

The Skills Of Pre-Service Teachers Of Region II, Philippines In The 21st Century

Teresita C. Molano

Abstract: The study aimed to determine the 21st century skills in developing instructional modules to enhance these skills that help bridge the gap in preparing pre-service teachers to meet the needs of their 21st century learners. Quantitative approach was used to determine appropriate outcomes in determining the 21st century skills of pre-service teachers of Region II of Philippines. The respondents of the study are the physical education teachers which are Graduate of Bachelor of Secondary Education major in Physical Education. Result shows that the pre-service Physical Science teachers are good in Information and Communications Technology, Flexibility and Adaptability, Creativity and Innovation and Collaboration. Moreover, the communicative, critical thinking and problem solving skills of the pre-service Physical Science teachers need improvement.

Index Terms: Flexibility, Pre-service teachers, Region II, Skills

1 INTRODUCTION

According to a report on January 2014 by the International Labor Organization (ILO), the Philippines has the highest unemployment rate among the 10 countries of the Association of Southeast Asian Nations. Findings revealed that the country has a high unemployment percentage of 7.3 in 2013. Additionally, based on an SWS survey, the number of unemployed Filipinos went up by 300,000 to 11.8 million in the second quarter of 2014. Out of the 11.8 million unemployed Filipinos, there were 1.2 million Filipino youth who, despite of having reached secondary and tertiary levels of education, were nonetheless unemployed. According to William Reese, Chief Executive Officer of the International Youth Foundation, a mismatch of skills was to blame for the rise of youth unemployment. According to him, more young people were gaining tertiary qualifications but not the necessary qualifications relevant to a changing labor market. This implies that young people have difficulty finding jobs. They are ready and willing to work, but the opportunities are not available. While there are job openings, companies cannot find people with the right skills. In the article entitled "Oversupply of Unemployable Graduates", Leandro Milan (2010) stated that the Philippine education system continues to turn out college graduates whose training and skill are not attuned to the needs of the labor market both at home and abroad. Similarly, reports by Arum and Roksa (2010), Van Velsor and Wright (2012), Barber, Donnely, and Rizvi (2013), YouGov Survey (2013) have highlighted the existing mismatch of skills between university graduates and the needs of potential employers. These reports have claimed that companies found it increasingly difficult to "find people with their right skills for entry-level positions" (Barton, 2012). This has been attributed to a skills gap whereby an organization is unable to find candidates with the right knowledge, skills and abilities to fill the open positions. Jayaram (2012) reported that the high level of youth unemployment can be partly attributed to a skills mismatch in which there is a growing gap between employers' needs and the skills that student acquire at the secondary and tertiary levels of education.

To address this gap, workers need to acquire skills which will allow them to compete and meet the demands of the employers. Educators, researchers and employers identified these skills as 21st century skills that call for their introduction at all levels in education. In the Philippines, the Department of Education has integrated this approach into its K to 12 Education reform agenda. The Basic Education program endeavors to produce holistic individuals who will possess the 21st century skills. These are life and career skills, learning and innovation skills, communication skills, and media and technology skills. So, what do these 21st century skills have to do with the future teachers?

2 METHODOLOGY

Research Design

Descriptive statistics was used in this study. The quantitative data were analyzed separately. The quantitative revealed both descriptive and inferential statistics. The survey results were validated and compared to some qualitative approach of similar intention of the study (Lodico, Spauling & Volegtle, 2006).

Setting of the Study

The study was conducted in selected Teacher Education Institutions in Region I (Mariano Marcos State University), II (Cagayan State University, Our Lady of the Pillar College, Isabela State University, and Northeastern College, III (Bulacan State University), IVa (Batangas State University, Southern Luzon State University), Cordillera Administrative Region (St. Louis University and Benguet State University) and National Capital Region (Technological Institute of the Philippines, De Lasalle University Araneta).

Respondents of the Study

The respondents for the survey were the pre-service Physical Science teachers belonging to the third and fourth year levels, from public and private Teacher Education Institutions in selected regions in the Philippines namely Region I, Region II, Region III, Region IVa, CAR and National Capital Region. A total of 342 pre-service Physical Science teachers participated in the study. The said survey was conducted during the second semester of school year 20015-2016.

Sampling Technique

The respondents in the survey were obtained using stratified

• Teresita C. Molano*, BSE Department, College of Education, Isabela State University-Cauayan Campus, Cauayan City, Isabela, Philippines

sampling technique. Stratified sampling is a probability sampling technique wherein the researcher divided the entire population into different subgroups or strata, then randomly selected the final subjects proportionally from the different strata.

Research Instrument

The survey questionnaire served as the primary data gathering instrument of the study. The said questionnaire sought to determine the extent of acquisition of the 21st century skills by the pre-service Physical Science teacher respondents. Data were collected through survey questionnaire. Survey is a systematic and standard way of data collecting method from individuals, households, organizations, or larger organized entities (Wright and Marsden, 2010).

3 RESULTS AND DISCUSSIONS

Out of the 342 respondents, majority or 53.5 percent were third year consisting of 183 respondents while 46.5 percent were fourth year consisting of 159 respondents. The data revealed that there were students still enrolling in the Bachelor of Secondary Education major in Physical Science. Majority of the respondents were enrolled in State College or University with the highest frequency of 267 or 78.1 percent. This finding was primarily attributed to the fact that tuition fees tend to be much lower in state colleges or universities than in other institutions. As cited by Orsolini (2014), "state universities typically provide a wider variety of majors compared to smaller colleges, so students can choose before settling in on a field of study." In addition, most of the respondents came from Region II with the highest frequency of 105 (30.7%). Some studies revealed that student teachers are inspired and driven to join the teaching profession with mostly extrinsic reasons (Chan, 1998). Extrinsic reasons refer to economic as well as conditions of service and social status. It is considered that students are interested in teaching as a career, and generally regards teaching as a preferred and respected occupation (Lai, Ko, & Li, 2000). Students who are interested in teaching consider teaching career for its massive contribution to community and society, good remunerations, benefits and good working conditions. Furthermore, more institutions in Region II offer bachelor of secondary education program major in Physical Science.

TABLE 1

THE ASSESSMENT OF 21ST CENTURY SKILLS OF PRE SERVICE TEACHERS

21 st Century Skills	3 rd Year		4 th Year		t-Value	p-value	Significance
	Mean	S.D	Mean	S.D			
Critical Thinking	3.10	0.39	3.29	0.42	-4.495	P=0.000<0.01	Very Significant
Flexibility and Adaptability	3.17	0.44	3.29	0.40	-2.651	P=0.008<0.01	Very Significant
Communication	3.03	0.40	3.23	0.42	-4.466	P=0.000<0.01	Very Significant
Collaboration	3.13	0.45	3.32	0.41	-4.193	P=0.000<0.01	Very Significant
Information and Communication Technology	3.15	0.41	3.35	0.41	-4.691	P=0.000<0.01	Very Significant
Creativity and Innovation	3.13	0.44	3.36	0.44	-4.601	P=0.000<0.01	Very Significant
Problem Solving	3.04	0.43	3.25	0.47	-4.290	P=0.000<0.01	Very Significant

Table 1 reveals that in terms of year level, there was a very significant difference with the pre-service teachers' extent of

acquisition of the 21st century skills as shown by the p-values of 0.000, 0.008, 0.000, 0.000, 0.000, 0.000, and 0.000 respectively which are lower than 0.01 level of significance with the computed t-values of -4.495, -2.51, -4.466, -4.193, -4.691, -4.601, -4.290 respectively. Thus, the pre-service teachers are good in Information and Communications Technology, Flexibility and Adaptability, Creativity and Innovation and Collaboration and the results are very significant.

4 CONCLUSION

The study shows that majority of the respondents were dominated by the 3rd year pre-service Physical Science teachers. They constitute 53.5 percent of the total sample population. Majority of the respondents belonged to State University or College with a percentage of 78.1 of the total sample population. Majority of the respondents came from Region 2 with a percentage of 30.7 of the total sample population. And Based on the self-assessment of pre-service physical science teachers' extent of acquisition of the 21st century skills, they had demonstrated critical thinking, communication, collaboration, creativity and innovation, information and communications technology literacy, flexibility and adaptability and problem solving skills, to a moderate extent. Among these skills, creativity and innovation and information and communications technology literacy got the highest rating with an overall mean of 3.24 respectively. Communication skills ranked the lowest with an overall mean of 3.13. It is recommended that the Commission on Higher Education of the Philippines should Develop and implement curricula geared towards learners' acquisition of 21st century skills and other competencies responsive to the needs of a changing labor market. In addition, the schools of private and public teachers should provide professional development programs to equip pre-service and in-service teachers with 21st century skills that will help in improving the quality of education and making them competent to deliver relevant and effective 21st century education. Adopt 21st century curriculum in the context of core academic subjects and employ methods of 21st century instruction that integrate innovative and research-proven teaching strategies, modern learning technologies, and real world resources and contexts. Review and align program goals, strategies, content and processes in ways that support educators in teaching for 21st century skills outcomes and Ensure that the physical infrastructure supports 21st century knowledge and skills.

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