table 5 shows the results of the analysis of variance on 21st-century skills acquisition of ALS senior high school learners when grouped according to Socio-economic Status revealed an f-value of 0.142 with the associated p-value of 0.708. Since the associated probability does not exceed .05 alpha, this means the 21st-Century Skills Acquisition of ALS learners did not affect when grouped according to socio-economic Status. Hence, the decision is to reject the null hypothesis which states that there's no significant difference on the 21st-century skills acquisition of ALS senior high school learners when grouped according to Socio-economic Status. This implies that socio-economic status of ALS learners is not the basis to determine if they can acquire the variety of 21st-century skills.

Proposed Capacity Building Program

The proposed capacity building program aimed to improve further the Alternative Learning System Senior High School (ALS SHS) learners to jive on the current trends and challenges of 21st-century education despite of their struggles in life. The crafted capacity building program is based on the results of the analysis done by the researcher.

The focus of the capacity building program intended for the ALS SHS learners are: (1) basic communication skills, especially to the speaking and writing macro skills; (2) the global and local trends and issues in the contemporary world; and (3) life skills, work life balance and time management in the 21st-century. The main approach of the capacity building is a collaborative approach since it appeared to the findings that ALS SHS learners were best to learn through collaborative activities.

Conclusion

In light of the results and discussion, the following conclusions were drawn:

1. Most of the respondents were female; in the age-range of 20-24 years old; and, have a monthly income of less than Php 5,000.00 a month.
2. Alternative Learning System Senior High School (ALS SHS) learners had a moderate level of 21st-century skills acquisition. Therefore, ALS SHS learners enrolled in one stand-alone public senior high school acquired a moderate skill level on collaboration skills, local connections, global connections, use of technology in learning, critical thinking, self-direction skills, creativity and creation skills, and communication skills.
3. There is no significant difference on the 21st-century skills acquisition of ALS SHS learners when group according to gender and age-range, but there is a significant difference on the 21st-century skills acquisition of ALS SHS learners when group according to their socio-economic status (monthly income).
4. The proposed capacity building program aimed to improve further the Alternative Learning System Senior High School (ALS SHS) learners' 21st-century learning skills and to jive on the current trends and challenges of 21st-century education despite of their struggles in life.

Recommendations

Based on the results and discussion of the study and drawn conclusions, the following recommendations are hereby offered:

1. That ALS Program coordinator in collaboration with the school and its clientele should maximize the learning space and process to improve the 21st-century skills of enrolled ALS SHS learners to jive the current trends of 21st-century education. To make this recommendation, ALS teachers should include the enhancement of 21st-century skills to their lesson planning and process.
2. That ALS Program Coordinator and ALS teachers should look in enhancing the communication skills of ALS learners to make them more confident and competitive in

facing the today's challenges. To make this action realistic, communication ALS teachers should be able to plan an activity as part of their discussion focusing on enhancing on the communication skills of ALS SHS learners.

3. That the ALS Program and ALS teacher should use collaborative approach with contextualization and experiential learning, especially in teaching them the local and global trends and issues. To make this in reality, the ALS Program Coordinator may seek a technical assistance to his master teachers to conduct a School Learning Action Cell (SLAC) on collaborative teaching approach with contextualization, localization and indigenization.
4. That the proposed capacity building program may be translated into an action plan to aid and address the moderate level of 21st-century skills acquisition of ALS SHS learners.
5. That the future researcher should conduct another study to examine further the 21st-century skills acquisition of ALS SHS learners and include other related variables such as their academic performance, self-efficacy and resiliency and the likes.

Acknowledgment

The author wishes to acknowledge the following individuals who give their precious time and input to make this study into a reality. To Mrs. Jo Ann B. Galang, School Principal of Academic Senior High School of the City of Meyacauyan and to the whole community of Academic Senior High School of the City of Meycauayan; To Mrs. Vivian R Dumalay, Education Program Supervisor – Esp/ALS, Mrs. Jo-Ann S. Diez, Education Program Specialist-ALS and to the SDO City of Meyacauyan, Bulacan; and to the ALS learners who became the respondents of the study. Furthermore, the researcher also acknowledges his research assistants: Ms. Rafaela Eleazar and Mr. Paulo T. Gatabonton for the completion of this research paper.

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