

## Research Article

# Training Needs on Learning Delivery Modalities of Senior High School Teachers of Zambales, Philippines: Response to the Changes in the Basic Education during the Pandemic

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**Abstract:** The study investigated the in-service training needs on Learning Delivery modalities of teachers in the Senior High Schools of Iba, Palauig and Botolan Districts of Department of Education, Division of Zambales, Philippines during the first quarter of the school year 2020-2021. This study was conducted in consideration of the changes in the Basic Education during the world health crisis or the COVID-19 Pandemic. The present study used a descriptive research design with survey questionnaire as instrument for gathering of data from senior high school teacher-respondents and the statistical tools employed were descriptive and inferential statistics. Findings revealed that majority of the senior high school teachers are in their middle adulthood and holders of Bachelor's degree with Master's units. They highly need trainings for Learning Delivery Modalities the 'new normal' in the basic education primarily on the guidelines on blended learning design, on flexible learning for synchronous sessions, how to bridge the digital divide with offline learning methods and classroom preparations for blended learning designs. The result of the ANOVA computation revealed a no significant difference on the perceived extent of in-service training needs on Learning Delivery Modalities when grouped according to teachers' age and highest educational attainment. The researcher recommends that the training plan/program for Learning Delivery Modalities, may consider the conduct of seminars, workshops, in-service trainings and learning action cells (LACs) sessions on the following themes or key areas: (a) blended learning design; (b) teachers' classroom preparation for blended learning; (c) utilization of flexible learning through synchronous and asynchronous sessions; and (d) digital literacy for an improved teaching methods.

**Keywords:** Training Needs, Learning Delivery Modalities, Senior High School, Basic Education COVID-19 Pandemic.

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## INTRODUCTION

More than 1.5 billion students and young learners globally are affected by school and university closures due to the coronavirus disease 2019 (Covid-19) pandemic [1]. Schools have remained closed for weeks, and no one knows for certain when we will come out of the lockdowns, as the pandemic shows no sign of slowing down anytime soon. Reimers [2] stated as the COVID-19 Pandemic ravages the world, it is essential to attend to the educational needs of children and youth during the crisis. Educators shifted quickly to distance learning and provided a variety of supports, but they indicated needing additional resources. Saggi & Anukoonwattaka [3] argued that the difficulties and limitations posed by technology are challenges inside the classroom. However, this should not prevent or discourage teachers, every teacher has to try. Otherwise, teachers will lose their relevance in this digital age. Obana [1] argued that those who are necessitated to move to flexible learning (synchronous and

asynchronous), online learning and other distance learning mode during the Covid-19 crisis will start to realize the full benefits of virtual education as teachers.

Article XIV, Section 2 of the 1987 Constitution mandates the State to establish and maintain, a system of free public education in the elementary and high school levels." The novelty of the COVID-19 emergency equally calls for a novel approach to the delivery of basic education in the public school system, in which social or physical distancing is indispensable to health and safety [4]. With the restrictions imposed by the new normal, the Philippine educational system requires responsive legal frameworks and support. The Plan features an adjusted curriculum with the Most Essential Learning Competencies, which will be delivered in multiple learning delivery modalities. These multiple learning delivery modalities necessitate the creation, reproduction, distribution, and use of learning resources consisting of intellectual properties [4]. The

constitutional right to access quality education and as stated in Republic Act No. 10533, otherwise known as the “Enhanced Basic Education Act of 2013,” calls for inclusive, quality, learner-oriented education that addresses the various needs and diversity of learners. Thus, the prevailing digital divide in the country, the various socio-economic situations of families which affect the provision of learning support in the home, and the peculiar needs of learners shall be taken into account, along with the needs of the majority and mainstream learners. The rights to access and to quality education shall be upheld.

Teacher training is a major consideration that would require schools to readjust their budget allocation in order to respond to this emerging need [5]. Different countries worldwide have introduced various solutions during the pandemic to continue the education process. According to Basilaia & Kvavadze [6], online libraries, TV broadcasts, guidelines, resources, video lectures, online channels were introduced in at least 96 countries.

Teachers act as students’ guide who honestly shows them the most reliable sources of information as well as the right way to self-education. In this sense, according to Al-Din Nasr [7], the professional development of teachers provides a greater part of the solution to many educational issues as teachers directly influence the academic performance and achievement of their students. Elshami 2006 [8] as cited in Aaronson, Lisa & William [9], stressed that a teacher is considered the most crucial factor in implementing all instructional reforms at the grassroots level. Teachers are expected to know and utilize latest innovations in teaching, effectively manage instruction that would provide better learning atmosphere in classroom setting. Article V, Section 2 of the Code of Ethics of Professional Teachers adopted in 1997 states that ‘every teacher shall uphold the highest standards of quality education, shall make essential preparations for teaching, and shall be at his best at all times in the practice of his profession.’ Because of the world’s rapid change and the continuing technological advance, educationalists are obliged to search for ways to overcome the challenges of the twenty-first century.

This study therefore, is intended for teachers who wish their in-service training needs and development can be addressed appropriately and adequately. Teachers need some direction as to what their options are when it comes to their professional development. The findings of the study would provide information to Public School Administrators, Senior High School Department Heads, and School Education

Specialists/Curriculum Planers of Department of education Division of Zambales on the in-service training needs focused on Learning Delivery Modality of the senior high school teachers during the ‘new normal’ in the basic education. This endeavour is hoped to paved the way for the development of planned or program of activities adaptive, coherent, effective and equitable education responses to a crisis that will significantly disrupt educational opportunities and for the in-service training needs of the teachers concerned for the improvement of delivery of instruction of the teachers and enhanced Senior High School Program.

## OBJECTIVES OF THE STUDY

The research study investigated the in-service training needs of teachers in the senior high school of Zone 2, Division of Zambales, Philippines for the school year 2020-2021 aims to address the ‘new normal’ in the modes and pedagogies of teaching in the Basic Education.

The following specific questions which were answered:

1. How may the profile of the teacher-respondents be described as to age and highest educational attainment?
2. How may the senior high school teacher-respondents perceive their need for in-service training in terms of Learning Delivery Modalities; and
3. Is there a significant difference on the perceived extent of in-service training needs of senior high school teachers when grouped according to their profile?

## MATERIALS AND METHODS

Descriptive research was the research design used in this study. Its value is based on the premise that problems can be solved and practices improved through observation, analysis, and description [10]. Descriptive research is all about describing people who take part in the study. The present study used a survey questionnaire for data collection. The items/indicators of the questionnaire were based and patterned from the questionnaires of Basilaia & Kvavadze [6], Transition to Online Education in Schools during a SARS-CoV-2 Coronavirus (COVID-19) Pandemic in Georgia; Reimers [2], A Framework to Guide an Education Response to the COVID-19 Pandemic of 2020. The survey questionnaire has two (2) parts. The first part gathered the profile of the respondents. Second part assessed the extent of in-service training needs on aspect Learning Delivery Modality with a total of 15 items. The teachers answered using a four-point scale

from 4 (Very Much Needed/Very Important), 3 (Moderately Needed/Important), 2 (Fairly Needed/Less Important), and 1 (Not Needed/Not Important at all). To test the instrument’s validity and reliability, first, the survey checklist was checked by experts (Professors and Dean) of the Graduate School of President Ramon Magsaysay State University, Iba, Zambales. Secondly, the survey questionnaire was submitted for pilot testing among senior high school teachers Cabangan national High School, Cabanagan, Zambales. Results of these two processes were considered and incorporated in the finalization of the survey questionnaire.

The respondents of the research study are the Senior High School Teachers from National High Schools and Integrated Schools of Zone 2, Department of Education, Division of Zambales. Botolan District/Municipality, Iba District/Municipality and Palauig District/Municipality were the composition of Zone 2.

To make the distribution/administration of the survey questionnaire to the senior high school teachers

of public schools of municipalities of Zone 2, Division of Zambales formal and official, the researcher sought for a written endorsement form the Schools Division Superintendent of the said Division of Department of Education. In the actual distribution of the survey questionnaire, the researcher also sought the assistance of the School Principals where the senior high school teachers are currently employed. The research instrument was administered to the respondents and retrieved those personally. The respondents were assured that their responses will be treated confidential and be used only for scholarly work. The data collected were treated, interpreted and analysed using descriptive (percentage, frequency counts and weighted mean) and inferential statistics (ANOVA).

## RESULTS AND DISCUSSION

### Profile of the Teacher-Respondents

Table-1 below shows the frequency and percentage distribution of the teacher-respondents as to their age, field of specialization, highest educational attainment, and teaching position.

**Table-1: Frequency and Percentage Distribution of the Teacher-Respondents’ Profile**

Age	Frequency	Percent
61 & Above	0	0.00
56-60	2	1.40
51-55	3	2.10
46-50	13	9.10
41-45	20	14.00
36-40	40	28.00
31-35	40	28.00
26-30	18	12.60
25-Below	7	4.90
<b>Total</b>	<b>143</b>	<b>100.00</b>
<b>Mean = 36.81</b>		
Highest Educational Attainment	Frequency	Percent
Bachelor	41	28.70
Bachelor w/Masters’ Units	56	39.20
Masters’	31	21.70
Masters’ w/ Ed. D. Units	12	8.40
Ed. D.	3	2.10
<b>Total</b>	<b>143</b>	<b>100.00</b>

### Age

Of the 143 total Senior High School-teacher respondents, there are 40 or 28.00%, who belong to 36-40 and 31-35 age groups respectively. It was followed by 20 (14.00%) teachers who are at 41-45 age group; 18 or 12.60%, 26-30 age group; 13 (9.10%) 46-50 age group; 7 (4.90%), below 25 years old; and 3 (2.10%)

and 2 (1.40%) who belong to age brackets of 51-55 and 56-60. The mean age was 36.81.

This particular age is categorized into middle adulthood. According to Armstrong [11], middle adulthood ranges from 35 to 40 years old who often accommodate bigger responsibilities in life. This

particular age is categorized into middle adulthood. According to according to Elkind [12], as cited in Valido, Laksanawati & Utarini [13], middle adulthood extends from 35-65 years. Moreover, the result of the present study is consistent with the data obtained in the study of Deliquina & de Guzman [14] and Lasco [15] on age profile variables. Their respondents belong the age bracket (36-40) or middle adulthood.

### Highest Educational Attainment

There are 56 or 39.20%, who are Bachelor degree holder with Masters units; followed by 41 or 28.70% Bachelor’s degree holders; 31 or 21.70% Master’s degree holders; 12 or 8.40%, Master’s degree holders with Ed. D. units; and 3 Doctorate Degree holders. The result suggests that most (56 or 39.20%) of the Senior High School teacher-respondents are Bachelor Degree holders with Master’s units. The

particular result is consistent with result on the highest educational attainment profile variable of the studies of de Guzman & Ecle [16], Coching & Echaure [17], Garcia & de Guzman [18] and Deliquina & de Guzman [14] indicating that most of the teachers are holders of Bachelor Degree with Master’s Units. The finding of the present study clearly suggest that the teacher respondents are pursuing advanced education and complies with the Department of Education’s (DepEd) call for continuous education by enrolling in graduate programs.

### Perceived Extent of In-Service Training Needs of Senior High School Teachers Learning Delivery Modalities

The Perceived Extent of In-Service Training Needs on Learning Delivery Modalities was presented in Table-2.

**Table-2: Perceived Extent of In-Service Training Needs on Learning Delivery Modalities**

Learning Delivery Modalities	Weighted Mean	Qualitative Rating	Rank
1. Training on Teaching Online Subjects/Courses	3.50	Very Much Needed	9
2. Training on the Effective Utilization of Teaching Modules	3.48	Very Much Needed	13
3. Training on Blended Learning Design Guidelines	3.55	Very Much Needed	1.5
4. Preparing Classrooms for Blended Learning Designs	3.53	Very Much Needed	4
5. Training on the Use of Google Tools for Teachers (Google docs, Google Slides, Google Classroom, Google Forms & Google Sites)	3.52	Very Much Needed	5.5
6. Training on the Use of Popular Video Conferencing Platforms (Google Meet, Zoom Meetings, etc.)	3.47	Very Much Needed	15
7. Using Computer Programs in the Process of Assessment at all Stages of Teaching and Learning	3.50	Very Much Needed	9
8. Training on the Use of Audio and Video Methods in Teaching	3.50	Very Much Needed	9
9. Training on the Use of Different Computer-Based Technology	3.48	Very Much Needed	13
10. Training on the Use of Different Search Engines	3.50	Very Much Needed	9
11. Training on Flexible Learning for Synchronous Sessions	3.55	Very Much Needed	1.5
12. Training on Flexible Learning for Asynchronous Sessions	3.52	Very Much Needed	5.5
13. Training on the Use of the Prezi and PowerPoint in Displaying the Lesson	3.48	Very Much Needed	13
14. Training on the Use of Open Textbooks	3.49	Very Much Needed	12
15. Bridging the Digital Divide with Offline Learning Methods	3.54	Very Much Needed	3
<b>Overall Weighted Mean</b>	<b>3.51</b>	<b>Very Much Needed</b>	

There were two indicators which were very much needed in-service training under Learning Delivery Modalities by the Senior High School Program of Zone 2, DepEd Division of Zambales. These include indicator 3, training on blended learning design guidelines and indicator 11, training on flexible learning for synchronous sessions (WM=3.55, rank 1.5). The SHS teachers opted to be part and to join educational trainings for teachers primarily on blended

learning design guidelines and on utilization of flexible learning for synchronous sessions. The SHS teachers of the present study highly considered these indicators as very important to further their knowledge and professional development and to be able to teaching this present school year with more quality and effectiveness. Korkko, Kyro-Ammala, & Turunen [19] and Witte & Jansen [20] argued that teachers need to be empowered and to improve professionally to further develop

expertise in their specialization, educational technologies and other essential teaching and learning related activities aimed towards higher standard of education. The Department of Education [21] already announced that classes will not start earlier and there will be no physical return to school. Philippines' education system has offered schools a menu of alternative learning methods that includes online learning and offline methods, such as modules, take-home readings and activities [22].

The careful and mindful blending of face-to-face instruction and online methods can create the best teaching and learning experience [3]. For the blended learning designs or models, teachers need to know the variations of Rotational model such as station rotation, lab rotation, flipped classroom, and individual rotation; the Flex model emphasizes individual; the Self-Blended approaches involve delivering a portion of a student's course load primarily online; and the Enhanced Virtual blended learning [23]. The hiring of instructional designers and educational technology consultants should be considered by school administrators in order to manage well the blended learning classrooms [5].

Bridging the digital divide with offline learning methods (Indicator 15, WM=3.54, rank 3), preparing classrooms for blended learning designs (Indicator 4, WM=3.53, rank 4), indicator 5, Training on the use of Google tools for teachers (Google docs, Google Slides, Google Classroom, Google Forms & Google Sites) and Indicator 12, Training on flexible learning for asynchronous sessions (WM=3.52, rank 5.5 respectively) were other Learning Delivery Modalities which the respondents would still wanted to be trained and be skilled of. The SHS teachers also found that connecting digital divide with offline learning methods, ways of preparing classrooms for blended learning, usage of Google tools and utilization of flexible learning for asynchronous sessions are very much needed and important training topics/subjects to further improve their teaching and learning delivery modalities.

The International Baccalaureate Organization [24] cleared out that to bridge the digital divide, schools should focus its efforts in establishing distance and offline multimedia approaches to teaching and learning. With this system, both the students and the teachers can monitor learning. On another issue, Obana [1] stressed that the widening inequality in the access and literacy on information and communication technology was a serious challenge for schools focusing to online teaching and learning. Almelweth & Alkahtani's [25] study concludes that the level of the training needs in all

domains for instance, technological infrastructure, use of learning resources, skills for research and evaluation and many others) re very important to address the needs and difficulties in today's educational system.

Kumala & Pandonge [26] pointed that Google Docs, Google Slides, Google Classroom, Google Forms & Google Sites are appropriate Google Tools for teachers. According to Subrahmanyeswari & Chander [27], these Google Tools are very functional most especially among schools and teachers utilizing flexible and distance or home-based teaching such as saving in a Google Drive, building presentations in the web browser, conducting polls, preparing quizzes, and sending link and email messages.

Training on teaching online subjects/courses; use of computer programs in all stages of teaching, assessment and learning; use of audio and video methods in teaching; and use of different search engines for instruction (WM=3.50, rank 15 respectively) were other Learning Delivery Modalities which the SHS teacher-respondents would want to have further training and adjustments most especially in the 'new normal' in the basic education. Online teaching, use of computer programs, audio and video methods and appropriate and effective use of different search engines are important distance learning modality and alternative learning methods nowadays. Even during Pandemic, learners can continue their education with these range of distance learning options. International Baccalaureate Organization [24] argued that over the past decade, online education has emerged as an innovative teaching and learning method. However, Daniel [5] stressed that online teaching involves a lot of preparation, and teachers now find themselves having to use tools they are not familiar with.

Although indicator 9, training on the use of different computer-based technology and indicator 13, training on the use of the Prezi and PowerPoint in displaying the lesson (WM=3.48, rank 13 respectively) and indicator 6, training on the use of popular video conferencing platforms (Google Meet, Zoom Meetings, etc.) (WM=3.47, rank 15) are also very much needed by the respondents for in-service training needs, these indicators obtained the least weighted mean. Even these indicators obtained the lowest weighted mean, the SHS teachers still considered these as very much needed and important to be acquired and to be utilized for improved teaching in their respective schools. Another reason could be their familiarity of these computer-based technology and would want other computer applications and usage of other digital devices for further training.

The trainings the SHS teachers wanted to focus into are the use of different computer-based technology, the use of the Prezi and PowerPoint in displaying the lesson training on the use of popular video conferencing platforms (Google Meet, Zoom Meetings, etc.).

Technology is a crucial enabler and it is the best choice that we have under the circumstances [28]. The paper of Brushc & Saye [29] describes the plan or strategies be used to assist teachers for effectively integrating technology into their future classrooms and this should strengthen the link between technology and pedagogy. Eblacas' [30] study require the attendance of teachers to seminar, training and workshop aimed to

improve skills and enhance knowledge most especially on the more technical aspects Microsoft Excel. Popular video conferencing platforms presented by Sinha & Basu [31] which teachers have to have knowledge and literacy are Google Meet, Zoom Meetings, and Cisco Webex Meetings. Daniel [5] on the other hand highly suggest that teachers in the basic education see and utilize a mix of live broadcasts, pre-recorded (on-demand) content and educational programs on broadcast media.

The Overall Weighted Mean of in-service training needs on Learning Delivery Modalities was 3.51 with descriptive equivalent of Very Much Needed.

### Learning Delivery Modalities

**Table 3: Test of Difference on Perceived Extent of In-Service Training Needs on Learning Delivery Modalities when Grouped according to Senior High School Teachers' Profile**

Profile Variable	Source of Variation	Sum of Squares	df	Mean Square	F	Sig.	Interpretation
<b>Age</b>	Between Groups	2.671	7	0.382	1.61	0.14	<b>Ho is accepted Not Significant</b>
	Within Groups	31.928	135	0.237			
	Total	34.600	142				
<b>Highest Educational Attainment</b>	Between Groups	1.862	4	0.466	1.97	0.10	<b>Ho is accepted Not Significant</b>
	Within Groups	32.737	138	0.237			
	Total	34.600	142				

Table-3 shows that the significant values for age (0.14) and highest educational attainment (0.10) were higher than (0.05) alpha level of significance. Therefore, the null hypothesis is accepted. There is no significant difference on the perceived extent of in-service training needs on learning delivery modalities when grouped according to Senior High School Teachers' Profile specifically age and highest educational attainment. The findings that bare manifestations of no significant difference on the perceptions could mean that there is similarity of perception on the specific training they need on aspect learning delivery modalities whether they are young and adult senior high school teachers; and who are holders of either bachelor, masters, with masters' units, with Ed. D. units and Ed.D, holders. Attributed to this result could be the similarity of their orientations and understanding of the aims of the senior high school program, and objectives of its different tracks before or during the Pandemic. Moreover, the teachers do believe that training in learning delivery modalities this 'new normal' is a necessity for students' education to continue. Trainings will improve whatever teaching and learning delivery modalities perceived appropriate in their teaching and for their students' learning this school year.

The perceived training needs of teachers in the study of Hamada [32] as cited in Bender [33], are towards wider information and skills development and modification in the different modalities teaching in relation to the continuing challenges and technological advance aimed to enhance the professional development of teachers. Akbaú & Özdemir [34] revealed that teachers' level of pedagogical and content knowledge contributed to their understanding of professional training needs to further their teaching skills, execution of lessons, and catering their students' needs. Singh & Thurman [35] on the other hand stressed that their teacher-respondents observe and recognize equally on the objectives of training services offered. However, they knew and approved the possibilities to improve themselves in their fields of profession, to be role-models and to use the electronic (digital) devices and resources effectively in the schools.

### CONCLUSIONS

Based on the findings, the researcher concluded that:

1. Majority of the senior high school teachers are in their middle adulthood and holders of Bachelor's degree with Master's units.



2. The trainings for Learning Delivery Modalities for the 'new normal' that the senior high school teachers very much needed were on guidelines on blended learning design, about flexible learning for synchronous sessions, how to bridge the digital divide with offline learning methods and classroom preparations for blended learning designs
3. The result of the ANOVA computation revealed a no significant difference on the perceived extent of in-service training needs on Learning Delivery Modalities when grouped according to teachers' age and highest educational attainment.

## RECOMMENDATIONS

In the light of the conclusions formulated, the researcher recommends that in the training plan/program for Learning Delivery Modalities, Department Heads, School Heads/Principals, Supervisors, and Education Specialist/Curriculum Planners of the Division of Zambales may consider the conduct of seminars, workshops, in-service trainings and learning action cells (LACs) sessions on the following themes or key areas: (a) blended learning design such as station rotation model, flex model, flipped classroom, self-blended model and enhanced virtual model; (b) teachers' classroom preparation for blended learning; (c) efficient and effective utilization of flexible learning through synchronous and asynchronous sessions; and (d) digital literacy for an improved teaching methods. The researcher also suggest the conduct follow up study in other public and private secondary schools of the Department of Education Division of Zambales for validation purpose.

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