## 21<sup>st</sup> CENTURY SKILLS OF ALTERNATIVE LEARNING SYSTEM LEARNERS

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# ABSTRACT

Education plays a very important role in the development and progress of a certain nation. With the advancement of science and technology, globalization and internalization of education are considered as challenges that every country must uphold. And one of the emphases of today's challenges in education is the promotion of 21st century skills among students. However, it is also a reality that a huge number of the world population are drop-outs, out-of-school youth and even individuals who do not go to formal schooling. As a result, these individuals who do not go to formal schooling have difficulties in understanding and learning 21st century skills which enable them to cope and to compete in the globalized world. Initiatives around the world have introduced alternatives to cope up with the challenges brought by the changing world and knowledge economy. The Philippines for instance had implemented the non-formal and informal education such as the Alternative Learning System to help individuals attain education. This study was conducted to determine the 21st century skills of Alternative Learning System Learners of Northern Philippines. 150 ALS learners across five schools in Northern Philippines participated in the study through descriptive survey method. Results revealed that the ALS learners have a low level of acquisition of 21<sup>st</sup> century skills. Furthermore, results of the Independent sample t-test and one way analysis of variance test revealed that sex, age, and employment status affect the acquisition of learners of the 21<sup>st</sup> century skills.

**Keywords:** 21<sup>st</sup> Century skills, Alternative Learning System, Northern Philippines

#### INTRODUCTION

Education plays a very important role in the development and progress of a certain nation. With the advancement of science and technology, globalization and internalization of education are considered as challenges that every country must uphold. And one of the emphases of today's challenges in education is the promotion of 21<sup>st</sup> century skills among

students. With this, schools both in public and private must focus not just on imparting the basics, but equally so on ensuring that students gain a suite of newly important thinking and reasoning skills (Silva, 2009). 21<sup>st</sup> century skills is defined as a broad set of knowledge, skills, work habits, and character traits that are believed to be critically important to success in today's world, particularly in collegiate programs and contemporary careers and workplaces and can be applied in all academic subject areas and in all educational, career, and civic settings throughout student's life (Moyer, 2016; Rotherham &Willingham, 2009). 21<sup>st</sup> century skills are needed to be able to solve problems that are complex, collaborate and communicate well with others, acquire new skills and information independently, and adapt to rapidly changing conditions in order to compete in today's rich and global economy (Gewertz, 2008).

It is then a reality that Educational institutions around the world should be able to promote 21<sup>st</sup> century skills to its students through formal education. However, it is also a reality that a huge number of the world population are drop-outs, out-of-school youth and even individuals who do not go to formal schooling. As a result, these individuals who do not go to formal schooling have difficulties in understanding and learning 21<sup>st</sup> century skills which enable them to cope and to compete in the globalized world. Initiatives around the world especially in developing countries (Nath, Sylvia, & Grimes, 1999) like the Philippines have introduced and implemented alternatives to cope up with the challenges brought by the changing world and knowledge economy through non-formal and informal education such as the Alternative Learning System to help individuals attain education (Colardyn & Bjrnavold, 2004)

The Philippines is active in accepting the global challenge of providing Educational Services to the Filipinos. In fact, in the year 1990, the international development community birthed a massive global education initiative called Education for All 2015 (Gonzales, 1999). The Philippine government has adopted this commitment of EFA goals in EFA assembly in Jomtien, Thailand in 1990 and Dakar, Bangladesh in 2000. The country also adapts Millennium Development Goals (MDG) in 2001 and the Decade for Literacy in 2003. But despite this visionary plans the country still continuously suffer a very high dropouts statistically 62% of the Filipino Student Population or 11,000,000 in total (UNICEF, 2010). The Government efforts to combat school attrition through strengthening student programs and developing a system that will promote continuing Education has promulgated Republic Act 9155 in 2001 or the Governance Act of Basic Education which provides provisions for Alternative Learning System that will address illiteracy and promote continuing education.

The implementation of Alternative Learning System paved way to the rights for education to be asserted by marginalized groups like children,

women, people with special needs, and Indigenous People communities students (Raywid, 1994; Doronila, 1997; Valk, 2009) and also Out-of-School-Youths (OSY) who did not finish their basic education due to economic and support issues. Many studies shown that globalization favors the educated, skilled and mobile workers (Abinalis & Dolan, 2012 and Guerrero, 2007). Marginalized groups who are denied access to education will most likely be unable to benefit from modernization. In order for the OSY and unprivileged Filipino learners to cope with the fast changing workplace, the Bureau of Alternative Learning System (BALS) under the Department of Education (DepEd) has design a curriculum combining the formal and Non-Formal Education (PHIL EFA Report, 2009). The learning strands are not adapted according to their disciplinal case but according to their "functionality." The Alternative Learning System is identified as a Community Based Learning Service (Pinca, 2015) where it pursues the growth of students` intellectual capacity along their chosen career path and aims to promote their sense of social responsibility and providing them the opportunity to serve the community. This challenges ALS teachers to provide a meaningful learning experience to such a diverse group. Galima (2002) identifies three teaching strategies. One is the use of informal sharing of experiences at the beginning of the session. This would inform the teacher about the condition of the learners, their current concerns and interest. They carefully consider the learners' interests before starting to teach them the contents of the module. Another strategy is the use of various computer-based technologies, especially video clips. This is done to keep the learners, especially the younger ones, motivated and engaged The third one is the use of group activities which are meant to create a closer relationship among the learners. Eventually, the class becomes a support group.

The program also stresses that it is a parallel learning system that provides a viable alternative to the existing formal education instruction encompasses both the non-formal and informal sources of knowledge and skills. Also, literatures suggest that Alternative Learning System is an avenue for Out-of –School youth and individuals to learn not only basic and life skills, but more importantly the 21<sup>st</sup> century skills which enable them to cope up and to easily adjust with the changes in their environment (Caoile, 2007; Kim & Taylor, 2008; Le Clus, 2011). It can be understood then that students of Alternative Learning System program are already equipped at least with 21<sup>st</sup> century skills needed for their professional and personal growth.

Recent trends in research stressed the need in evaluating the effectiveness of non-formal education programs (Huffmann, Lawrenz, & Thomas, 2008; Macomber, Rennae, & Steuerle, 2010; Walahoski & Suzanne, 2012) such as the Alternative Learning System Program of the Philippines (Mercado, 2015; Apao, Dayagbil, & Abao, 2014; Dela Rosa, 2015). The use of effective evaluation of such programs play a critical role in revealing its outcomes specially in terms of assessing if the objectives of the programs are really met (Clavijo, Fleming, Hoerman, Toal, & Johnson, 2005; Braveman & Arnold, 2008; Castleberry & Enger, 1998). As such, assessing students' outcomes is one of the best ways to measure the effectiveness of such programs (Dugger & Dugger, 1998; George & George, 2000) and to see to it that such programs promote and help students to become globally competitive through the acquisition of the 21<sup>st</sup> century skills despite learning in non-formal school (Bozhovich, 2009). With this, it can be concluded that the importance of student engagement in 21<sup>st</sup> century skills is at the forefront of educational reforms. However, little has been done to assess such engagement especially with Non formal learners (Feichas, 2010; Rotherham & Willingham, 2009) such as the Alternative Learning System learners (Guerrero, 2007; Rogers, 2005). Hence, this study was conducted in order to present the 21<sup>st</sup> century skills of the Alternative Learning System learners in Northern Philippines.

Hixson, Ravitz, and Whisman (2012) identified eight skills that every student should possess in the 21<sup>st</sup> century which are the following:

- a. *Critical thinking skills* refers to students being able to analyze complex problems, investigate questions for which there are no clear-cut answers, evaluate different points of view of sources of information, and draw appropriate conclusions based on evidence and reasoning.
- b. Collaboration skills refer to students being able to work together to solve problems or answer questions, to work effectively, and respectfully in teams to accomplish a common goal and to assume shared responsibility for completing a task.
- c. Communication skills refer to students being able to organize their thoughts, data, and findings and share these effectively through a variety of media as well as orally and in writing.
- d. *Creativity and innovation skills* refer to students being able to generate and refine solutions to complex problems or task based on synthesis, analysis and then combining or presenting what they have learned in new and original ways.
- e. Self-direction skills refers to students being able to take responsibility for their learning by identifying topics to pursue and processes for their own learning, and being able to review their own work and respond to feedback.
- f. *Global connections* refer to students being able to understand global, geopolitical issues including awareness of geography, culture, language, history, and literature from other countries.
- g. *Local connections* refer to students being able to apply what they have learned to local contexts and community issues.
- h. Using technology as a tool for learning refer to students being able to manage their learning and produce products using appropriate information and communication technologies.

### **Research Objective**

This study was conducted to determine the extent of acquisition of the Alternative Learning System Learners in Northern Philippines on the 21<sup>st</sup> century skills which include critical thinking, collaboration, communication, creativity and innovation, self-direction, global connections, local connections, and information and communications technology.

# METHODS

The respondents in this descriptive study were sampled from a random sample of Alternative Learning System (ALS) schools in Northern Philippines. The sample consisted of 150 enrolled students of the ALS program. However, only those students enrolled under the Accreditation and Equivalency (A & E) program was considered in the study. Although it was not possible to reach a random sample of all schools offering Alternative Learning System in Northern Philippines, care was taken to select schools from rural and urban communities to represent the composition of ALS students in Northern Philippines with regard to sex, age, civil status, and employment status. Of the ALS students, eighty three percent were female and the average age was 16.5. Also, ninety five percent of the respondents are single and sixty five percent are unemployed. These demographic characteristics of the respondents were similar to those found in comparable studies on ALS learners in other parts of the Philippines (Fernandez, 2013; Moralista & Delariate,, 2014)

### Table 1. Background Variables

Background Variables		N (150)	%
Sex	Male	67	45.00
	Female	83	55.00
Age	10-15 years old	19	13.00
	16-20 years old	98	66.00
	21 - 30 years old	29	19.00
	30 years old and above	4	2.00
Civil Status Employment Status	Single	122	81.00
	Married	24	16.00
	Widow	4	3.00
	Farmers	12	8.00
	Utility Services	7	5.00
	Technical/ Industrial	37	25.00
	Home based	9	6.00
	Entertainers	7	5.00
	Unemployed	78	51.00

A structured questionnaire using Likert-type scale was administered in April 2016 to 150 Alternative Learning System students. The respondents were instructed to fill out questionnaire that asked a range of items about their 21<sup>st</sup> century skills.

The 21<sup>st</sup> century skills of ALS learners were measured using the survey items from the International Innovative Teaching and Learning Study (Shear, Novais, Means, Gallagher, & Langworthy, 2010) and modified by Ravitz, Hixon, English and Mergendoller (2010). The tool is a 62-item instrument on a 5-point scale (scored from 1=strongly disagree to 5 = strongly agree). Factor analysis of the said tool revealed eight 21<sup>st</sup> century skills. The dimensions and their internal consistency estimates (coefficient alphas) are: critical thinking skills (0.90), collaboration skills (0.94), communication skills (0.93), creativity and innovation skills (0.94), self-direction skills (0.95), global connections (0.96), local connections (0.95), and Information and Communications Technology (0.95). Descriptive statistics were used to analyze data.

# RESULTS

A. 21<sup>st</sup> Century Skills of the Alternative Learning System Learners in Northern Philippines

Table 2. 21 <sup>st</sup> Century Sk	s of the ALS Learners in	Northern Philippines
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21 <sup>st</sup> Century Skills	Mean	Standard Deviation	Qualitative Description
Critical Thinking	3.17	0.80417	Moderate
Collaboration	2.42	0.73079	Low
Communication	2.50	0.71618	Low
Creativity and	1.70	0.81376	Very Low
Innovation			-
Self-Direction	2.70	0.71059	Moderate
Global Connections	2.05	0.66839	Low
Local Connections	3.62	0.72422	High
ICT	1.87	0.66479	Low
OVERALL MEAN	2.50	0.72911	Low

Table 2 presents the 21<sup>st</sup> century skills of the students enrolled in the Alternative Learning System in Northern Philippines. It can be gleaned in the table that generally, ALS learners have a low level of acquisition of 21<sup>st</sup> century skills. The results show that local connection skill is the highest among the different 21<sup>st</sup> century skills that the learners acquired. However, most of the learners have a low acquisition of 21<sup>st</sup> century skills.

# DISCUSSION

The findings reveal that the level of ALS learners` acquisition of 21st century skills is low. This implies that the learners enrolled in the program do not yet possess the required 21<sup>st</sup> century skills required. Under this area, local connections have the highest level of acquisition by the learners. This implies that their local environment strongly affect the way they learn which includes the communal support they are receiving such as community learning centers which constitutes the study of Gallardo (2010) saying that community and schools must collaborate in achieving specific objectives thus, enriching not just their intellectual capacity but also their social awareness. Moreover, the findings affirm what Jimes, Weiss, and Keep (2013) & Cheng (2002) stressed that teachers should teach the importance of content of a certain topic that is rooted in the cultural context or in a local setting. Hence, ALS mobile teachers should adapt localized instructional materials to suit to the localized setting of learners. Meanwhile, the findings also show that most of the skills are low such as the Creativity and Innovation Skill. One likely explanation for this is the diverse status and learning styles of the learners. Moralista & Delariarte (2014) & Fernandez (2013) stated that increasing learning competencies is one of the major problems encountered by mobile teachers since there are advance and slow learners affecting the interference on cognition abilities to task related factors such as complexity of a task or lesson. Further, Craft, Jeffrey & Leibling (2001) stressed that creativity as a 21<sup>st</sup> century skill can be enhanced and cultivated to students since it is often seen as a talent.

On one hand, the findings reveal that the Integration of ICT in learning is also low. This includes updating learning materials and providing modern approaches for learners. The findings affirm the study of Moralista & Delariarte (2014) where they emphasized that the availability of state-of-theart equipment has significant implications to modern teaching and learning of ALS beneficiaries. Moyer (2016) also stressed that teachers training in using technology in learning is vital and must be regularly instituted. Furthermore, Russell, Finger, & Russell (2000) and Hardy (1998) reveal in their study that the limited use of ICT can be characterized by the provision of minimal skills in educational technology for teachers in pre-service education training courses. As a result, teachers do not employ the use of ICT, but rather stick to the traditional mode of teaching. Consequently, students will not have any avenue to develop their ICT skills. Meanwhile, the study also shows that collaboration is also one among the lowest developed 21st century skills. Colardyn & Bjornavold (2004) found out that non-formal learners must provide meaningful learning experiences to such a diverse group. This implies that there must be informal sharing of experiences and multiple views, thus, informing the mobile teachers about the condition of the learners, their current concerns and interests. This would help both the learners and the

teachers in modifying and developing approaches in providing an inclusive education. Moreover, most of the respondents stressed that working with other learners and presenting it to the class are not their mode of learning because of factors such as low self-esteem and age gaps. Bell (2010) suggested that in order for learners to develop or to enhance collaborative skills, teachers should teach students more on active listening skills and should employ project based in teaching.

The findings also reveal that the level of development of the learners to their communication skills is low. Mercado (2005) emphasized that learners should always express their ideas and teachers on the other hand must provide learning opportunities for the students to speak their minds. He also further expressed that communication skill is one of the most important skills to adapt to the present. Additionally, Silva (2009) stressed that the use of group activities is meant to create a closer relationship among the learners. Eventually, the class becomes a support group where they will feel no guilt or shame in sharing their ideas thus, giving them the self-confidence to react and be open. On the other hand, learners perceived their global connection skills as low. Moralista & Delariarte (2014) proved that there is strong pressure of fast modernization that is borderless and boundless. This implies that there is paradigm shift to the present society hence forcing many to adapt including the ALS learners. Meanwhile, learners shared that they do not have competency dealing with studying global matters like global issues and cultural diversity. Ravitz, Hixson, English, & Mergendoller (2012) stated that a person without global connections is not prepared in facing the world outside his parameter or culture and forming conflict in engaging to other people. In addition, Pinca (2015) emphasized that ALS learners must understand and be prepared to diverse and differences among nations.

It can also be gleaned in the result that that there is moderate level of development of learners in their self-direction and critical thinking skills. One likely explanation for this is their preference to work individually. This implies that they are directly involved in the learning process thus fostering their capabilities to correspond and formulate own ways to learn. Pinca (2015) argues that excessive help and support denudes students of the opportunity to think for themselves. It stops them having to work through difficulties or solve problems. The tacit message is that there will always be someone else there to do it for them. He also emphasized that effective formative feedback encourages students to be independent because it allows them to take control of their own learning. If they know what they need to do to improve, they are in a position to make those improvements, therefore acting independently. The converse would see a summative grade being given which offers no scope for action and which, psychologically, encourages students to become dependent.

# CONCLUSION

The present study assessed the 21<sup>st</sup> century skills acquisition of the Alternative Learning System learners in Northern Philippines. The research findings indicates that ALS learners are not yet ready to face the globalized world due to the fact that the extent of their attainment on the required 21<sup>st</sup> century skills, except for the local connection skills is not that high. One very important contribution of the study is that it underscores and reveals how ALS learners are doing well in terms of the acquisition of 21<sup>st</sup> century skills as it will serve as a basis for policy formulation and intervention to help uplift the ALS learners and to cope with the challenges of globalization.

### **RECOMMENDATIONS AND IMPLICATIONS FOR FURTHER RESEARCH**

Possible extension of this study could be to examine also the 21<sup>st</sup> century skills and competencies of the ALS teachers. In addition, since the current study was conducted in Northern Philippines, it may be worthwhile also to investigate the 21<sup>st</sup> century skills of ALS learners in other parts of the Philippines to determine whether the results presented here reflect the general situations of ALS learners in the whole Philippines.

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# EXTENT OF ATTAINMENT OF TEACHER EDUCATION GRADUATES ON THEIR PROGRAM LEARNING OUTCOMES

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# ABSTRACT

The Philippine Higher Educational System is undergoing series of changes and transitions in order to adapt to the challenges of globalization and internalization of education. The Commission on Higher Education (CHED) introduced a new shift in the Higher Education, which is the implementation of the Outcomes-Based Education from Inputs-Based Education, thus placing the learners as the center of all educational planning. This study was conducted to determine the extent of attainment of Teacher Education Graduates on the 14 Program Learning Outcomes of the University of Saint Louis. Total enumeration of Teacher Education graduates of school year 2015-2016 were considered in the study through descriptive survey. Results showed that Constructing and/or selecting, and employing the most appropriate tool to improve various learning experiences are considered as the most attained program learning outcomes. Moreover, result of the independent sample t-test and one way analysis of variance test revealed that field of specialization and program specialization affect the level of attainment of teacher education graduates on their Program Learning Outcomes. In general, the extent of attainment of Program Learning Outcomes is very high.

**Keywords**: Teacher Education Graduates, Program Learning Outcomes, University of Saint Louis

#### INTRODUCTION

Education plays a very important role in the development and progress of a certain nation and society. In the Philippines, education is undergoing transitions and adaptations especially in terms of globalization and internalization which creates investable problems that imply the need for effective programs and policies in all levels from pre-elementary to post tertiary. As a result, the Philippine Educational System has undergone series of changes and transformations in order to adapt to the contemporary