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# Online Teaching Readiness of Teachers in Salesian Schools

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## Authors' contributions

*This work was carried out in collaboration between both authors. Author FRJGU designed the study, performed the statistical analysis, and wrote the entire manuscript. Author DVM proofread and edited the manuscript. Both authors read and approved the final manuscript.*

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## ABSTRACT

**Aims:** The study assessed Salesian educators' level of online teaching readiness and the challenges they have encountered during the conduct of online classes.

**Study Design:** This descriptive-comparative and correlational study gathered data from Salesian Educators as respondents and Bosconians as assessors.

**Place and Duration of Study:** Salesian Schools in the Philippines during the School Year 2020-2021

**Methodology:** The study gathered data from 368 Salesian Educators as respondents and 365 Bosconians as assessors using a researcher-made survey. The respondents were the whole population of High School Salesian Educators from the different Salesian Schools in the Philippines with 365 students picked through stratified random sampling. Teachers' online teaching readiness data were gathered using a researcher-made instrument based on the principles of technological, pedagogical, and attitudinal competencies.

**Results:** As a whole, Salesian Educators demonstrate very high online teaching readiness with an obtained mean of 3.35 regardless of the teachers' age, sex, length of service, and online teaching experience. Both the teachers' assessment (M=3.42, SD=0.34) and the student assessment (M=3.28, SD=0.35) indicated very high online teaching readiness. Moreover, the findings suggest a

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significant difference in teachers' online teaching readiness when the assessors are grouped according to teacher and student designation [ $U=51722.5$ ,  $p=0.000$ ]. Meanwhile, no significant relationship between age and the teachers' online teaching readiness [ $\rho(366)=-0.064$ ,  $p=0.222$ ], length of service and teachers' online teaching readiness [ $\rho(366)=-0.062$ ,  $p=0.236$ ], online teaching experience and teachers' online teaching readiness [ $\chi^2(2)=1.253$ ,  $p=0.534$ ]. On the other hand, a significant relationship between teachers' online teaching readiness and sex [ $\chi^2(2)=8.811$ ,  $p=0.012$ ] was established. Majority of teachers' challenges include dealing with passive students (87.5%), following up students (78.8%), dealing with technical difficulties (67.1%).

**Conclusion:** Salesian Educators are ready to teach online however, teachers must continuously upgrade and update to remain relevant in this fast-paced digital era.

*Keywords:* Education; online teaching competencies, online teaching readiness; quantitative, salesian.

## 1. INTRODUCTION

The digital transformation of education systems at all levels has allowed the incorporation of a new teaching-learning ecosystem [1]. In the trend of educational technology, online teaching is one of the fastest trends around the world [2]. In recent years, countries worldwide are entering the online education sector, allowing both students and teachers to have broader access to learning opportunities that were not possible in the past as lead by countries like the United States of America, India, China, and Korea [3].

Following the directive of President Rodrigo Duterte, teachers are prompted to abruptly adopt online teaching in place of face-to-face interaction as the Department of Education decided to shift to distance learning for the School Year 2020-2021 and delay face-to-face classes until a Coronavirus disease vaccine becomes available to guarantee the wellness, protection, and welfare of all learners, teachers, and personnel (Department of Education [4].

As online modes of education expands, online teacher readiness also rises as a significant construct [5]. Literature revealed a rich discussion on the frameworks of competency, functions, specifications, and duties to teach online [6]. However, data on teachers' readiness to deliver online teaching competencies is insufficient. More importantly, such competencies vary for faculty by culture, circumstances, institutions, and countries [7,8,9,6], which in turn indicates that teachers' online teaching readiness will differ by these similar factors. Thus, there is a need to further study teachers' readiness to teach online.

This paper assessed teachers' level of online teaching readiness in the areas of technological, pedagogical, and attitudinal competencies as

well as the challenges they have encountered during online classes. Furthermore, it investigated the difference in the teachers and the students' assessment and the correlation between teachers' online teaching readiness and their age, sex, length of service, and online teaching experience.

The findings of the study served as the basis for an online teaching development program implemented by school administrators and teachers and contributed to the development of an online teaching readiness assessment tool.

### 1.1 Statement of the Problem

The main purpose of this study was to assess the level of online teaching readiness of Salesian Educators in the Philippines during the School Year 2020-2021 as assessed by teachers and students when they are taken as a whole and grouped according to age, sex, length of service, and online teaching experience.

Likewise, this study explored the challenges encountered by Salesian Educators in implementing the online teaching modality.

Specifically, it aimed to answer the following questions:

1. Is there a significant difference in teachers' online teaching readiness when the assessors are grouped according to teacher and student designation?
2. Is there a significant relationship between age and teachers' online teaching readiness?
3. Is there a significant relationship between sex and teachers' online teaching readiness?

4. Is there a significant relationship between the length of service and teaching readiness?
5. Is there a significant relationship between online teaching experience and teachers' online teaching readiness?

## 1.2 Hypotheses

1. There is no significant difference in teachers' online teaching readiness when the assessors are grouped to the designation.
2. There is no significant relationship between age and teachers' online teaching readiness.
3. There is no significant relationship between sex and teachers' online teaching readiness.
4. There is no significant relationship between the length of service and teaching readiness.
5. There is no significant relationship between online teaching experience and teachers' online teaching readiness.

## 1.3 Review of Related Literature

### 1.3.1 Online teaching readiness

In Turkey, a study revealed that teachers' overall technology readiness level was moderate [10]. Moreover, findings from the study of Phan & Dang, [7] revealed that teachers who are more familiar with technology are more ready for teaching in an online environment. However, Downing and Dyment [11] reported that teachers lack the technological and pedagogical competence to handle online teaching.

### 1.3.2 Online teaching readiness and age

Studies revealed no significant difference between teachers' technological readiness and age [10] and [12]. In support of the previous claim, Ventayen [13] found out that there is no significant difference in teachers' age and readiness in terms of technological skills, experience with online teaching, attitude towards online learning, time management and commitment. Similarly, a study conducted in Iran (by) also revealed no significant correlation observed between age and technological competencies readiness.

### 1.3.3 Online teaching readiness and sex

When teachers' readiness and sex are studied, several researchers have examined gender

differences in online teaching. Briggs [14], revealed gender-specific differences in perceptions of the importance of online teaching roles and competencies. Several studies found males more technologically ready than females [10] and So and Swatman [15]. Additionally, Chase [16] discovered differences in instructional design practice when teachers are grouped according to their sex.

### 1.3.4 Online teaching readiness and length of teaching experience

Length and experience in teaching impact online course facilitation and design, as espoused by the study's result that novice teachers perceive that they are not ready for online teaching [6]. In support of this claim, result from the study of Shea [17] stated that less skilled faculty struggle to teach online. Moreover, Choi and Park [18], neophyte instructors find online courses require a huge workload, technology concerns, and student-teacher communication. However, Carril, Sanmamed, and Selles [19] found out those faculties who have more teaching experience have a greater perceived ability to perform pedagogical competencies online.

### 1.3.5 Online teaching readiness and online teaching experience

With the constant development of online technologies, readiness to teach online may be in a state of flux [14]. Gold [15] emphasized that most of the teachers have little or no experience with online teaching. Furthermore, without previous experience, teachers simply apply traditional classroom practices in the online setting when they should be developing new methodologies of teaching. It was found out that faculty with little to no experience in online teaching have lower perceptions of readiness to teach online than those with more than five years of online teaching experience. On the other hand, educators with more online teaching experience rated to have greater perceived levels of readiness and proficiencies [16].

### 1.3.6 Challenges encountered by teachers during online teaching

Online education affects all components of teaching and learning [17]. In dealing with technology, Orlando and Attard [19] emphasized that online teaching is not a one size fits all approach. This means that challenges are

expected to rise along with the implementation of online teaching and learning. Choi and Park [18] revealed that the variation of a teacher's role in online education makes online teaching delivery challenging. Kebritchi, Lipschuetz and Santiago [17] identified three major categories of issues and challenges related to online teaching: a) issues related to learners, teachers, and content development.

#### 1.4 Theoretical Framework

This study is anchored on the self-efficacy theory by Albert Bandura, which emphasizes an individual's confidence in his or her capacity to complete a task, fulfill role expectations, or meet challenging situations successfully [20] cited in Clark & Bates, [21]. Bandura and Locke [22] also validated that employee performance is significantly affected by self-efficacy beliefs.

Research shows that teacher efficacy is an important variable in teacher effectiveness, which is largely dependent on how teachers successfully cope with tasks, obligations, and challenges related to his/her professional role [23]. As examined, teachers with higher teaching self-efficacy are more likely to persist through negative outcome expectations and experiences in the workplace [24]. Thus, in this case, teachers' self-efficacy and belief in one's readiness carry weight to his/her online teaching performance and readiness. By assessing teachers' readiness to teach online, school administrators can provide the necessary support that teachers need to improve the quality of online teaching delivery.

## 2. MATERIALS AND METHODS

### 2.1 Research Design

The study made use of the descriptive, comparative, and correlational research design using a researcher-made survey. These designs were employed since they were found suitable to the study for it sought to examine level of readiness and challenges encountered by Salesian Educators in teaching online; compare the level of teachers' readiness in online teaching according to assessors' designation; and determine whether a relationship exists between the teachers' readiness in online teaching and the identified demographics.

### 2.2 Respondents

The respondents of the study are the whole population of the Junior High School and Senior High School faculty from the nine (9) Salesian Schools in the Philippines. On the other hand, to validate the teachers' self-assessment, student-assessors are asked to participate in the study. Stratified random sampling was utilized to identify the number of student-assessors for each school.

### 2.3 Research Instrument

A researcher-made instrument was employed in gathering data based on the principles of technological, pedagogical, and attitudinal competencies. The research instrument is based on the study of the Blended Learning Preparedness Framework by Ventayen, Salcedo, Ventayen, C., Ventayen, and Ventayen [13].

The instrument consists of two parts. Part I is the respondent's profile, which contains information about their age, sex, length of service, and online teaching experience. Part II is the questionnaire on the online teaching readiness of Salesian Educators. This part consists of three (3) areas: technological competencies, pedagogical competencies, and attitudinal competencies, including ten questions under each area.

The respondents chose from four (4) alternative responses according to which applies to them. The options are weighted, and the high score indicates higher readiness. A low score is interpreted as having lower readiness. The rating scale below was used to assess the level of teachers' online teaching readiness.

To quantify the questionnaire's content validity, the researcher subjected the questionnaire to a content validity process where the research instrument garnered a score of 1.00 for its content validity index.

Furthermore, to determine the reliability of the research instrument, a pilot test to 30 teachers and students in Mary Help of Christians School in Cebu was conducted. The instrument's reliability was established with a reliability index of 0.959 for the respondents' questionnaire and a reliability index of 0.957 for the assessors' questionnaire.

**Table 1. Distribution of Respondents**

Philippine Salesian Schools	Teachers		Students		
	N	%	N	n	%
A	27	7.34	563	28	7.75
B	25	6.79	674	34	9.27
C	44	11.96	864	43	11.89
D	32	8.70	696	35	9.58
E	27	7.34	528	27	7.26
F	32	8.70	867	44	11.93
G	89	24.18	1,492	75	20.53
H	59	16.03	721	36	9.92
I	33	8.97	863	43	11.87
<b>Total</b>	<b>368</b>	<b>100</b>	<b>7,268</b>	<b>365</b>	<b>100</b>

**Table 2. Online teaching readiness scale of interpretation**

Scale	Mean Range	Verbal Description	Verbal Interpretation
4	3.26 – 4.00	Strongly Agree	Teachers demonstrate very high online teaching readiness.
3	2.51 – 3.25	Agree	Teachers demonstrate high online teaching readiness
2	1.76 - 2.50	Disagree	Teachers demonstrate average online teaching readiness
1	1.00 – 1.75	Strongly Disagree	The teacher demonstrates low online teaching readiness.

**2.4 Data Collection Procedure**

Data from the respondents are gathered through the digital platform-google forms due to the strict observation of the Coronavirus disease protocols. Before the conduct of the study, the approval of the School Rector of each of the nine (9) schools was obtained. The respective School Principals supervised the official data gathering procedure. The School Principal then followed up the completion of the data gathering phase in his/her school. After the respondents answered the questionnaire and submitted it, the responses are automatically recorded in the google forms.

**2.5 Data Analysis Procedure**

Descriptive, comparative, and correlational analyses are utilized to analyze data using the appropriate statistical tools. For descriptive analyses, frequency count, percentage distribution, Mean, and Standard Deviation are used to describe and present the demographics data of the population.

Mann-Whitney U Test was utilized for the comparative analysis to identify if a significant difference exists between the teachers'

assessment of their online teaching readiness than the student assessment. Since the data is not normally distributed, a non-parametric test was conducted using the Kolmogorov–Smirnov test.

Spearman rank correlation was used for the correlational analyses to determine the significant relationship between teachers' online teaching readiness and the variables age and length of service. Moreover, the Chi-square test of association was used to determine the significant relationship between teachers' online teaching readiness and the variables sex and online teaching experience.

**4. RESULTS AND DISCUSSION**

**4.1 Level of Online Teaching Readiness of Salesian Educators**

Table 2 shows that as a whole, Salesian Educators demonstrate very high online teaching readiness with an obtained mean of 3.35 regardless of the teachers' age, sex, length of service, and online teaching experience. Both the teachers' assessment (M=3.42, SD=0.34) and the student assessment (M=3.28, SD=0.35)

indicated very high online teaching readiness. It is necessary to understand the level of faculty readiness for online teaching in every institution. It plays an important factor in a successful online learning environment [25].

It is noted that teachers' demography did not affect their online teaching readiness. Moreover, the results show that despite the short preparation in the shift from traditional to online classes, Salesian Educators are ready to teach online in the three identified area competencies: a) technological, b) pedagogical, and c) attitudinal.

Similarly, a study conducted by Gay [26] revealed that 72.6% of the faculty were individually ready to embrace online teaching having access to a network connection. In addition, Ventayen [27] found out that teachers in Pangasinan, Philippines have a positive perception of online teaching, and the majority of them are ready for online distance teaching.

On the contrary, a study conducted by Sadik [21] in an Egyptian University revealed that the majority of the teachers have limited competence and low readiness for online teaching; however, they exhibited positive online teaching perception. Furthermore, Lichoro [28] found out that teachers do not feel adequately prepared to teach online since there are still competencies to

be identified to prepare them for online teaching. Downing and Dymont [11] concluded that teachers lack online teaching readiness.

#### 4.2 Difference in Teachers' Online Teaching Readiness When Assessors are grouped According to Designation

Table 3 presents the difference in the online teaching readiness of teachers using the Mann-Whitney U test. The findings showed a significant difference in teachers' online teaching readiness when the assessors are grouped according to teacher and student designation [U=51722.5, P=0.000]. Interestingly, teachers' rating is significantly higher than students' rating.

It can be deduced that teachers assessed themselves to be more ready than what students experienced during the online learning sessions.

Specifically, the difference between the teachers' and the students' assessment is in the higher rating assessment by the teachers than the rating given by the students. In general, teachers who rate themselves higher than the students appear to be a case of overestimation, which is the norm regarding self-assessment as revealed by several studies [29-31].

**Table 3. Level of online teaching readiness of salesian educators**

Variable	Readiness			Technological Competencies			Pedagogical Competencies			Attitudinal Competencies		
	M	SD	Int	M	SD	Int	M	SD	Int	M	SD	Int
<i>Teacher</i>	3.42	0.34	VH	3.61	0.37	VH	3.39	0.42	VH	3.25	0.41	H
Age												
20-35 years old	3.44	0.32	VH	3.66	0.31	VH	3.42	0.40	VH	3.23	0.41	H
36-60 years old	3.37	0.39	VH	3.51	0.45	VH	3.32	0.45	VH	3.29	0.42	VH
Sex												
Male	3.45	0.35	VH	3.65	0.39	VH	3.41	0.43	VH	3.29	0.42	VH
Female	3.39	0.34	VH	3.59	0.35	VH	3.37	0.41	VH	3.22	0.41	H
Length of Service												
0 - 9 years	3.43	0.32	VH	3.65	0.32	VH	3.42	0.39	VH	3.23	0.41	H
10 or more years	3.37	0.40	VH	3.50	0.46	VH	3.31	0.48	VH	3.30	0.41	VH
Online Teaching Experience												
with experience	3.48	0.34	VH	3.67	0.35	VH	3.45	0.42	VH	3.32	0.42	VH
without experience	3.39	0.34	VH	3.59	0.37	VH	3.36	0.41	VH	3.22	0.41	H
<i>Student</i>	3.28	0.35	VH	3.49	0.35	VH	3.20	0.42	H	3.14	0.40	H
<b>As a Whole</b>	<b>3.35</b>	<b>0.35</b>	<b>VH</b>	<b>3.55</b>	<b>0.37</b>	<b>VH</b>	<b>3.29</b>	<b>0.43</b>	<b>VH</b>	<b>3.20</b>	<b>0.41</b>	<b>H</b>

\*VH=Very High (SA), H=High (Ag)A=Strongly Agree, Ag, Agree

**Table 4. Difference in Teacher’s online teaching readiness when assessors are grouped according to designation**

Variable	Designation		U	P
	Teacher	Student		
Readiness	3.42 (0.34)	3.28 (0.35)	51722.5*	0.000

*\*the difference is significant at  $P \leq 0.05$*

Furthermore, a study conducted by Maciejczyk [30] on the relationship of self-ratings and assessor ratings revealed in support to the findings of the study that self-assessment and assessor ratings are different with significantly different means and low correlations. The same study revealed that self-ratings are more lenient than that of the assessor ratings.

### 4.3 Relationship between Age and Teachers’ Online Teaching Readiness

Table 4 shows the relationship between age and teachers’ online teaching readiness using Spearman rank correlation. The result shows no significant relationship between age and the teachers’ online teaching readiness [ $\rho(366) = -0.064, P = 0.222$ ]. Hence, the null hypothesis is accepted.

The result of the study implies that the readiness of Salesian Educators to teach online is not affected by age. Under the areas of technological and pedagogical competence, both young and old teachers possess very high readiness. On the other hand, there is a minor difference in attitudinal competence, where young teachers showcased high readiness while older teachers possessed very high readiness. This implies that as digital migrants, older teachers do not lag behind the younger teachers in facilitating online classes. In general, whether young or old, a Salesian Educator is ready to teach online. In reference, Table 2 presented that both young and old teachers are assessed to have the same level of readiness. Moreover, the results emphasize the value that Salesian Administrators place on both the young and the older faculty members.

Furthermore, the finding of the study supports the claim of Summak et al. [10] that revealed no significant relationship between the teachers’ technological readiness and age. Similarly, a study conducted in Iran by Eslaminejad et al. [12] also revealed no significant correlation observed

between age and technological competencies readiness. Moreover, Ventayen [32] found out that there is no significant relationship between teachers’ age and readiness in terms of technological skills, experience with online teaching, attitude towards online learning, and time management and commitment.

On the contrary, a research project involving Hong Kong’s primary and secondary school teachers discovered that age has a significant influence on the online teaching readiness of in-service teachers [15].

**Table 5. Relationship between age and Teachers’ online teaching readiness**

Variable	$\rho$	df	P
Age	-0.064	366	0.222

*\*the correlation is significant at  $p \leq 0.05$*

### 4.4 Relationship between Sex and Teachers’ Online Teaching Readiness

Table 5 presents the relationship between sex and teachers’ online teaching readiness using the Chi-square test of association. The result reveals a significant relationship between teachers’ online teaching readiness and sex [ $\chi^2(2) = 8.811, P = 0.012$ ]. Hence, the null hypothesis is rejected.

The finding indicates that sex influences teachers’ online teaching readiness. Relative to technological and pedagogical competence, both males and females possessed very high readiness, but when it comes to attitudinal competence, males scored higher than females; very high and high readiness.

This means that both male and female Salesian Educators did not exhibit differences in their readiness in the areas of technological and pedagogical given that both groups receive the same support and training. On the other hand, males felt more confident in the online class

modality than females. In general, despite receiving the same support and training, differences arise on how Salesian Educators apply and put to life such experiences.

The finding of the study supports a research project in Hong Kong which discovered that gender has a significant influence on the online teaching readiness of teachers [15]. Additionally, Ventayen [32] stated a significant correlation between teachers' age and readiness in terms of technological skills, experience with online teaching, attitude towards online learning, and time management and commitment. Moreover, women teachers tended to explore more relational approaches to teaching and using technology for different purposes than men [33].

In contrast to the claims previously presented, Aydin [8] stated that teachers' gender did not affect teachers' perception of roles and competencies in teaching online. Additionally, several studies claimed that there is no significant correlation observed between gender and technological competencies readiness [12] Spotts, Bowman, & Mertz [34].

**Table 6. Relationship between Sex Teacher's online readiness**

Variable	$\chi^2$	df	P
Sex	8.811*	2	0.012

\*the association is significant at  $p \leq 0.05$

#### 4.5 Relationship between the Length of Service and Online Teaching Readiness

Table 6 shows the relationship between the length of service and teachers' online teaching readiness using Spearman rank correlation. The result reveals no significant relationship between teachers' online teaching readiness and length of service [ $\rho(366) = -0.062, P = 0.236$ ]. Hence, the null hypothesis is accepted.

The finding indicates that length of service does not influence teachers' online teaching readiness in general. In relation to technological and pedagogical competence, both teachers with shorter and longer service possessed very high readiness, but when it comes to attitudinal competence, teachers with longer service scored higher than those with shorter service; very high and high readiness, respectively. In general, a teacher's length of service is not a factor in determining one's readiness to teach online.

Contrary to the result of the study, the literature reveals that length and experience in teaching impact online course facilitation and design, which forms part of the teachers' pedagogical competencies. Graff [35] concludes that length of service is a factor that influences teachers' readiness to teach in an online environment as having experience and a thorough understanding of one's field facilitates and helps readiness to teach online as practical experience and strong knowledge content moderates fear of technology. Sadik [21], found out that there was a significant correlation between length of teaching experience and technical as well as pedagogical competencies. A series of Scheffe tests revealed that instructors with five to ten years of teaching experience claimed high readiness on the technical subscale than instructors with more than ten years of teaching experience.

Several studies also support the claim that length of service impacts online teaching readiness. It was found out that when compared, teachers with longer teaching are perceived to be more ready to teach online than teachers with shorter teaching experience [6] and [16]. Additionally, Shea [17], stated that in comparison to the tenured teachers, novice teachers struggle to teach because of the lack of face-to-face communication, are unfamiliar with efficient online pedagogy, lack the possibility to observe online teaching before involving in it, lack the chance to explore with the technologies of online teaching, and have insufficient time to learn about online teaching.

**Table 7. Relationship between length of service and Teacher's Online teaching readiness**

Variable	$\rho$	df	P
Length of Service	-0.062	366	0.236

\*the correlation is significant at  $p \leq 0.05$

#### 4.6 Relationship between Online Teaching Experience and Teachers' Online Teaching Experience

Table 7 presents the relationship between teachers' online teaching readiness and online teaching experience using the Chi-square test of association. The result reveals no significant relationship between the teachers' online teaching readiness and online teaching experience [ $\chi^2(2) = 1.253, P = 0.534$ ]. Hence, the null hypothesis is accepted.

The finding suggests that online teaching experience does not influence a teacher's readiness to teach online. In the light of technological and pedagogical competence, both teachers with previous online teaching experience and those with not exhibited very high readiness, but in the area of attitudinal competence, teachers with previous online teaching experience scored higher than those without online teaching experience; very high and high readiness respectively. Thus, a teacher's previous online teaching experience exhibited an advantage in the attitudinal competence area, but in general, it is not a factor in determining one's readiness to teach online.

In consonance with the result of the study, in the study conducted in Iran by Eslaminejad et al. [12], it was revealed that there is no significant correlation observed between teaching experience and technological competencies readiness.

Contrary to the study's finding, the literature reveals that online teaching experience influences teachers' online teaching readiness. As shown in the research of [16], it was found out that faculty with little to no experience in online teaching have lower perceptions of readiness to teach online than those with more than five years of online teaching experience while educators with more online teaching experience rated have greater perceived levels of readiness and proficiencies.

In relation to the finding of the present study, the result which goes in contrast with the majority's view in the literature, emphasized that in the Salesian School Setting, online teaching experience does not influence teachers' readiness to teach online since online teaching is relatively new among the members of the faculty.

**Table 8. Relationship between Teacher's Online readiness and the given variables**

Variable	$\chi^2$	df	P
Online Teaching Experience	1.253	2	0.534

*\*the association is significant at  $p \leq 0.05$*

#### 4.7 Challenges Encountered by Teachers during Online Teaching

Table 8 presents the challenges encountered by Salesian Educators during online teaching. The majority of teachers' challenges include dealing with passive students (87.5%), following up students (78.8%), dealing with technical

difficulties (67.1%). The least challenges include Students' Focus (0.3%) and Dealing with Parents' Expectations (0.3%).

Classes conducted virtually is a first time experience for both Salesian Educators and Bosconians. During synchronous online classes, students just turn off their camera and keep their microphones on mute while the discussion is on-going which makes it a challenge for teachers to boost up students' participation. Literature tells us that learning from home changes a student's learning environment. With this, students' learning is affected by their feelings of isolation and disconnectedness while learning physically apart from their classmates [36]. Dealing with passive students has also been a major issue revealed by the study of Kebritchi [17], wherein teachers find it difficult to deal with passive students with regards to their participation in online discussions. Since students' can easily turn off their camera and microphone, having them actively participate is indeed a challenge. Fein and Logan [37] explained that in order for teachers' to assure students' active participation, they must consider that students learn differently online. Thus, with this existing challenge, teachers are called to motivate and encourage students to participate more.

On the other hand, teachers also experience difficulty in following up on students' submission. Following up with students in the submission of their assignments, quizzes, and projects on time is a challenge in online learning platforms [38] Lyons, [39]. Fein and Logan [37] noted that student follow-up is one of the three phases of challenges that teachers encounter during an online class.

Based on the data gathered, technical difficulties encountered by the teachers during online classes include internet accessibility and power interruption, which affect the delivery of the lesson. In dealing with technology, Orlando and Attard [19] emphasized that online teaching is not a one size fits all approach. The online teaching environment presents challenges for many teachers who increasingly require higher levels of technological competency and proficiency [40]. In the course of online teaching, teachers tend to encounter technology challenges which include: low bandwidth, high costs of bandwidth, access issues, limited interaction to learners, and delay in getting a response from learners [41]. In addition, teachers encounter technological challenges in

familiarizing internet-based technologies and online teaching tools to adjust their teaching plans and methods [42].

**Table 9. Challenges encountered by teachers during online teaching**

<b>Challenges</b>	<b>f</b>	<b>%</b>
Dealing with passive students	322	87.5
Following up students	290	78.8
Dealing with technical difficulties	247	67.1
Staying connected with the students	214	58.2
Encouraging student collaboration	205	55.7
Motivating students	162	44.0
Disciplining students	158	42.9
Giving suitable student assessment	133	36.1
Setting online learning activities	132	35.9
Managing time	128	34.8
Others		
Unstable Internet Connection	46	12.5
Dealing with Parents' Demands	13	3.5
Student Honesty	6	1.6
Too much workload	5	1.4
Power Interruption	5	1.4
Too much screen time	4	1.1
Dealing with students with learning abilities	3	0.8
Not conducive for learning and teaching	3	0.8
Presence of Parents During Online Class	3	0.8
Lack of Resources	3	0.8
Noise	2	0.5
Mental and Emotional Stress	2	0.5
Creating learning materials for technical subjects.	2	0.5
Availability of software tools for students	2	0.5
Internet Load Assistance	2	0.5
No hands-on learning	2	0.5
Dealing Parents' Expectations	1	0.3
Student Focus	1	0.3

**5. SUMMARY OF FINDINGS, CONCLUSION, AND RECOMMENDATIONS**

**5.1 Summary of Findings**

Generally, the level of online teaching readiness of Salesian Educators in the Philippines as a whole is very high regardless of the teachers' age, sex, length of service, and online teaching experience. In terms of technological and

pedagogical competencies, teachers' also demonstrated very high readiness. On the other hand, in terms of attitudinal competencies, teachers' generally demonstrated high readiness.

Meanwhile, when grouped according to the designation, the findings reveal a significant difference in the assessments of the teachers and the students. Teachers rated themselves significantly higher than the students' assessment. Furthermore, there is no significant relationship between teachers' online teaching readiness and the variables age, length of service, and online teaching experience. Relative to the correlation between teachers' online teaching readiness and sex, a significant relationship was established.

With regards to the challenges encountered by teachers during online teaching, the following emerged as top issues: dealing with passive students, following up students, and dealing with technical difficulties. The least challenges include students' focus and dealing with parents' expectations.

**5.2 Conclusion**

Salesian Educators from the nine different Salesian Schools in the country are deemed very ready to teach online, as reflected in the very high online teaching readiness assessment result. Despite the demonstrated very high online teaching readiness, teachers must continuously upgrade and update themselves to remain relevant in this fast-paced digital era. In addressing the teachers' continuous improvement, a well-crafted Online Teaching Development Program that covers the different areas in online teaching: technological, pedagogical, and attitudinal be in place to assist teachers' continuous improvement and to raise the quality of Salesian Online Teaching Programs.

**5.3 Recommendations**

Based on the findings of the study, it is recommended that:

The administrators may address the gaps and utilize the Proposed Online Teaching Development Program as an empirical reference to enhance the quality of online teaching instruction of the different Don Bosco schools in the country. Moreover, it is recommended that the schools formulate an online education

evaluation tool and conduct an evaluation and assessment of the implementation of the online education platform to monitor and identify other areas of improvement. The said assessment should cover students, parents, teachers, and staff assessment to ensure a holistic impact. They are also recommended to gather together and craft a one Don Bosco System Online Education Development Plan and Policy for all Don Bosco schools in the country to create a brand of one Salesian Education across the Philippine islands. Lastly, establish a One Don Bosco System Online Learning Community to gather the different Don Bosco stakeholders, including the students, parents, teachers, staff, alumni, and school administrators in the country.

The teachers may continuously update themselves professionally through faculty research exposure and engagement, especially on the trends in online education, to carry out and facilitate an effective and innovative online teaching and learning process. Likewise, they must adopt an attitude of openness and adaptability to online teaching innovations.

Future researchers may conduct the same study in other school settings to validate the current study's claim. They can consider adding other variables such as teachers' educational attainment and subject area taught or other areas of concern to deepen the discussion. Moreover, they may assess the teachers' readiness and its relationship with the utilized variables under the lenses of each given dimension to provide an in-depth assessment.

## CONSENT

As per international standard or university standard, respondents' written consent has been collected and preserved by the author(s).

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## COMPETING INTERESTS

Authors have declared that no competing interests exist.

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