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Online Teaching Preparedness of Junior High School Teachers during the Coronavirus Pandemic

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Abstract

The study examined the online teaching preparedness of Junior High School Teachers (JHS) during the Coronavirus Pandemic. The study used the descriptive-correlational method of research with a duly validated questionnaire as research instrument. Descriptive statistics such as the mean and frequency counts were used to analyze data. Standard deviation was calculated to measure the dispersion of a dataset relative to its mean. Spearman's Correlation was used to evaluate relationship involving ordinal variables. Data were drawn from the 19 JHS Teachers of the Polytechnic University of the Philippines Laboratory High School (PUPLHS). JHS Teachers assessed their preparedness for online teaching as "Very Satisfactory". The demographic profile of the JHS Teachers such as age, years of teaching experience, and educational attainment were correlated to their preparedness for online teaching. It is observed that the age and years of teaching of JHS teachers were not significantly related to their online teaching preparedness. However, the educational attainment of JHS teachers registered a significant relationship to their online teaching preparedness. It is recommended that JHS teachers of PUPLHS pursue advance studies to further enrich and update their knowledge on the current trends in education. Furthermore, they are encouraged to undergo seminars and trainings to cultivate their consistent and very satisfactory performances as educators. School administrators should continually inspire them to nurture and foster their knowledge to avoid any means of complacency especially with the new normal system of online education. This is also a way for them to persistently refresh, revitalize, and improve their skills.

Keywords: Polytechnic University of the Philippines, Online Teaching, Junior High School, Teaching Preparedness, Synchronous

Introduction

The COVID-19 pandemic, which began in China, has nearly infected every country in the world. As a result, over a billion students around the world have been impacted. More than 28 million Filipino students across all academic levels are among those forced to stay at home and adhere to the Philippine government's quarantine regulations (UNESCO 2020).

The Philippine's Department of Education (DepEd) Secretary, Leonor Briones, quipped, "Education must continue even in times of crisis whether it may be a calamity, disaster, emergency, quarantine, or even war" (Department of Education, 2020). As a result, schools need to comply to engage in Online Teaching-Learning.

To ensure that all students have equal access to high-quality teaching and learning, a variety of factors related to university teachers' adoption and use of online teaching must be investigated, particularly to assist institutions in better supporting teaching and learning in online spaces (Kebritchi et al., 2017).

Several studies on teacher preparation for online learning and teaching have been undertaken. The study in Turkey of Summak et al., (2010) found that teachers' overall technology readiness

was moderate, with no significant differences in terms of technology readiness across age and subject area, but a significant difference between technology readiness and gender. Furthermore, Palloff & Pratt (2013) mentioned that when dealing with technology-enhanced classrooms and related concerns, teachers may feel uncomfortable.

Gay (2016) looked at how online teachers' eLearning preparedness was assessed before, during, and after the course was delivered. They discovered that online teachers had a pressing need for online support desk services. Moreover, Lichoro (2015) found that teachers do not believe they are fully prepared to teach online. However, identifying competences to equip teachers to teach online remains a priority. Likewise, the study of Hung (2016) discovered that the most essential aspect in e-Learning is instructor motivation and training.

In addition, Downing and Dyment (2013) explored at teacher educators' readiness and preparation for, as well as their perceptions of, preparing preservice teachers in a totally online environment, and discovered that instructors thought online teaching was time demanding. According to the research, teachers new to online teaching felt unprepared to teach online and lacked technical and pedagogical support, as well as time-management measures.

To cope up with these challenges, the competencies needed to be a competent and effective online teacher should be emphasized. In the literature, competencies for online instruction have been classified at various levels, and multiple methodologies have been used to classify them. Salmon (2003) divides e-teacher competencies into five categories: (1) online process comprehension, (2) technical ability, (3) online communication skills, (4) subject expertise, and (5) personal qualities.

Furthermore, Berge (1995) looked at the criteria for successful online teaching and divided them into four categories: (1) educational, (2) social, (3) managerial, and (4) technical. His work was elaborated upon by Williams (2003), who described faculty functions, roles, and competences. He categorized teacher competencies into four: (1) learning and instruction, (2) communication and interaction, (3) management and administration, and (4) technology.

Moreover, personal, social, pedagogical, and technological competencies, as well as a set of competences linked to content, design, communication, and management, are briefly listed by some researchers (Baran & Correia, 2014; Guasch, Alvarez, & Espasa, 2010; Palloff & Pratt, 2011; Smith, 2008).

Based on our review and synthesis of literature and studies, the researchers focused on the following online teaching skills which is believed necessary for teachers to have for a successful online teaching: (1) Technological Literacy, (2) Communication Skills, (3) Time Management Skills, (4) Student Engagement Skills, and (5) Assessment and Evaluation Skills.

Given the situation, this study aimed to determine how prepared the teachers were in their conduct of Online Teaching. The results of this study will surely benefit the school administration, teachers, and students for the improvement of Teaching-Learning in the following School Year.

Theoretical Framework

Transformative Learning Theory by Jack Mezirow was used in the study. It's a learning theory that focuses on adult education and young adult education. The notion behind transformative learning, also known as transformation learning, is that learners may modify their thinking in response to new knowledge. Teachers can greatly benefit from understanding this theory by implementing new teaching methodologies and strategies in their classrooms which will help them appeal to more learners especially in the online setup. More faculty development is required to improve the integration of online learning. Not only do students need to be aware of the time commitment

and comfortable with technology, but teachers need an orientation regarding the pedagogical methods appropriate for an online course (Kowalczyk, 2014).

Objectives of the study:

This study sought to determine the relationship between the socio-demographic profile of JHS Teachers to their online teaching preparedness.

Specifically, it aimed to answer the following questions:

1. What is the socio-demographic profile of the JHS Teachers in terms of:
1.1 Age?
1.2 Years of teaching experience?
1.3 Educational Attainment?
2. What is the assessment of JHS Teachers online teaching preparedness in terms of:
2.1 Technological Literacy?
2.2 Communication Skills?
2.3 Time Management Skills?
2.4 Student Engagement Skills?
2.5 Assessment and Evaluation Skills?
3. Is there a significant relationship between the socio-demographic profile of the JHS Teachers and their online teaching preparedness?

Methodology

This study is descriptive-correlational. Descriptive correlational studies describe the relationship among variables, without seeking to establish causal connection. The method was used to describe the socio-demographic profile and online teaching preparedness of JHS Teachers. Survey method was used as the major technique in generating data. The study used a two-part researcher-made survey questionnaire. The first part was used to describe the socio-demographic profile of the JHS Teachers, while the second part was used to assess the JHS Teachers' preparedness for online teaching. Series of revision has been made on the questionnaire after the content-validation of two research experts. Test-retest was administered to ensure the reliability of the instrument.

The study is limited to the teachers at the PUP Laboratory High School (PUPLHS). The researchers observed proper research protocol in administering the survey questionnaire by acquiring ethics clearance from the office of the Research, Extension and Development.

The data gathered was summarized, tabulated, and analyzed using descriptive statistics such as the mean and frequency counts. Pearson product moment correlation was applied to measure the relationship of the socio-demographic profile of the JHS Teachers to their preparedness for online teaching.

Results

Table 1 shows the demographic profile of the junior high school teachers. 47.4 % of the respondents aged between twenty-one and thirty, while 10.5% of them aged sixty and above. 63.1% of the junior high school teachers have taught from one to ten years, while 5.3% of the respondents have taught from twenty-one to thirty, thirty-one to forty, or more than forty years. 31.6% of the respondents have earned units in master's degree program, while one respondent has earned a doctorate degree program.

Table 1. Demographic Profile of the Junior High School Teachers

Age	**Frequency**	**Percentage**
21 – 30	9	47.4 %
31 – 40	2	10.5 %
41 – 50	3	15.8 %
51 – 60	3	15.8%
Above 60	2	10.5%
Total	**19**	**100 %**
Teaching Experience (in years)		
1 - 10	12	63.1%
11 – 20	4	21.0%
21 – 30	1	5.3%
31 – 40	1	5.3 %
More than 40 years	1	5.3%
Total	**19**	**100 %**
Educational Attainment		
Bachelor's Degree Holder	3	15.8 %
With Units/Currently Enrolled in a Master's Degree Program	6	31.6 %
Master's Degree Holder	4	21.0 %
With Units/Currently Enrolled in a Doctorate Degree Program	5	26.3 %
Doctorate Degree Holder	1	5.3 %
Total	**19**	**100 %**

Table 2: JHS Teachers Online Teaching Preparedness in Terms of Technological Literacy

Statements	**Mean**	**SD**	**Interpretation**
I can perform file management on my computer (e.g. copying, moving, renaming, and deleting files or folders).	3.56	0.58	Very Satisfacto-ry
I can use office applications (e.g. MS Word, MS PowerPoint, and MS Excel).	3.60	0.56	Very Satisfacto-ry
I can navigate within the course in the learning management system (e.g. MS Teams, Google Classroom, Moodle, etc.).	3.44	0.84	Very Satisfacto-ry
I can use an internet browser for open educational resources (e.g. Google Chrome, Firefox, and Safari).	3.52	0.60	Very Satisfacto-ry
I can use online collaborative tools (e.g. Google Drive, Drop-box).	3.48	0.69	Very Satisfacto-ry
Overall Mean	**3.52**	**0.66**	**Very Satisfac-tory**

Table 2 shows the perceptions of the teachers regarding their preparedness for online teaching in terms of technological literacy. Overall, the teachers agree that they are prepared for online teaching in terms of technological literacy with means scores ranging from 3.44 to 3.60. More specifically, they agree that they can use office applications. It is, however, observed that teachers agree that they can navigate within the course in the learning management system. Nonetheless, all (5 out of 5 indicators) of the teachers' responses per indicator classified that they agree that they are pre-

pared for teaching online in terms of technological literacy. It is also noticed that lower variability in the scores were assigned by the respondents (SD = 0.66).

Table 3: JHS Teachers Online Teaching Preparedness in Terms of Communication Skills

Statements	Mean	SD	Interpretation
I send announcements and reminders in the Learning Management System/Messenger/e-mail clearly.	3.44	0.77	Very Satisfactory
I respond to the student's questions promptly (within 24 to 48 hours).	3.40	0.84	Very Satisfactory
I provide constructive feedback on activities.	3.40	0.90	Very Satisfactory
I encourage students to participate during the synchronous session.	3.60	0.65	Very Satisfactory
I express myself easily and articulately during the synchronous session.	3.60	0.56	Very Satisfactory
Overall Mean	**3.49**	**0.74**	Very Satisfactory

Table 3 shows the perceptions of the teachers regarding their preparedness for online teaching in terms of communication skills. Overall, they often communicate to their students with mean scores ranging from 3.40 to 3.60. More specifically, the teachers often encourage students to participate during the synchronous session and they often express themselves easily and articulately during the synchronous session. On the other hand, they often respond to the student's questions promptly and provide constructive feedback on activities. All (5 out of 5 indicators) of the teachers' responses per indicator that they are often prepared for online teaching in terms of communication skills. It is also observed that lower variability in the scores were assigned by the respondents (SD = 0.74).

Table 4: JHS Teachers Online Teaching Preparedness in Terms of Terms of Time Management Skills

Statements	Mean	SD	Interpretation
I schedule time to design the learning instructions prior to delivery.	3.64	0.42	Very Satisfactory
I keep track of my classes and tutoring sessions.	3.52	0.83	Very Satisfactory
I set clear, reasonable boundaries for my time as a teacher with my students.	3.56	0.58	Very Satisfactory
I meet grading deadlines, and other tasks to be accomplished.	3.32	0.90	Fair
I spend time to learn about new methodologies or tools.	3.44	0.84	Very Satisfactory
Overall Mean	**3.50**	**0.71**	Very Satisfactory

Table 4 shows the perception of the teachers regarding their preparedness for online teaching in terms of time management skills. Overall, the teachers often possess time management skills with mean scores from 3.32 to 3.64. They often schedule time to design the learning instructions prior to delivery. On the other hand, the respondents sometimes meet grading deadlines, and other tasks to be accomplished. Most (4 of 5 indicators) of the responses per indicator classified that they are often prepared for online teaching in terms of time management skills. It is also observed that the scores assigned by the respondents were too close (SD = 0.71).

Table 5: JHS Teachers Online Teaching Preparedness in Terms of Terms of Student Engagement Skills

Statements	Mean	SD	Interpretation
I set goals and help students stick to them.	3.60	0.56	Very Satisfactory
I break down the lessons and make it digestible.	3.64	0.54	Very Satisfactory
I inspire student motivation for learning.	3.64	0.40	Very Satisfactory
I implement virtual reality through sophisticated simulations and games that provide a risk-free, but challenging environment for engaging students in authentic problem-based activities and role-playing exercises.	3.32	0.40	Fair
I encourage students to do self-reflection and self-assessment for them to be responsible for their own learning.	3.56	0.60	Very Satisfactory
Overall Mean	**3.55**	**0.42**	Very Satisfactory

Table 5 shows the perceptions of the teacher regarding their preparedness for online teaching in terms of teaching the students to apply the concepts. Overall, teachers often perceived they are prepared for online teaching in terms of teaching the students to apply the concepts with mean scores from 3.32 to 3.64. More specifically, they often break down the lessons and make it digestible. However, they sometimes implement virtual reality through sophisticated simulations and games that provide a risk-free, but challenging environment for engaging students in authentic problem-based activities and role-playing exercises. Most (4 out of 5 indicators) of the teachers' responses often perceived that they are prepared for online teaching in terms of teaching the students to apply the concept. It is also noticed that scores assigned by the respondents were too close (SD = 0.42).

Table 6. JHS Teachers Online Teaching Preparedness in Terms of Terms of Assessment and Evaluation Skills

Statements	Mean	SD	Interpretation
I am aware of a student's current knowledge and understanding, as well as where they need to go and how they will get there.	3.40	0.70	Very Satisfactory
I inform the students about their strengths and weaknesses based on assessment results and communicate them to their parents.	3.36	0.84	Fair
I keep track of assessment results and submit them to the school for analysis, evaluation, and decision-making.	3.24	0.90	Fair
I review assessment data gathered before and during instructions to comprehend each student's progress to date and to inform future instructional planning.	3.20	0.44	Fair
I evaluate the effectiveness of instruction, curriculum, and materials used at the end of the school year.	3.40	0.77	Very Satisfactory
Overall Mean	**3.32**	**0.73**	**Fair**

Table 6 shows the perceptions of the teachers regarding their preparedness for online teaching in terms of assessment and evaluation skills. Overall, teachers sometimes perceived that they are prepared for online teaching in terms of assessment and evaluations skill with mean scores from 3.20 to 3.40. Teachers are often aware of a student's current knowledge and understanding, as well as where they need to go and how they will get there, and they evaluate the effectiveness of instruction, curriculum, and materials used at the end of the school year. However, they sometimes review assessment data gathered before and during instructions to comprehend each student's progress to date and to inform future instructional planning. Most (3 of 5 indicators) of the teachers' responses per indicator sometimes perceived they are prepared for online teaching in terms of assessment and evaluation skills. It is also observed that lower variability in the scores were assigned by the respondents (SD = 0.73).

Table 7. Summary of JHS Teachers Online Teaching Preparedness

	Mean	**SD**	**Interpretation**
Technological Literacy	3.52	0.66	Very Satisfactory
Communication Skills	3.49	0.74	Very Satisfactory
Time Management Skills	3.50	0.71	Very Satisfactory
Student Engagement Skills	3.55	0.42	Very Satisfactory
Assessment and Evaluation Skills	3.32	0.73	Fair
Overall Mean	**3.48**	**0.66**	Very Satisfactory

Table 7 shows the summary of the perceptions of teachers regarding their preparedness for online teaching. Overall, they often perceived that they are prepared for online teaching with mean scores from 3.32 to 3.55. More specifically, they often perceived that they are prepared for online teaching in terms of teaching the students to apply the concepts. However, respondents sometimes perceived they are prepared for online teaching in terms of assessment and evaluation skills. Most (4 out of 5 indicators) of the teachers' responses per indicator classified that they often perceived that they are prepared for online teaching. It is also observed that lower variability in the scores were assigned by the respondents (SD = 0.66)

Table 8: Correlation between the Socio-demographic Profile of the Junior High School Teachers and their Online Teaching Preparedness

Independent Variables	**Dependent Variables**	**Pearson r-value**	**Interpretation**	**p-value**	**Remarks**
Age	Assessment of online teaching preparedness	0.1282	Weak Correlation	0.2955	Not Significant
Years of Teaching	Assessment of online teaching preparedness	0.0424	Weak Correlation	0.1533	Not Significant
Educational Attainment	Assessment of online teaching preparedness	0.6456	Strong Correlation	0.0031	Significant
Overall Correlation Value		**0.2721**	**Moderate Correlation**		

Table 9 shows correlation between the demographic profile of the junior high school teachers and their perceptions regarding their preparedness for online teaching. Overall, there is a mod-

erate correlation between the demographic profile of the junior high school teachers and their perceptions regarding their preparedness for online teaching ($r = 0.2721$). More specifically, there is a strong correlation between the educational attainment of the respondents and their preparedness for online teaching ($r = 0.6456$). On the other hand, there is a weak correlation between teacher's age ($r = 0.1282$) and years of teaching experience ($r = 0.0424$) on their preparedness for online teaching.

It is observed that the age and years of teaching of JHS Teachers were not significantly related to their online teaching preparedness. However, the educational attainment of JHS Teachers registered a significant relationship to their online teaching preparedness.

Discussions

Socio-demographic characteristics of JHS Teachers: age, years of teaching, and educational attainment were correlated to their online teaching preparedness. The results show that the age and years of teaching did not register a significant relationship to their online teaching preparedness. The study of Tweed (2013) concluded that there was no significant correlation between teacher age and the self-efficacy of teachers. Previous research of Tran & Do (2020) also mirrored these findings by concluding insignificant impacts of the teacher's age, seniority, gender, and qualification on rated teaching effectiveness. Furthermore, years of traditional teaching experience cannot be translated to online teaching. This is due to the different aspect of online teaching compared to traditional teaching. Ko & Rossen (2017) that teaching in the online mode differs from teaching in the classroom, and that the function of an online teacher differs from that of a classroom teacher. In addition, the study of Felege and Olson (2015) indicated that teacher with prior experience in teaching online are more likely to have a favorable attitude about online education. They demonstrated that online teaching and accompanying responsibilities take more time than traditional teaching.

On the other hand, there is a significant relationship between the JHS Teachers' socio-demographic characteristic, educational attainment, and their online teaching preparedness. According to Leite (2013), the rising demands of the teaching profession necessitate ongoing knowledge and skill updates. Since online teaching has been prevalent due to the current situation, teachers need to adapt to this change and make sure they have the knowledge and skills necessary for online teaching. Continued graduate education will help them address these issues. Furthermore, graduate education could boost teacher effectiveness (Harris & Sass, 2011) as well as elevate the teaching profession's status (Sahlberg, 2015). Moreover, Nag (2017) showed that teachers were able to evaluate the strengths and weaknesses of their existing teaching technique because of graduate education program. Researchers are continually discovering new ways to integrate academic theory and instruction, which means teachers must constantly learn new skills to perform better.

Conclusion and Recommendations

This study correlated the socio-demographic characteristics of JHS Teachers and their online teaching preparedness. Overall findings suggest that age and years of teaching has no significant relationship to their online teaching preparedness. The age and years of teaching have nothing to do with how well the teacher was prepared to conduct online teaching. However, there is significant relationship between the educational attainment of JHS Teachers and their online teaching preparedness. Thus, the level of education of JHS Teachers is associated with their online teaching preparedness. It is recommended that JHS Teachers of PUPLHS pursue advance studies to further enrich and update their knowledge on the current trends in education. Furthermore, they are encouraged to undergo seminars and trainings to cultivate their consistent and very satisfactory performances as educators. School administrators should continually inspire them to nurture and foster their know-

ledge to avoid any means of complacency especially with the new normal system of online education. This is also a way for them to persistently refresh, revitalize, and improve their skills by gaining additional ideas and knowledge through seminars and trainings.

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