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**INTERNATIONAL JOURNAL OF ENGINEERING SCIENCES & RESEARCH  
TECHNOLOGY****THE INSTRUCTION OF SOCIAL STUDIES IN THE Kto12 SENIOR HIGH  
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**ABSTRACT**

This study examined the instruction of Social Studies in the Kto12 Senior High School of Zone II, Department of Education (DepEd), Division of Zambales specifically assessing the three Knowledge Domains such as the Content Knowledge, Pedagogical Knowledge and Technological Knowledge. The respondents of the research study are the Senior High School Social Studies (*Araling Panlipunan*) teachers from Zone 2, Division of Zambales. The study was conducted during the third quarter of the school year 2018-2019. The statistical treatment of this study utilized descriptive statistical tools such as percentage and mean and ANOVA was used as inferential statistics. Based on the findings, the researcher concluded that the Senior High Social Studies teacher-respondents are female, in their early adulthood, Teacher I, holders of Bachelor Degree with Master's units, quite new in the teaching profession and have attended seminars primarily on Teaching Pedagogy. The teachers have a very high extent of Knowledge on the domains Content Knowledge, Pedagogical Knowledge and Technological Knowledge. Moreover, results revealed a no significant difference on the level of teachers' Content Knowledge, Pedagogical Knowledge and Technological Knowledge when attributed to respondents' age, sex, field of specialization, highest educational attainment, academic position and years of teaching. However, there is significant difference when attributed to respondents' number and types of seminars attended.

**KEYWORDS:** Instruction, Social Studies, Knowledge Domains, Content Knowledge, Pedagogical Knowledge, Technological Knowledge.

**1. INTRODUCTION**

Education is recognized worldwide as the bedrock of national development and the key factor in human resource. Bekoe (2013) asserted that there is a general belief that teachers play a very critical role in the achievement of quality education. The importance of the teacher in quality education delivery underscores the need for commitment of both material and financial resources to the preparation of teachers. Teacher development starts at the training institution and continues throughout working life. Ornstein & Hunkins (2004) believe that it is therefore incumbent on the Social Studies teacher to be abreast with and encompass problem solving, scientific inquiry, active learning, subject integration and self-discipline in classroom activities.

The Social Studies Education emphasized the holistic integration of nation building content around relevant issues and topics that included environmental concerns, population, attention to attitudes, values, beliefs and the skills of problem solving (Kankam, 2015). Judging from the multidisciplinary content and child-centered pedagogical approaches, Social Studies stands out as the most appropriate subject for Citizenship Education (Kankam, 2015). The fundamental concern of Social Studies is with man and his complex relationships with the world around and beyond. It is in this context that the National Council for Social Studies (NCSS) (2010) posits that the Social Studies curriculum attempts to instill in the students; the basic knowledge, desirable values, and skills for investigating, analyzing and explaining these interrelationships. By going through these process the student is taught the knowledge and skills that will enable him/her function effectively in whatever setting they find themselves (Welton & Mallan, 1988). Social Studies, as a core subjects in the school curriculum by nature requires learning and the knowledge of students should not be put into a watertight-compartment and that students learning, phenomenon and societal issues be discussed in a multi-dimensional approach. For Tomei



(2005), this will help reconstruct the teaching and learning of Social Studies to be more active learning, students centered, more real world learning (competence-based) to better understand real world issues and dynamics

The Republic Act 10533 of 2013, known as Kto12, is an Act enhancing the curriculum. The graduates (the Senior High school students) are also expected to be equipped with 21st century skills like ICT, learning and innovation, communication skills. Therefore, the competencies that the secondary Social Studies teacher will acquire and gain by integrating technology, content and pedagogy will enable the teacher to enhance the scope of the content and the use of technological resources, information and approaches.

Partnership for 21st Century Skills in 2007 echoes that the future of Social Studies education and the expectations of learners on how the teaching and learning of the subject should be. The theoretical framework for this research is rooted in Mishra & Koehler (2006) Technological Pedagogical Content Knowledge (TPACK). Specifically, TPACK has three intertwining knowledge domains being technology, content and pedagogy.

By investigating the knowledge underlying effective teaching and learning, we are studying how to improve teacher quality. Teacher quality itself is an important factor in determining gains in student achievement. In fact, the main motive for investigating teacher knowledge is to improve student outcomes. On the other hand, to improve teacher quality, it is crucial to understand what teacher professionalism involves. Thus, this study proposal focuses on teacher knowledge as a key factor in teacher professionalism. In other words, the two main themes underlying the study of teacher knowledge are improving student outcomes and teacher professionalism. The basis of the K-12 Social Studies Curriculum is to achieve the goal “Edukasyon para sa Lahat 2015” (Education for All 2015) and the K-12 Philippine Basic Education Curriculum Framework. The aim of these is for students to develop 21st Century Skills to nourish a functionally literate and developed Filipino. The overall objective of Social Studies is to hone learners to become citizens who are investigative, critical thinkers, responsible, productive, environment friendly, patriotic and values oriented with a nationalistic and global view and value to social and historical topics.

This research would contribute to the limited knowledge on content, pedagogical and technological knowledge of educators in the teaching and learning of Social Studies in the Province and the country. The research would aid in the adaptation of technological pedagogical content knowledge by Mishra & Koehler (2006) as a yardstick in measuring Social Studies teacher’s effectiveness and competencies within the country. The review would rekindle the awareness that teaching and learning of Social Studies in the senior high school. The need or justification to integrate innovativeness in planning of the content, teaching and learning resources, materials, technology and activities to make it a functional subject. It is envisaged that the study will help Social Studies curriculum specialists/experts to organize technological training programmes on 21st century teaching and learning methods for Senior High Social Studies teachers to enhance their knowledge and competencies.

The findings of this study would enable the curriculum planners, the school heads and Social Studies educators to determine the status of implementation and teaching of the coverage of the Social Studies Program. By so doing, weaknesses and needs of the Social Studies program can now be properly and completely addressed. Evaluation of the Knowledge domain of the Social Studies Educators is towards providing appropriate instruction for teachers and quality learning opportunities, meaningful, comprehensive and challenging Social Studies content for all learners.

## 2. OBJECTIVES OF THE STUDY

This study examined the instruction of Social Studies in the Kto12 Senior High School of Zone 2, DepEd, Division of Zambales, Philippines categorized into three Knowledge Domains underlying effective teaching and learning, during the school year 2018-2019.

Specifically, this study sought to answer the following questions:

1. How may the profile of the teacher-respondents be described as to: age; sex; field of specialization; academic position; highest educational attainment; and numbers of years teaching; number of seminar attended; and type of seminar attended?

2. How may the instruction of Social Studies in the Senior High School be described in terms of the following Knowledge Domains of teachers?
  - 2.1 Mastery of the Content Knowledge;
  - 2.2 Pedagogical Knowledge; and
  - 2.3 Technological Knowledge.
3. Is there a significant difference in the level of Knowledge Domains of the respondents in terms of Content Knowledge, Pedagogical Knowledge and Technological Knowledge of Social Studies Educators in the Senior High School when grouped according to teachers' profile?

### 3. MATERIALS AND METHODS

This study employed descriptive research method with the survey questionnaire as the research instrument. According to Driscoll (2011), the major purpose of descriptive research is description of the state of affairs as it exists at present. The present study described the instruction of Social Studies in the Kto12 Senior High School in the Division of Zambales categorized in three Knowledge Domains. The perceptions and insights were solicited from the teacher - participants. The respondents of the research study are the Social Studies (AralingPanlipunan) teachers from twelve (12) Senior High Schools at Zone 2 (Botolan District, Iba District and Palauig District), Division of Zambales, Philippines. A total population of one hundred eight (108) teachers participated.

The main instrument which was used in gathering the data for the study proposal is survey checklist. According to Cherry (2014), survey is probably the most commonly used research design in Social Sciences. The contents of the survey checklist of the present study were lifted from the questionnaires of the studies of de Guzman, M. F. D. & Ecle, R. (2019), "The Social Studies Curriculum Standards in Junior Secondary Schools; Input to Quality Instruction and Students' Civic Competence" and Eblacas, I (2018), "Level Of Computer Usage and Literacies in Computer-Based Technology Tools in 21st Centuries Social Studies Teacher and Students"; and from the Southeast Asian Ministers of Education Organization Regional Center for Educational Innovation and Technology (SEAMEO INNOTECH) Teaching Competency Standards in Southeast Asian Countries, Version 2010.

First part of the survey checklist of the present study focused on the profile of the teacher –respondents which include the age, sex, field of specialization, academic position, highest educational attainment, number of years teaching, number of seminar attended; and type of seminar attended. The second part of the survey checklist assessed and describe the level of Content Knowledge, Pedagogical Knowledge, Technological Knowledge of Social Studies teachers in the Kto12 Senior High School. These categories have a total of 30 items. The respondents answered on a Likert scale ranging from 4 (Very High Extent), 3 (High Extent), (Low Extent) to 1 (Very Low Extent).

The instrument in its first draft was presented to the panel of oral examiners of President Ramon Magsaysay State University (PRMSU) Graduate School for validity purpose. The amendments and revisions which the panel were cited and suggested in their recommendations were carried on in the finalization of the research instrument. The conduct of a pilot test is necessary for the research instrument's test of reliability. The pilot test was conducted among the Senior High School teachers Polytechnic College of Botolan, Botolan, Zambales.

After securing the endorsements from appropriate authorities, the researcher personally distributed the instrument to the respondents. The objectives of the study were explained, for them to consider and gain better understanding of the objectives of the study. The respondents' answers were treated confidential. The instruments were collected immediately. The statistical treatment of this study utilized descriptive statistical tools such as percentage and mean. ANOVA was used as inferential statistics.

#### 4. RESULTS AND DISCUSSION

##### 1. Profile of the Social Studies Teacher - Respondents

**Age.** The mean age of the teacher-respondents is 36.81 or 37 years old (Table1). This particular age is categorized into middle adulthood. According to Armstrong (2008), middle adulthood ranges from 35 to 40 years old who often accommodate bigger responsibilities in life.

**Sex.** Of the 108 total respondents, 38 or 35.19% are males and 70 or 64.81% are females. This means that majority of the teacher-respondents of the present study is represented by women. In the study Catacutan & de Guzman (2017), majority (82 or 61.65%) of the teacher-respondents of selected public schools in Iba, Zambales are female.

*Table 1 Frequency, Percentage and Mean Distribution of Teacher-Respondents' Profile*

Age	Frequency	Percent
<b>Total</b>	<b>108</b>	<b>100.00</b>
<b>Mean</b>	<b>36.81 or 37 years old</b>	
Sex	Frequency	Percent
Male	38	35.19
Female	70	64.81
<b>Total</b>	<b>108</b>	<b>100.00</b>
Field of Specialization	Frequency	Percent
History	7	6.48
Social Science	11	10.19
Political Science	2	1.85
Social Studies	56	51.85
Others	32	29.63
<b>Total</b>	<b>108</b>	<b>100.00</b>
Academic Rank/ Position	Frequency	Percent
Teacher 1	44	40.74
Teacher 2	40	37.04
Teacher 3	22	20.37
Master Teacher	2	1.85
<b>Total</b>	<b>108</b>	<b>100.00</b>
Highest Educational Attainment	Frequency	Percent
Bachelor	24	22.22
Bachelor w/ Master's Units	67	62.04
Masters	14	12.96
Masters' with Ed. D. Units	2	1.85
Ed.D.	1	0.93
<b>Total</b>	<b>108</b>	<b>100.00</b>
Number of Years in Teaching	Frequency	Percent
<b>Total</b>	<b>108</b>	<b>100.00</b>
<b>Mean</b>	<b>5.99 years</b>	

As for the result on teachers' **area of specialization**, more than half 56 or (51.85%) of the teacher-respondents specializes in Social Studies or *AralingPanlipunan* and the rest are holders of other specialization (e.g., Languages, Mathematics or Pure Science, etc.). This result signifies that the respondents are teaching aligned with their specialization. This particular result is consistent with Catacutan & de Guzman (2017) and Dizon & Orge's (2019) studies with regards to variable field of specialization, indicating that the respondents' field of specialization/major is Social Studies.

**Academic Position.** Forty four (44) 40.74% are Teacher I; 40 or 37.04% are Teacher II; there are 22 or 20.37% Teacher III and 2 or 1.85% Master Teachers. As for the result on teachers' present academic position of the present study, most (40.74%) are Teacher I. Teacher I academic rank/position in the study of Dizon & Orge (2019) and Catacutan & de Guzman (2017) constituted the largest percentage of their respondents.

**Highest Educational Attainment.** Majority (67 or 62.04%) of the Social Studies teacher-respondents are Bachelor Degree holder with Master's units. The result is consistent with the finding on the highest educational attainment profile variable of the studies of de Guzman & Ecle (2019) and Dizon & Orge (2019), indicating that most of the Social Studies teacher are holders of Bachelor Degree with Master's Units. The finding of the present study clearly suggests that the teacher respondents are pursuing advanced education.

**Number of Years Teaching.** The mean of years in teaching was 5.99 or 6. In this study, the teachers rendered their service for not quite long as supported by the high percentage of respondents who are Teacher I (40.74%), the lowest in the academic position and salary grade (SG) for public school teachers in the Philippines and who are holders of Bachelor's degree with MA units (62.04%). The result is the same with Eblacas (2018) and Catacutan & de Guzman's (2017) whose respondents' mean years of service as Social Studies (*AralingPanlipunan*) teachers was 6 years.

*Table 3 Frequency and Percentage Distribution of the Types of Seminar Attended by the Teacher-Respondents*

Types of Seminar Attended	Frequency	Percent	Rank
Learning Plan	8	7.41	6
Performance Task Assessment	9	8.33	5
Teaching Pedagogy	26	24.07	1
ICT	17	15.74	3
Instructional Resource/ Materials	24	22.22	2
Curriculum Guide	11	10.19	4
Outcomes Based	6	5.56	8
Others	7	6.48	7
<b>Total</b>	<b>108</b>	<b>100.00</b>	

Twenty six of the teacher respondents (26 or 24.07%) have attended seminars on Teaching Pedagogy (rank 1). Majority of the faculty-respondents in the study of de Guzman (2016) and de Guzman, Edano & Umayan (2017) preferred and attended seminars and workshops on student-centered strategies. Rajae, et al. (2013) argued that the teaching approach appropriate for outcomes based and Kto12 is learner-centered.

There were 24 teachers (22.22%) attended seminars on Instructional Resource/ Materials (rank 2); 17 (15.74%) on Information Communication and Technology (ITC) (rank 3). The Social Studies teacher-respondents in the study of Eblacas (2018) perceived the importance ICT literacy of teachers, therefore constant training to keep abreast with this aspect is vital. Moreover, the Social Studies teacher-respondents also have attended seminars on different topics (Curriculum Guide, Performance Task Assessment, Learning Plan and Outcomes Based) to enhance their teaching competencies in the Senior High.

## 2. Perception on the Extent of Knowledge Domains in terms of Content Knowledge, Pedagogical Knowledge and Technological Knowledge

### 2.1 Content Knowledge

It was determined that the senior high Social Studies teachers do have a very high extent of mastery on the content knowledge in Social Studies primarily indicator 11, Social Studies program provides for the study of how people structures of power, authority and governance (AWM=3.64, rank 1). The respondents in the study of De Guzman & Ecle (2019) reported on Theme/Content - Power, Authority and Governance to be highly adequate. With this result, the students would benefit from the experiences and knowledge on how people create and change structures of power, authority and governance. On the other hand, the Power, Authority and

Governance would allow for a significant and relevant classroom discussions focused on meeting needs through public services and making public decisions (Dyngneson & Gross, 1999); the knowledge contribute to expressions of public and political behavior and helps the students learn how the government operates de Guzman &Ecle (2019); and resolving personal, group, and community conflicts; and understanding the purpose of the government (Ross, Mathison& Vinson, 2013).

**Table 3 Mean Rating on the Extent of Knowledge Domains of Teacher in Social Studies in terms of Content Knowledge**

<b>A. CONTENT KNOWLEDGE</b>	<b>AWM</b>	<b>DE</b>	<b>Rank</b>
<b>The level of mastery on:</b>			
1. Social Studies contents that allow and encourages students to participate in the affairs of society	3.52	Very High Extent	11
2. Social Studies contents that aim for Citizenship Education	3.61	Very High Extent	2
3. The scope of Social Studies education based oncurrent issues and solving issues that threaten human survival	3.47	Very High Extent	12
4. The Social Studies contents that focus on the development of socio-civic and personal behavior	3.53	Very High Extent	8
5. Social Studies that contents is an amalgamation of the Social Science disciplines	3.41	Very High Extent	15
6. Social Studies Education that promotes important social goals associated with democratic living.	3.46	Very High Extent	13
7. Social Studies Education in developing citizens who can use knowledge about their community, nation and the world.	3.59	Very High Extent	4
8. Social Studies Education that is towards acquisition of skills of data collection and analysis, collaboration, decision-making and problem solving.	3.60	Very High Extent	3
9. Social Studies Education that is towards understanding interdependence and social mindedness of men and nations	3.53	Very High Extent	8
10. Social Studies program that provides for the study of interactions among individuals, groups, and institutions	3.53	Very High Extent	8
11. Social Studies program that provides for the study of how people structures of power, authority and governance	3.64	Very High Extent	1
12. Social Studies program that studies how people organize for production, allocation and consumption of goods and services.	3.56	Very High Extent	5
13. Social Studies program that includes experiences that provide for the study of nation and global connections and independence	3.54	Very High Extent	6
14. Social Studies program that includes experiences that provide for the study of culture and cultural diversity.	3.44	Very High Extent	14
15. Social Studies program that includes experiences that provide for the study of history, people, places, & environments	3.54	Very High Extent	6
<b>Overall Weighted Mean</b>	<b>3.53</b>	<b>Very High Extent</b>	

A high extent mastery of content knowledge was stated by the senior high teachers on Indicator 2, Social Studies contents should aim for Citizenship Education (AWM=3.61, rank 2); Indicator 8, Social Studies Education is towards acquisition of skills of data collection and analysis, collaboration, decision-making and problem solving. (AWM=3.60, rank 3); Indicator 7, Social Studies Education is developing citizens who can use knowledge about their community, nation and the world. (AWM=3.59, rank 4). The teachers primarily identified a high extent of knowledge that the Social Studies program significantly focused on contents aimed for identifying and practicing forms of civic discussion and participation consistent with the ideals of a democracy. de Guzman &Ecle, (2019) stated that the Social Studies program of the Secondary Schools have included experiences that provide for the study of the ideals, principles, and practices of citizenship in a democratic society. The Learning Standards for the K to12 in 2013 emphasized the equipping of students with the basic skills and social habits which should help them to adapt into the society in which they may find

themselves. Ross, Mathison & Vinson (2013) argued that beliefs in civic ideals and citizenship education should consist of developing a positive self-concept and a strong sense of personal efficacy among students USAID Teacher Education Project (2012) argued that teacher must provide meaningful learning opportunities for students aimed to acquire skills of data collection and analysis, collaboration, decision-making and problem solving. On the other hand, the Social Studies curricula, according to Khaled (2013) should be reviewed to prepare young ones for the new millennium the most recent available information on global connections; and globalization.

The teachers also have a very high extent mastery of content knowledge on Indicator 5, Social Studies contents is an amalgamation of the Social Science disciplines (AWM=3.41, rank 15). National Council for the Social Studies (NCSS, 1994 and 2010) states that; Social studies is the integration of history, the social sciences, and the humanities to promote civic competence. An amalgamation of the Social Science disciplines. The Overall Weighted Mean (OWM) was 3.53 with descriptive equivalent of Very High Extent. The senior high school teachers of Zone 2, Division of Zambales have very high extent mastery of Content Knowledge from the three Knowledge Domains needed for Social Studies Instruction in the senior high school K to 12 Program.

## 2.2 Pedagogical Knowledge

*Table 4 Mean Rating on the Extent of Knowledge Domains of Teacher in Social Studies in terms of Pedagogical Knowledge*

<b>B. PEDAGOGICAL KNOWLEDGE</b>	<b>AWM</b>	<b>DE</b>	<b>Rank</b>
1. Social Studies Education utilizes Single-Discipline Approach and Integrated Multidisciplinary Approach.	3.43	Very High Extent	12
2. Powerful Social Studies teaching utilizes learner-centered approaches as well as appropriate teacher-directed strategies.	3.42	Very High Extent	14
3. Social Studies teaching emphasizes the development of relevant knowledge, values and skills of students.	3.78	Very High Extent	1
4. Social Studies teaching and learning are powerful when they are integrative.	3.35	Very High Extent	15
5. Social Studies stress the teaching and learning of skills more than the teaching and learning of factual content.	3.43	Very High Extent	12
6. The Social Studies education emphasizes the development of social participation skills	3.50	Very High Extent	6
7. Social Studies teaching methods are determined by the content, instructional practices and nature of instructional materials.	3.44	Very High Extent	11
8. Social Studies teaching and learning integrate effective use of technology.	3.54	Very High Extent	4
9. Social Studies teaching and learning integrate across the curriculum.	3.46	Very High Extent	10
10. Powerful Social Studies teaching encourages recognition of opposing points of view.	3.56	Very High Extent	3
11. Powerful Social Studies teaching encourages respect for well-supported positions and social responsibilities.	3.49	Very High Extent	7
12. Powerful Social Studies teaching encourages sensitivity to cultural similarities and differences.	3.53	Very High Extent	5
13. Powerful Social Studies teaching encourages commitment to social responsibility.	3.49	Very High Extent	7
14. Powerful Social Studies teaching considers the ethical dimensions of topics and addresses controversial issues.	3.47	Very High Extent	9
15. Powerful Social Studies teaching provides an arena for concern for the common good, development and application of social values.	3.62	Very High Extent	2
<b>Overall Weighted Mean</b>	<b>3.50</b>	<b>Very High Extent</b>	



A great extent of pedagogical knowledge was determined on indicator 3, Social Studies teaching emphasizes the development of relevant knowledge, values and skills of students (AWM=3.78, rank 1). The extent of pedagogical knowledge of Social Studies teachers was very high specifically on teaching Social Studies lessons which emphasizes the development of relevant knowledge, values and skills of students when teaching. Dynnesson & Gross (1999) argued that Social Studies content must address students' needs to learn to cooperate and participate in the community and national affairs. Because of this, different instructional approaches were devised to resolve the issue. de Guzman (2013) concluded that instructional strategy will vary according to the elements of instruction which content include knowledge (facts, skills and values. Review of Literature and Effective Practices (2007) stressed that effective instructional practices are the key to achieving desired student outcomes. Parker (2015) argued that instructional effectiveness is improved when creative teachers are aware of, employ a large number of strategies and made a good match between the content to be taught and the instructional strategy.

The Social Studies teachers also have a great extent of pedagogical knowledge on Indicator 2, Powerful Social Studies teaching provides an arena for concern for the common good, development and application of social values. (AWM=3.62, rank 2); Indicator 10, Powerful Social Studies teaching encourages recognition of opposing points of view (AWM=3.56, rank 3); and Indicator 8, Social Studies teaching and learning integrate effective use of technology (AWM=3.54, rank 4). The teachers believed that teaching is realization and internalization of values, encouraging and democratic and uses varied instructional resources. Teacher challenges students to think deeply about personal, group and social values which can be used to reflect on problems and models solution to these (USAID Teacher Education Project, 2012). Facilitates lively classroom debates and written learning tasks where students are expected to defend their responses with facts, opinions, ideas and points of view Public Education Leadership Program [PELP] (2009).

Indicator 2, Social Studies teaching and learning are powerful when they are integrative obtained the least AWM of 3.35 (rank 15) although still obtained a descriptive equivalent of very high extent of knowledge. The teachers are very knowledgeable on the aspect that teaching and learning Social Studies are powerful when they are integrative. Sicuan (2011) presented approaches in teaching Social Studies which are integrative in nature, these includes Interdisciplinary (combination of disciplines from different related areas (Anthropology, Sociology, History, Economics, Political Science, and Geography); Multidisciplinary (combination of different areas of discipline like the Social Sciences, Humanities and Philosophy); and Integration Approach (Issues and concepts are combined in understanding man's position in today's society). The overall Weighted Mean (OWM) was 3.35 with descriptive equivalent of Very High Extent. The senior high school teachers of Zone 2, Division of Zambales have very high extent of Pedagogical Knowledge from the three Knowledge Domains needed for Social Studies Instruction in the senior high school K to 12 Program.

### 2.3 Technological Knowledge

*Table 5 Mean Rating on the Extent of Knowledge Domains of Teacher in Social Studies in terms of Technological Knowledge*

C. TECHNOLOGICAL KNOWLEDGE	AWM	DE	Rank
1. Audio-video communication, documentation and presentation	3.53	Very High Extent	3
2. use of ICT for research and for cooperative learning activities	3.57	Very High Extent	1
3. Computer application software such as word, excel and power point	3.56	Very High Extent	2
4. Presentation of slide, slide transition, slide show and custom animation	3.38	Very High Extent	4
5. Participation in social networks for creation and sharing of knowledge	3.33	Very High Extent	6
6. Wide range of professional computing skills	3.26	Very High Extent	13
7. Windows operating system	3.30	Very High Extent	9
8. Use internet applications	3.34	Very High Extent	5
9. Operate, use display options and adjust projector	3.32	Very High Extent	7
10. Make information processing and retrieval	3.32	Very High Extent	7
11. Utilize e- mail, web surfing and search engines	3.28	Very High Extent	12

12. Manage data, word and data processing tasks	3.29	Very High Extent	10
13. Operate/manage content from external devices	3.23	High Extent	15
14. Configure virus protection software to protect system	3.24	High Extent	14
15. Use digital camera, take and scanner picture and store	3.29	Very High Extent	10
<b>Overall Weighted Mean</b>	<b>3.35</b>	<b>Very High Extent</b>	

There was a high extent of technological knowledge of Social Studies teachers specifically the use of ICT for research and for cooperative learning activities (Indicator 2, AWM=3.57, rank 1). The teachers considered that information and communication technologies (ICTs) has become much more than the ability to handle computers. ICT comprises a set of basic skills which include the use and production of digital media, information processing and retrieval, and creation and sharing of knowledge. Figg & Jaipal-Jamani (2011) found that ICT pedagogical skills are important for teaching across all topic areas. Bhalla (2014) revealed teachers' actions are linked to the planning of ICT enhanced lessons and use of differentiation strategies which are engaging, active and collaborative.

Indicator 3, Computer application software such as word, excel and power point (AWM=3.56, rank 2); indicator 1, Audio-video communication, documentation and presentation (AWM=3.53, rank 3; indicators 4, Presentation of slide, slide transition, slide show and custom animation (AWM=3.38, rank 4). The teachers also believed that they have high extent of knowledge in computer application software (e.g., word, excel and power point); audio-video communication and documentation presentation; and Power Points (e.g., presentation slide, slide transition, slide show and custom animation). Information society competences – IT competence, evaluation of information disseminated in mass media according to Rauhvargers (2014) are 21st Century Skills also intended to educators to acquire and be more knowledgeable of. Dauvarte (2015) stated that teachers need to optimize the learning process in their subjects by utilizing both computer literacy and pedagogical proficiency.

To Operate/manage content from external devices (Indicator 13, (AWM=3.23) was rank 15. This means that the teachers have to have more technical knowhow on this particular area of operating and managing contents for the lessons from external devices. Eblacas' (2018) study reported that teacher-respondents need more training in the use, connection and operation external devices such as projectors, hard drives and specialized gadgets. The overall Weighted Mean (OWM) was 3.35 with descriptive equivalent of Very High Extent. The senior high school teachers of Zone 2, Division of Zambales have very high extent of Technological Knowledge from the three Knowledge Domains needed for Social Studies Instruction in the senior high school K to 12 Program.

### 3. Significant Difference in the Level of Knowledge Domains

*Table 6 Summary of ANOVA to Test the Differences on Perceived Level of Knowledge Domains when grouped according to Profile Variables*

Sources of Variations	Content Knowledge		Pedagogical Knowledge		Technological Knowledge	
	F	Sig.	F	Sig.	F	Sig.
Age	0.95	<b>0.48</b>	1.38	<b>0.22</b>	1.33	<b>0.24</b>
Sex	1.08	<b>0.30</b>	0.73	<b>0.40</b>	0.11	<b>0.74</b>
Area of Specialization	1.92	<b>0.11</b>	2.26	<b>0.07</b>	1.89	<b>0.12</b>
Highest Educational Attainment	2.07	<b>0.09</b>	1.05	<b>0.38</b>	1.10	<b>0.36</b>
Academic Rank/ Position	1.73	<b>0.17</b>	1.69	<b>0.17</b>	0.62	<b>0.60</b>
Length of Years in the Service	1.64	<b>0.22</b>	0.78	<b>0.59</b>	1.63	<b>0.15</b>
Types of Seminar Attended	5.72	<b>0.00*</b>	2.29	<b>0.03*</b>	3.11	<b>0.03*</b>

*\*Significant*



For the **Content Knowledge**, the significant values for age (0.48), sex (0.30), field of specialization (0.11), highest educational attainment (0.09), academic position (0.17) and years of teaching (0.22) were higher than (0.05) alpha level of significance. Therefore, the null hypothesis is accepted. There is no significant difference on the perception. Even teachers vary in term of age,sex, field of specialization, highest educational attainment, academic position and years in teaching, there exist similarity of perceived extent of mastery of Content Knowledge domain needed for Social Studies instruction in the senior high.

The significant value for Types of Seminar Attended (0.03) was lower than (0.05) alpha level of significance. Therefore, the null hypothesis is rejected. There is significant difference on the perception. The dissimilar perception of the extent of mastery on the Content Knowledge needed for the instruction of Social Studies in the Kto12 Program was attributed of the different types of seminars they attended. Ross, et al. (2013) reported that teachers differ in their insights of the broad standards and contents of the program Social Studies. On the other hand, the LAC sessions, an in-service training (INSET) as analysed in the study of Dizon&Orge (2018) can contribute to enhanced teaching profession and in delivering quality Social Studies instruction. However, does not establish any empirical data to actually affect negatively or positively learners' performances inside the classroom.

For the **Pedagogical Knowledge**, the significant values for age (0.22), sex (0.40), field of specialization (0.07), highest educational attainment (0.38), academic position (0.17), and years of teaching (0.59) were higher than (0.05) alpha level of significance. Therefore, the null hypothesis is accepted. There is no significant difference on the perception. Finding shows that the teachers have likeness of pedagogical knowledge needed for Social Studies instruction in the senior high even they vary in term of age,sex, field of specialization, highest educational attainment, academic position and years in teaching.

The significant value for Types of Seminar Attended (0.03) was lower than (0.05) alpha level of significance. Therefore, the null hypothesis is rejected. There is significant difference on the perception. The teachers vary in terms of types of seminars they attended manifest different extent of pedagogical knowledge (e.g., teaching strategies and methodologies) needed for Social Studies Instruction in the senior high. Chick & Hong (2012) argued that incorporating innovative strategies acquired and learned from conferences, seminar and workshops can help teachers begin to meet the needs of diverse learners in the Social Studies classroom. The study of Eblacas (2018) among Social Studies teachers' instructional strategies revealed that the use of varied ad more strategies is dependent on teachers' familiarity and acquired knowledge through in-service trainings and participation in learning action cells.

For the **Technological Knowledge**, the significant values for age (0.24), sex (0.74), field of specialization (0.12), highest educational attainment (0.369), academic position (0.60), and years of teaching (0.15) were higher than (0.05) alpha level of significance. Therefore, the null hypothesis is accepted. There is no significant difference on the perception. Finding suggests that the teachers have likeness of technological knowledge and expertise for senior high Social Studies instruction even they vary in term of age, sex, field of specialization, highest educational attainment, academic position and years in teaching.

The significant value for Types of Seminar Attended (0.03) was lower than (0.05) alpha level of significance. Therefore, the null hypothesis is rejected. There is significant difference on the perception. The senior high Social Studies teachers have varied extent and level of technological knowledge and technical knowhow/literacy domain in Social Studies in the Kto12 Program. It was revealed in the study of Rampersad (2011) that competence and confidence in using ICT among teachers were attributed to their exposure, trainings and experiences in using ICT, hence will bring these array of ICT skills to the classroom.

## 5. CONCLUSIONS

Based from the findings obtained in the study, the following conclusions were derived.

1. The Senior High Social Studies teacher-respondents are female, in their early adulthood, Teacher I, holders of Bachelor Degree with Master's units, quite new in the teaching profession and have attended seminars primarily on Teaching Pedagogy.



2. The teachers have a very high extent of Knowledge on the Domains, Content Knowledge primarily on the aspect that Social Studies program is towards the study of how people structures of power, authority and governance; very high extent on Pedagogical Knowledge which emphasizes the use of varied and appropriate teaching skills aimed for the development of relevant knowledge, values and skills of students; and very high extent on Technological Knowledge specifically the use of ICT for research and for cooperative learning activities.
3. There is no significant difference on the level of teachers' Content Knowledge, Pedagogical Knowledge and Technological Knowledge when attributed to respondents' age, sex, field of specialization, highest educational attainment, academic position and years of teaching. However, there is significant difference when attributed to respondents' number and types of seminars attended.

## 6. RECOMMENDATIONS

In the light of the foregoing conclusions of the study, the following recommendations were advanced:

1. Teachers may enhance Content Knowledge on amalgamation of the Social Science disciplines by further understanding and implementing integration of history, the social sciences, and the humanities aimed to promote civic competence and citizenship education.
2. Teachers may consider Interdisciplinary, Multidisciplinary and Integration Approaches in teaching lessons in Social Studies to further the Pedagogical Knowledge.
3. School Heads may require the teachers to attend seminars, trainings and workshops aimed to further improve Technological Knowledge primarily on the more technical aspects of computer-based technology.
4. The schools may implement intervention to improve instruction in Senior High Kto12 Social Studies Program primarily on selecting and teaching aspects of knowledge, skills, and values that are relevant to students; incorporate in the knowledge base of teaching the latest scientific research, and employing meaningful learning activities.
5. Conduct follow up study that would include a wider scope (e.g., High Schools in other Zones in the Division of Zambales for validation purpose.

## REFERENCES

- [1] Armstrong, T. (2008). **The Human Odyssey: Navigating the Twelve Stages of Life**. New York: Sterling, 2008. <http://www.institute4learning.com/resources/articles/the-12-stages-of-life/>
- [2] Bekoe, S. O. (2013). **Influence of the Differences in Social Studies Teachers' Curriculum Conceptions on Curriculum Implementation in Senior High Schools (SHSs) in Ghana: Implication for Curriculum Policy**. *Developing Country Studies*. Vol.3, No.5, 201
- [3] Catacutan, R. A. & de Guzman, M. F. D. (2017). **The Project- Based Learning (PBL) Approach in Secondary Social Studies Instruction at Zone 2, Division of Zambales, Philippines**. *International Journal of Scientific & Engineering Research* Volume 8, Issue 11, November-2017
- [4] Chick, K. A. & Hong, B. (2012). **Differentiated Instruction in Elementary Social Studies: Where Do Teachers Begin?** Penn State Altoona. *Social Studies Research and Practice* [www.socstrp.org](http://www.socstrp.org) 112. Volume 7 Number 2 Winter2012. [http://www.socstrpr.org/wp-content/uploads/2013/01/06449\\_no8.pdf](http://www.socstrpr.org/wp-content/uploads/2013/01/06449_no8.pdf)
- [5] Dauvarte, L. (2015). **Teacher's ICT Competence in Home Economics and Technologies Lessons**. *Rural Environment. Education. Personality* ISSN 2255-808X Jelgava, 15.-16.0 5 2015 <http://ilufb.llu.lv/conference/REEP/2015/Latvia-Univ-Agricult-REEP-2015proceedings-89-100.pdf>
- [6] de Guzman, M. F. D. (2013). **Workbook in Major 12- Approaches and Techniques in Social Studies**. CTE, RMTU, Main Campus, Iba, Zambales, Philippines.
- [7] de Guzman, M. F. D. & Ecle, R. (2019). **The Social Studies Curriculum Standards in Junior Secondary Schools; Input to Quality Instruction and Students' Civic Competence**. *International Journal of Computer Engineering in Research Trends(IJCERT)*. Volume-5, Issue-1, 2019.
- [8] Dizon, N. H. & Orge, N. V. (2018). **Utilization of Learning Action Cell (LAC) Session Contents: Perceptions among Secondary Social Studies Teachers in Zambales, Philippines**. *Journal of International Academic Research for Multidisciplinary* Impact Factor 4.483, ISSN: 2320-5083, Volume 5, Issue 13, January 2019.
- [9] Driscoll, D. L. (2011). **Introduction to Primary Research: Observations, Surveys, and Interviews**. ISBN 978-1-60235-184-4 <http://www.parlorpress.com/pdf/driscoll--introduction-to-primary-research.pdf>

- [10] Dynneson, T. & Gross, R. (1999). **Designing Effective Instruction for Secondary Social Studies**. Prentice Hall. USA.
- [11] Eblacas, I (2018). **Level Of Computer Usage and Literacies in Computer-Based Technology Tools in 21st Centuries Social Studies Teacher and Students in Selected Public Secondary School In Zone II IbaZambales AY: 2017-2018**. International Journal of Scientific & Engineering Research (IJSER). Volume 8, Issue 11, November-2018
- [12] Figg, C. & Kamini, J. J. (2011). **Exploring teacher knowledge and action supporting technology-enhanced teaching in elementary schools: Two approaches by pre-service teachers**. Australasian Journal of Education Technology, vol. 27, no. 2, pp. 343-360.
- [13] Kankam, B. (2016). **Social studies education in Ghana: A historical perspective (1940-Present)**. Proceedings of INCEDI 2016 Conference, Accra, Ghana.
- [14] Khaled, A. F. (2013). **Jordanian Students Attitudes toward Social Studies Education**. The Journal of International Social Research. Cilt: 6 Sayı: 24 Volume: 6 Issue: 24 [http://www.sosyalarastirmalar.com/cilt6/cilt6sayi24\\_pdf/khaled\\_alazzi.pdf](http://www.sosyalarastirmalar.com/cilt6/cilt6sayi24_pdf/khaled_alazzi.pdf)
- [15] Mishra, P., & Koehler, M. J. (2006). **Technological pedagogical content knowledge: A framework for teacher knowledge**. Teacher's College Record, 108(6), 1017-1054.
- [16] National Council for the Social Studies (2010). **Building social understanding and civic efficacy**. Retrieved from [www.socialstudies.org/positions/Social\\_understanding](http://www.socialstudies.org/positions/Social_understanding).
- [17] Ornstein, A., & Hunkins, F. P. (2004). **Curriculum: Foundations, principles and issues**. Boston, MA: Pearson.
- [18] Ozoemelem, O. A. (2010). **Web affinity: A study of undergraduate students in Nigerian universities**. Library Philosophy and Practice [e-journal]. Retrieved on 15th April 2012 from <http://www.webpages.uidaho.edu/~mbolin/obuh2.htm>
- [19] Parker, W. C. (2015). **Social Studies Today: Research and Practice**, 2<sup>nd</sup> ed., New York: Routledge, 2015. [https://education.uw.edu/sites/default/files/u284/Chapter1.intro\\_2e.pdf](https://education.uw.edu/sites/default/files/u284/Chapter1.intro_2e.pdf)
- [20] Partnership for 21<sup>st</sup> Century Skills. (2006). **A state leader's action guide to 21st century skills: A new vision for education**. Tucson, AZ: Partnership for 21st Century Skills.
- [21] Public Education Leadership Program [PELP] (2009). **Characteristics of Highly Effective Social Studies Teaching and Learning in Kentucky Schools**. November (2009). <http://education.ky.gov/curriculum/standards/teachtools/Documents/SocStudConnections.pdf>
- [22] Rampersad, A. (2011). **Teachers' Perceptions of the Contribution of Information and Communication Technology to the Teaching of Modern Studies, Using an Integrated System, in an Urban Secondary School**. The University of the West Indies Caty- <http://uwispace.sta.uwi.edu/dspace/bitstream/handle/2139/12784/Caty-Ann%20Rampersad.pdf>
- [23] Rajae, N., Junaidi, E., Taib, S.N.L., Salleh, S.F. & Munot, M.A. (2013). **Issues and Challenges in Implementing Outcome Based Education in Engineering Education Malaysia Sarawak, Universiti**. International Journal for Innovation Education and Research [www.ijer.net](http://www.ijer.net). Vol.1-04.
- [24] Rauhvargers, A. (2014). **Creating Qualifications Framework for Latvian Higher Education**. Working document for starting Latvian scale debate). 2014. gadaugusts – 2015.gada janvāris, 26.lpp. (In Latvian).
- [25] Review of Literature and Effective Practices (2007). **Basic Skills as a Foundation for Student Success in California Community Colleges** <http://www.cccbsi.org/websites/basicskills/images/instructionalpractices.pdf>
- [26] Ross, E. W., Mathison, S. & Vinson, K. D. (2013). **Social studies education and standards-based education reform in North America: curriculum standardization, high-stakes testing, and resistance**. Revista Latinoamericana de Estudios Educativos. No. 1, Vol. 10, pp. 19-48. Manizales: Universidad de Caldas. [http://latinoamericana.ucaldas.edu.co/downloads/Latinoamericana10%281%29\\_2.pdf](http://latinoamericana.ucaldas.edu.co/downloads/Latinoamericana10%281%29_2.pdf)
- [27] Sicuan, F. M. (2011). **Teaching and Learning Social Studies/Civics**. The Modern Teacher. Vol. L. June 2011.
- [28] Southeast Asian Ministers of Education Organization Regional Center for Educational Innovation and Technology (SEAMEO INNOTECH) [2010]. **Teaching Competency Standards in Southeast Asian Countries**, Version 2010.
- [29] Tomei, L. A. (2005). **Taxonomy for the technology domain**. USA: Information Science Publishing.



- 
- [30] USAID Teacher Education Project (2012). **Teaching Social Studies - II (Teaching Social Studies Pedagogy Option) Windows on Practice Guide B.Ed. (Hons.) Elementary 2012**. Higher Education Commission  
[http://www.hec.gov.pk/InsideHEC/Divisions/AECA/CurriculumRevision/Documents/TeachingSocStudies2\\_Sept13.pdf](http://www.hec.gov.pk/InsideHEC/Divisions/AECA/CurriculumRevision/Documents/TeachingSocStudies2_Sept13.pdf)
- [31] Welton, D. A. & Mallan, J. T. (1988). **Children and the World: Strategies for Teaching Social Studies**. Boston: Houghton Mifflin Company.

