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Research Article

Through Pains and Gains: Measures of 21st Century Skills and Sense of Self-Efficacy of Alternative Learning System (ALS) Learners

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ABSTRACT

For several years, illiteracy, poverty, and deprivation were the worst adversary of the Philippine Government. One of the greatly affected sectors of illiteracy and poverty is the education sector. The Department of Education (DepEd) has experienced large amounts of drop-outs and out-of-school youth and adults due to poverty. For the Department to alleviate this concern, the Alternative Learning System (ALS) was established. ALS offers basic schooling for all persons who wish to return to school in a way that fits their personal needs and situation. Hence, this study assessed and extrapolated ALS learners with their 21st-century skills and its correlation to their sense of self-efficacy. Using a descriptive-correlational design, the researchers wanted to establish a link between and among variables. The findings of the study revealed moderate acquisition of 21st-century skills among ALS' learners. Their sense of self-efficacy was also noted to be high. Further analysis revealed that, ALS learners' acquisition of 21st century skills significantly correlated to their sense of self-efficacy. It is recommended that ALS teachers should provide more activities that will further enhance and strengthen the local and global awareness of ALS learners. Also, possible extension of the study could be undertaken to draw the general picture of the ALS learners as to their skills and sense of self-efficacy.

Keywords: 21st-century skills, Self-Efficacy, Alternative Learning System, Learners

Introduction

The advancement in Information and Communications Technology (ICT), globalization, and internationalization of education had created an era of advancement in science and technology. In effect, it brought massive changes and reformation in society and

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education. With this, education is a factor to consider in bringing significant changes to society and the lifestyle of its people. Thus, education plays a very significant role in a particular nation's growth and advancement. However, disadvantages, challenges, and concerns have also been observed. Indeed, in the present situation of the educational climate, one of the determinants to consider as a hindrance to successful learning outcomes is promoting and developing the skills.

With this, schools, both public and private, focused not only on imparting the basics; but also in ensuring that students gained a suite of newly important thinking and reasoning skills (Silva, 2009; Tindowen, Bassig, & Cagurangan, 2017). On the basis of the awareness of the changing circumstances in personal, social, and professional life, Chalkiadaki (2018) highlighted that the 21st-century skills and competencies in primary education established in the framework of this literature review are considered particularly important. Thus, the present and future education need to set new goals, focusing on developing an identity of responsible and effective national and global citizenship in students, with all the knowledge, skills, and attitudes required (Zajda, 2010). Subsequently, the 21st century has given rise to new skills, talents, and capabilities necessary for students to experience academic and life achievement.

Cognizance to the demand for education worldwide, educational institutions starting from primary up to the tertiary, are now devoted to promoting the students' 21st century and their sense of self-efficacy through formal education. However, in reality, as reported by every department and ministries of every country's education, a colossal population turned to dropouts, out-of-school youth, and even individuals who do not go into formal schooling. And as a result, these individuals who did not go to formal schooling had difficulties understanding and learning 21st-century skills that enable them to cope with and compete in the globalized world (Tindowen, Bassig, & Cagurangan, 2017). In the Philippine educational climate, the nation had been named one of the countries with the largest level of poverty in Southeast Asia. The Out-of-School Children (OSC), Out-of-School Youth (OSYs), and

Out-of-School Adults (OSAs) are the most affected by poverty among all because of the scarcity of educational opportunities provided by illiteracy itself (Apao et al., 2014).

To alleviate the concern, to provide all Filipinos the ability to gain access and to complete their primary education in a manner that fits their diverse circumstances and needs, the Alternative Learning System (ALS) was established (DepEd, 2016). It explicitly addressed schools' learning standards from disadvantaged classes, leavers, adults, and other learners who belong to marginalized groups who do not have access to formal schooling. As stipulated by Atilano et al. (2016), the Alternative Learning System subscribes to this pattern of learning, as it is a more practical option for out-of-school youth and other people who cannot cope with formal instruction. The ALS offers basic education in a way that fits their distinct needs and situations. Through ALS students, those who, as defined by the statute, are "deprived, troubled, and underserved" are now offered with Accreditation and Equivalence (A&E) examination instruction that can be granted either primary or high school diplomas (Arzadon and Nato, 2015).

Prior to this, Alternative Learning System (ALS) was still at the height of helping those dropouts, out-of-school youth, individuals who belong to the marginalized group to finish their studies, promote their skills and capabilities, and sense of self-efficacy. This was evidenced by a lot of successful ALS graduates in their chosen field. At present, the system is further strengthened with national government passing a law that supports the country's alternative learning system.

This study aimed to assess and extrapolate the 21st-century skills and sense of self-efficacy of alternative learning system learners who already graduated from the ALS program and currently enrolled in a private institution in the district of Obando, Bulacan. Moreover, the study also wanted to determine whether alternative learning system learners' 21st-century skills significantly correlated to their sense of self-efficacy. The study's findings was utilized as a basis in formulating a training program for the betterment of these Alternative Learning System learners.

Purpose of the Study

This study catechized the 21st-century skills and sense of self-efficacy of Alternative Learning System learners. Thus, it did not only evaluate the 21st-century skills and sense of self-efficacy of alternative learning system learners, but it also aimed to establish or ascertain a link between and among variables. Moreover, the study's findings would be used to develop a training program to further enhance and uplift the skills and self-efficacy of Alternative Learning System learners since the national government already passed the law on Alternative Learning Education. The outcome of the study would be used as a foundational perspective for the Alternative Learning System. It will serve as a reference for other capability or training programs for alternative learning system learners.

Research Questions

Specifically, the study sought to answer the following questions:

1. How may the 21st-century skills of Alternative Learning System learners be described in terms of the following domains:
 - 1.1 critical thinking skills;
 - 1.2 collaboration skills;
 - 1.3 communication skills;
 - 1.4 creativity and innovation skills;
 - 1.5 self-direction skills;
 - 1.6 global connections;
 - 1.7 local connections; and,
 - 1.8 use of technology?
2. How may the level of sense of self-efficacy of Alternative Learning System learners be described in terms of the following sub-scales:
 - 2.1 belief in personal ability; and,
 - 2.2 belief that ability grows effort
3. Did the 21st-century skills of the Alternative Learning System learners significantly correlated to their sense of self-efficacy?
4. From the study's findings, what training program for the Alternative Learning System learners may be proposed to enhance and betterment the skills and self-efficacy of the learners in acquiring learning?

Methodology

Research Design

This study employed a descriptive-correlational design to determine the relationship of 21st-century skills of Alternative Learning System learners to their sense of self-efficacy. Correlational analysis is a paradigm aimed at evaluating the presence of a relationship or correlation between and among variables and further determining the relationship's extent and degree. Moreover, the study used a quantitative research approach to assess and schematize the study's variables. The researchers utilized a standardized questionnaire as the primary data gathering tools.

Respondents of the Study

The study respondents were Alternative Learning System learners/completers who were previously enrolled in one private institution in the district of Obando, Bulacan for the School Year 2020-2021. Age of respondents were 19-23 years of age. Informed consent was secured prior to their participation. In sum, thirty-five (35) ALS learners/completers were the total respondents of the study. As there was a limited number of ALS learners/completers enrolled in the said private school, the researchers used the universal sampling procedure as the study's sampling tool.

Instrument of the Study

The researcher adopted and used a standardized questionnaire as the primary data gathering tools to gather the data needed for this study. For the first part of the survey-questionnaire, the researchers adopted the survey tool, 21st-century learners' skills, from Shear et al. (2010), and it is modified by Ravitz et al. (2012) for the betterment of the instrument. It comprises the following: 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 learners. The respondents rated the survey questionnaire using a five-point Likert Scale ranging from 1 (very low) to 5 (very high). A closer look on the

domains of 21st century skills showed that critical thinking skills, collaboration skills, communication skills, creativity and innovation skills, self-direction skills, global connections, local connections, and use of technology were reliable with Cronbach's alpha values of .90, .94, .93, .94, .95, .96, .95, and .95 respectively. Overall, the Cronbach's alpha value of the tool was .94.

To measure the learners' sense of self-efficacy, the researchers adopted the Self-Efficacy Formative Questionnaire Gaumer et al. (2018) with a sub-scale belief in personal ability and belief that ability grows effort. The Self-Efficacy Formative Questionnaire is a 13-item tool that measures the sense of self-efficacy of alternative learning system learners. It is reliable, as evidenced by Cronbach's alpha of 0.89. The respondents rated the survey-questionnaire using a five-point Likert Scale ranging from 1 (strongly disagree) to 5 (strongly agree).

Data Analysis

The researchers tabulated and analyzed the survey questionnaires data through Google Forms and printed survey-questionnaire, using descriptive and inferential statistics. The researchers utilized Statistical Packages for Social Sciences (SPSS) v. 24 as the study's statistical software to analyze and interpret the data. 21st-century skills of alternative learning system learners, as the study's independent varia-

ble, and sense of self-efficacy, as the study's dependent variables, was quantified using descriptive statistics such as weighted mean procedures. In order to determine the correlation between the 21st century skills of alternative learning system learners and their sense of self-efficacy, the researchers utilized the Pearson Product Moment Correlation (Pearson r).

Ethical Considerations

To establish and safeguard ethics in conducting this study, ethical clearance was secured thru a local Research Ethics Committee of a private institution in the City of Malolos, Bulacan, Philippines. All respondents in the study signed an informed consent prior to their participation. Observance of all ethical principles was done during the conduct of the study. All researchers declared no conflict of interests in conducting this study.

Results and Discussions

This section presents the result and discussion of 21st century skills and sense of self-efficacy of Alternative Learning System learner, as well as, the correlation of the variables. In this section, the proposed capability program for the ALS learners to enhance their 21st century skills and sense of self-efficacy is also presented.

Table 1. 21st Century Alternative Learning System Learners

21 st Century Alternative Learning System Learners	Average	Interpretation	
1. Collaboration Skills	3.81	High	1 st
2. Use of Technology as Tool of Learning	3.69		2 nd
3. Creativity and Creation Skills	3.51		3 rd
4. Self-direction Skills	3.49	Moderate	4 th
5. Critical Thinking Skills	3.45	Moderate	5 th
6. Communication Skills	3.24	Moderate	6 th
7. Local Connection Skills	2.89	Moderate	7 th
8. Global Connections	2.37	Low	8 th
General Average	3.31	Moderate	

Table 1 explicates the 21st century skills of Alternative Learning System learners. In general, Alternative Learning System learners' acquisition of 21st century skills is moderate as gleaned from the general weighted mean value

of 3.31. Analysis on the seven key-areas by Alternative Learning System learners' acquisition on 21st century skills as to collaboration skills, use of technology as tool of learning, and creativity and creation skills rated as high as

evidenced with its weighted mean values of 3.81, 3.69, and 3.51 respectively. Self-direction skills, critical thinking skills, communication skills, and local connection skills is rated as moderate given by its weighted mean values of 3.49, 3.45, 3.24, and 2.89 respectively. However, a global connection was found to be low as evidenced by a weighted mean value of 2.37.

On the description of Alternative Learning System learners' acquisition of 21st century skills in Table 1, it appears that collaboration skills reported the highest weighted mean value of 3.81, which was interpreted as high. The finding of the study on the 21st century skills implies that Alternative Learning System learners work well in pairs or in small groups when completing their tasks.

They are more likely to work collaboratively in executing their mission or tasks which results to better performance. This implies that collaborative teaching-learning strategies work well for ALS learners resulting to better or improved performance. Team-based activities are better utilized for improved learning and performance taking into consideration each other's strengths. ALS students often manifest ingenuity in their work, especially seen when they immerse themselves in a collective task. Aside from collaboration, ALS learners are also good at using technology in learning; since most of the schools have infused technology in the learning process, instructional strategies and techniques.

On the eight key-areas of 21st century skills, global connection was reported to have the lowest weighted mean, as shown by the weighted mean value of 2.37, which was interpreted as low. This connotes that ALS learners experienced struggles and some concerns pertaining to navigating information about other countries or their cultures in addition to discussing issues and concerns related to global interdependency and environment. The results also indicate that ALS learners have little awareness and comprehension of other countries' culture, history, and geography and that they fail to contextualize these foreign ideas and concepts into local contexts. Therefore, in comparison to regular students, the experience and comprehension of ALS learners in global contexts is not as broad and deep.

In general, the level of learners' acquisition of 21st century skills is moderate. This also suggests that the students are doing better in the ALS program and that they have improved much in their classroom like any regular student. While they possess a moderate level of 21st century skills acquisition, they exert their utmost effort on their studies and to improve their performance. The findings suggest that students enrolled in the program showed a higher level of 21st century skills acquisition compared to the results of Tindowen, Bassig, & Cagurangan (2017).

Table 2. Alternative Learning System Learners Sense of Self-Efficacy

Alternative Learning System Learners Sense of Self-Efficacy	Average	Interpretation	Rank
1. Belief that Ability Grows with Effort	3.77	High	1 st
2. Belief in Personal Ability	3.69	High	2 nd
General Average	3.73	High	

Table 2 illustrates the Alternative Learning System learners' sense of self-efficacy. In general, ALS learners have a high sense of self-efficacy as evidenced by the general weighted mean of 3.73. To be more specific, the two subscales of self-efficacy, namely; belief in personal ability and belief that ability grows with effort yielded a "high" sense of self efficacy, as

shown by the weighted mean values of 3.69 and 3.77.

As can be gleaned from the weighted means summary in Table 2, it reveals that the highest weighted mean of 3.77 is on the subscale of belief that ability grows with effort. The results show that ALS learners realize broadly and profoundly that growth and progress are part

of their path. They do believe that working hard and spending quality time and effort in their studies, yield positive results. This is exemplifying maturity and responsibility. In addition, for ALS learners, regardless of who you are, you can dramatically improve yourself and enhance your gifts and talents; regardless of one's circumstances and challenges. They also have a pretty good grasp of their goals in continuing their studies.

Although belief in personal ability reported the lowest weighted mean of 3.69, still, it is still interpreted as high by ALS learners. This finding implies that ALS learner can learn from the lessons being taught to them and they are able to apply it with real life situations. Despite their limitations in terms of knowledge and skills given their circumstances, they see their enrolment to ALS as an opportunity to learn and be educated. ALS learners are also determined when accomplishing tasks in putting their best efforts. This reflects that they are focused and

goal-oriented despite their existing challenges and struggles. With this, they believe that they will succeed regardless of their status in life, and that finishing their education and hopefully a collegiate degree will be their proofs of success.

Overall, the findings indicate that ALS learners do have confidence that they can compete with regular students and succeed like them. They do believe that all their efforts will come to fruition. Having a great sense of self efficacy will definitely allow anyone to finish and be successful on anything that he/she started. As Fast et al. (2019) emphasized, learners who have high sense of self-efficacy do become more successful in their chosen track. Also, it has the most in attaining their dreams as seen on their good and improved academic performance. Thus, higher self-efficacy can lead to better results, increased motivation and skills for learning (Zimmerman et al., 2011).

Table 3. Test of Significant Correlation between 21st Century Skills and Sense of Self-Efficacy of Alternative Learning System Learners

Computed R-value	t-value	Critical t-value	Decision	Interpretation
0.63	6.12	0.250	Reject the Null Hypothesis	Significant
$\alpha = 0.05$		$d.f. = 59$		

The 21st century skills and sense of self-efficacy of alternative learning system learners are the study's significant variables. Thus, this study also aims to ascertain whether the 21st century skills of alternative learning system learners correlate significantly to their sense of self-efficacy. The data collected was subjected to the Pearson Product Moment Correlation to determine the link/relationship between and among variables.

The result of Pearson's r analysis in Table 3 reveals that the 21st century skills of alternative learning system learners is correlated to their sense of self-efficacy to a varying extent, as attested by the non-zero r-value of 0.63. The nature of correlation is positive as can be gleaned from the r-value, which means that the higher skills in learning correlates with the higher sense of self-efficacy. Conversely, lower skills relate to lower sense of self-efficacy.

The degree of magnitude of the correlation is substantial, as can be deduced from the r-value of 0.63. This means that a substantial correlation was observed between the 21st century skills and sense of self-efficacy of alternative learning system learners.

Furthermore, the result of the analysis of the t-test for the significance of r reveals a computed t-value equals to 6.12 at 0.05 alpha where d.f. is equals to 59; the critical t-value was 0.250. Comparing the computed and critical values the computed value exceeded the critical value, giving the researchers reason to reject the null hypothesis. It may be safely concluded that there is a significant correlation between the 21st century skills and sense of self-efficacy of alternative learning system learners.

It can be deduced from this analysis that the when ALS learners get better in acquiring skills, the better their sense of self-efficacy and

confidence gain in their studies. This deduction clearly illustrated that ALS learners become more independent and responsible as they increasingly acquire 21st century skills. It can therefore be said that despite this learners' enrolment in the ALS program, they are capable of learning to be educated for possible career advancement or betterment of their life. Accordingly, learners with improving skills are expected to have a better sense of self-efficacy

that will make them to be more productive in their field or career (Chemers et al., 2001; Lent et al., 2008).

Proposed Training Program for Alternative Learning System Learners

Table 4 presents the proposed training program for Alternative Learning System (ALS) learners to sustain their success in schooling.

Table 4. Proposed Training Program for Alternative Learning System Learners

Topics	Objectives	Expected Outcome
Familiarizing with the Community and the World	<ol style="list-style-type: none"> 1. To develop awareness of information, policies and systems relative to his community and the world; 2. To update the learners on the current trends and status of the community and the world; and, 3. To orient the learners on the common characteristics and qualities of today's world. 	The learner will be equipped with knowledge and understanding about the present situation of the community and the world. Also they will be aware of the basic information, existing policies and system of different countries in the world.
Creating Better Filipino Learners in a Global Setting: The Basics of Geography	<ol style="list-style-type: none"> 1. To orient the learners on the use of geography in making connections with different countries; 2. To revisit the philosophical basis of geography as the springboard of history and culture; and, 3. To develop the skills needed in studying geography. 	The learners will be equipped on the basics of geography and its importance in studying its history and culture. More so, the learners will become aware on the philosophical basis of studying geography in connection with the global environment. Lastly, the training will develop the learners on the basic skills needed in the study of geography.
Global Interdependency in the 21 st Century: Issues and Concerns	<ol style="list-style-type: none"> 1. To describe the emergence of global economic, political, social, and cultural systems; 2. To discuss the issues and concerns that the contemporary world is facing; 3. To articulate personal positions on various global issues and concerns; and, 4. To reflect on how their own experiences and local issues are connected with global issues. 	The learners will become aware of the global economic, political, social and cultural systems which they can connect with their present experience/s in order to come up with a well-presented collaborative project for the community. Also, they will become more abreast on the pressing issues and concerns that the international community are facing. Lastly, it is expected that the learners reflect on their experiences in order to propose possible solutions to the present and urgent concerns of the community.

Conclusions and Recommendations

Based on the research questions raised in this study and from the findings of the study, it is concluded that the Alternative Learning System (ALS) learners' 21st century skills acquisition is moderate. However, they are not yet ready to face global issues and concerns due to their low skill acquisition. ALS learners' sense of self-efficacy is found to be high. Pearson *r*'s analysis reveals that ALS learners' acquisition of 21st century skills is significantly correlated to their sense of self-efficacy. Hence, the null hypothesis is hereby rejected. As the outcome of this study, findings raise a proposed training program that focuses on their 21st century skills' acquisition.

It is hereby recommended that ALS teachers should develop and strengthen the local and global awareness of ALS learners. To realize this, ALS teachers must include this area on his/her discussions, utilize more team based, collaborative and cooperative learning activities that will cover community or local situations and global environment in order for them to be more aware on what is happening in the community and to the whole world. Also, performance-based tasks and class/community projects may also be asked from ALS learners to complete to immerse them to local and global situations.

This study also recommends that the study be extended to further assess the skills and competencies of ALS learners. Since this investigation was only undertaken in a district of Obando, Bulacan, it may be worthwhile to extrapolate the skills and competencies of ALS learners in other parts of the country to gather more information on the general picture of ALS learners across the country.

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