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# Understanding Senior High School Teachers' Perceived Competency and Readiness to Deliver Instruction Online

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**Abstract: Faced with numerous class suspensions especially with the threat of pandemic, school needs to innovate to ensure that learning is in place even at the comfort of students' home. Online classes are a set of instructional experiences using the available technology. These courses require teacher preparation and competencies. This descriptive research aims to know the readiness of senior faculty members in teaching online. Using Faculty Readiness to Teach Online (FRTO), the researcher describes the attitude and the ability of the teacher-participants of designing online courses. Results reveal that the perception of attitude and ability of teachers to online teaching imply their knowledge and skills. Although attitude is higher than ability, the faculty are ready to teach online. It is recommended that the locale may design periodic seminar-workshops on the subscales, especially those which the faculty deem very important, but they cannot do very well.**

***Keywords:*** *Teaching Online, Readiness, Attitude and Ability and Competencies.*

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## I. INTRODUCTION

➢ *Background*

Distance education is a flexible or alternative mode of educational delivery whereby teachers and learners are geographically separated. In this, instruction is delivered through materials and methods using communication technologies and supported by organizational and administrative structures and arrangements. The delivery medium of distance education is typically online (Commission on Higher Education [CHED], 2016). Distance education delivered online or in this study simply online classes are a set of instructional experiences utilizing the digital network for communication, learning and dialogue.

The sudden shift of purpose of applications and social media from business or entertainment to education was brought by the suspension of face-to-face classes due to community quarantine or lockdown as safety measures against Corona Virus Disease (COVID-19). One way to avoid the negative effects of class suspensions is the conduct of online classes which do not require physical presence. As a result of continuous mounting demand for virtual education, there has been a growth in the number of educators teaching online (Martin, Wang, Jokiaho, May, & Grübmeyer, 2019). Learners and teachers alike need to adjust and adapt to the growing demand to partake in a diversity of learning projects, including online learning. Students need certain attitudes and skills to survive in online classes (Rappel, 2017). Similarly, teachers need training or mentoring on teaching online, but they may lack the same (Allen & Seaman as cited in Martin et al., 2019). They may also face numerous concerns (Heitner & Jennings, 2016; Hetrick & Marcum, 2019). Hence, an investigation on faculty's readiness for online teaching is timely and necessary (Martin, Budhrani & Wang, 2019; Martin et al., 2019).

Faced with numerous class suspensions especially with the threat of pandemic, schools need to innovate to ensure that learning is in place even at the comfort of students' homes. In such an outbreak, teachers are encouraged to utilize online classes using the available technology to deliver instruction. Knowing that online courses are not common in the Philippines especially in Angeles City and the readiness of teachers is crucial in such, the researcher wanted to examine both the readiness (i.e., attitude and ability) of senior high school (SHS) faculty to teach online. The results of this study may be a basis for faculty training, collaborative work and even beyond.

Highlighting the key role of teachers in the success of online classes, several studies looked into teachers'

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preparation in teaching in an online platform. McAllister and Graham (2016) were interested to know how higher educational institutions (HEIs) capacitate pre-service teachers to teach online. The analysis specified that state and institution online teacher preparation programs are expanding but not at a comparable rate to the speedy increase of K-12 online student enrolments. This status may be because of a lack of research to guide teacher preparation programs. Administrators in HEIs also have a choice on whether preparation shall come through pre-service courses, an endorsement, or professional development. Regardless of the timing of teacher preparation, there may be a need to develop resources for preparing online teachers around emerging national standards. Most HEIs also acknowledge that creating approved courses and programs at the institutional level takes considerable time.

In relation, Hatlevik (2017) involved 332 educators in a survey. The participants responded to self-report questions and answered a multiple-choice test on digital competence. Structural equation modelling was employed to evaluate a hypothesized model of the relationship between self-efficacy both in basic information and communication technology (ICT) and online collaboration, strategies to assess information, digital competence, and the usage of. Results tell that the empirical figures supported the hypothesized model. There were noted significant factor loadings and positive relationships between the factors. Generally, the components in the model described 41% of teachers' digital competence while 49% explained their self-efficacy in online collaboration, and 36% indicated their use of ICT at school.

Meanwhile, Rhode et al., (2017) invited 58 faculty members from four colleges to answer a self-assessment instrument. Most of them had high proficiency in technical skills such as sending information or announcements, making courses available to learners, inserting files and web links to the course and organizing contents in certain folders. The members of the faculty had fairly high mastery of several assessment skills, specifically in grading student work and providing comments or feedback on assignments submitted via the learning management system. However, they had lower levels of proficiency on building assessments such as tests, surveys or assignments. The utmost need for professional development was emphasized in advanced communication through the LMS, namely facilitating communication, establishing specified groups, and utilizing web conferencing instruments or tools. The researchers also found differences in the self-assessment between those who were new and those who were experienced in online teaching.

In a similar investigation, Martin, Budhrani, and Wang (2019) learned that university faculty members with experience in teaching online consider the aspects course communication and technical competencies important; however, they rated their ability in these areas lower than their perceived significance of the said areas. For time management, their perception of their ability was higher than their attitude about its importance.

Aiming to learn about the opinions of online class teachers in the USA and in Germany on their preparedness to teach online, Martin, Wang, Jokiaho et al., (2019) developed a tool focused on teacher's perception on the significance of teaching online competencies and self-efficacy to online teaching. Generally, the faculty of the USA rated higher in teaching online competencies in comparison with the German faculty as they ranked higher both in perception of importance and self-efficacy.

The cited studies above relied on self-assessment to measure readiness. Some of them also measured the attitude of the faculty on online teaching, which is a factor salient to readiness. These studies focused on teachers with experience in teaching online and employed in tertiary level.

In several studies on online teaching, demographics have been included and examined. The study of Badia, Garcia, and Meneses (2017) revealed that demographic factors like age, online teaching dedication, academic background, and teachers' roles in teaching online are essential predictors of the adoption of a specific approach in online teaching. Martin et al. (2019) also assessed teachers' demographics. They concluded that there were significant differences recorded in the perception of the importance of competencies based on the different factors such as gender, level taught, training, age and rank. On self-efficacy, significant differences were noted between the faculty in teaching format (synchronous, asynchronous or hybrid format), age and years of teaching online. Martin, Budhrani, and Wang (2019) also found significant differences in gender, years of online teaching, and delivery method for faculty perceptions on the importance of teaching online competencies. Significant differences were also evident in years of teaching online and delivery methods with respect to ability to teach online. Thus, demographics such as age, gender, years in teaching, and academic rank in relation to teaching with modern technology are worthy of further investigation.

Within this COVID-19 outbreak, Holy Angel University (HAU) realized the importance of digital transformation to be connected with the students and stakeholders anew. Similarly, the University ensured that its faculty members are retooled for them to be effective in alternative delivery modes such as online, blended, or distance education. Specifically, HAU faculty members attended series of online trainings on the use of LMS Canvas. They also joined other webinars on the use of other LMS namely OrangeApps and Aralinks.

In this study, the readiness of the faculty to teach online is defined as a state of preparation of teachers for teaching online. Readiness has two facets which are (a) teachers' attitude on the significance of teaching online and (b) teachers' perceived ability to positively teach online (Martin, Budhrani & Wang, 2019). In Krosnick and Petty as cited in Martin et al. (2019), attitude means a person's point of view on something together with his/her personal attachment to it while ability refers to the capacity or capability to perform successfully (Ferguson as cited in

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Martin et al., 2019). Since at least semester-long online teaching has not transpired in the SHS context, the researcher may not measure the teacher's direct ability in online teaching. Therefore, this study centers on SHS faculty's readiness to teach online, particularly their attitude and their perceived ability.

The blind and blank spots on the readiness of SHS faculty to teach online and on the relationship between their readiness and demographic profile make this study worth pursuing.

➢ *Research Questions and Hypothesis*

The general objective of the study is to measure the readiness of the faculty members to teach online. Specifically, it aims to answer the following questions:

- How may the demographic profile of the SHS teachers be described in terms of:

✓ Age;
✓ Sex;
✓ Academic rank;
✓ Years of teaching experience;
✓ Educational preparation; and
✓ Department?

- What is the SHS teachers' readiness to teach online based on

✓ Their attitude towards online teaching, and
✓ Their perceived ability in online teaching?

- Is there a significant difference in SHS teachers' readiness in online teaching when grouped according to demographic profile?

➢ *Hypothesis:*

There is a significant difference on the readiness of the teachers in online teaching when grouped according to demographic profile.

## II. METHODS

➢ *Research Design*

This study is descriptive research. Descriptive research can obtain facts about existing conditions or detach significant relationships between current phenomena. It describes and interprets prevailing condition or relationship that exists or does not exist, practices that prevail or do not prevail, beliefs or points of view or attitude that are held, processes that are going on or otherwise, effects that are being felt, or trends that are developing (Estolas & Boquiren as cited in Garcia, 2011).

A descriptive research design was used to define the respondents' demographics and their readiness for online teaching. Readiness was measured through their attitude and the ability to teach online. This study also utilized a comparative design which seeks to provide answers in determining the difference in their readiness when grouped according to demographics. The demographic factors are age, sex, academic rank, year of teaching experience, educational preparation, and department.

➢ *Sampling and Setting*

Using consecutive sampling, the researcher included all SHS teachers who total to 105 as respondents. The cohort is subdivided into six departments namely Accounting, Business and Management (ABM) and Technical-Vocational-Livelihood (TVL), English, Filipino and Physical Education, Humanities and Social Sciences (HUMSS), Mathematics, and Science. Their exposure to online teaching was limited to Aralinks and Google Classroom. Aralinks is an instructional technology integration program by the book company Phoenix Publishing House while Google Classroom is a collaboration or productivity tool. These teachers were requested to conduct online classes during the suspension of classes due to the threat of COVID-19 for one week; hence, they have limited exposure to actual online teaching. In terms of educational preparation, the teachers vary since some are teacher education graduates while some are non-Education graduates with or without units in Education. These SHS teachers attended training in using the LMS Canvas, OrangeApps and Aralinks via Zoom and were therefore versed about the content of the research instrument.

➢ *Instrument*

The Faculty Readiness to Teach Online (FRTO) designed by Martin, Budhrani, and Wang (2019) was adopted. This self-survey measures faculty members' attitude towards and their perceived ability to teach online. For both constructs, teachers rate the online teaching competency subscales course design with nine items, course communication with 10 items, time management with six items and technical with seven items. For attitude, participants have five options ranging from 1 or not important at all to 5 or very important. For ability, they choose among five options from 1 or I cannot do it at all to 5 or I can do it well. The instrument has Cronbach's alpha for all items, specifically 0.88 for attitude and 0.92 for ability. The demographic profile of the instrument was modified to be relevant in the Philippine setting excluding country, university/college, years of teaching online, the requirement of teaching online course, primary online method of teaching, and level being taught and replacing them with educational preparation (McAllister & Graham, 2016) and department. This adopted instrument was answered by all participants who have attended the LMS training and will be teaching in online mode during the school year 2020-2021.

➢ *Data Collection*

After obtaining permission to conduct the study, the researcher distributed the instrument via Google Form, an online tool, by sending the link of the same to potential participants through the social media platform Facebook. The distribution was online because of the on-going enhanced community quarantine. All data were extracted in an MS Excel spreadsheet for quality check and organization.

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➢ *Data Analysis*

Attitude, ability, and demographic factors were described using descriptive statistics (mean and standard deviation). The data with respect to age, sex, academic rank, year of teaching experience, educational preparation, and department and attitude and ability were subjected to a test of normality, specifically Kolmogorov Smirnov. The result of this initial test was the basis in testing difference, using either t-test and ANOVA depending on the grouping of variables.

To interpret the ratings, the researcher referred to the table below.

Legend: 1.00 to 1.49 = Not important at all/ I cannot do it at all; 1.50 to 2.49 = Not important/ I cannot do it; 2.50 to 3.49 = Somewhat important/ Maybe I can do it; 3.50 to 4.49 = Important/ I can do it; 4.50 to 5.00 = Very important/ I can do it well.

Table 1 Verbal Interpretation of Ratings

| RATING | VERBAL INTERPRETATION Attitude/Ability |
|---|---|
| 1.00-1.49 | Not important at all/ I cannot do it at all |
| 1.50-2.49 | Not important/I cannot do it |
| 2.50-3.49 | Somewhat important/Maybe I can do it |
| 3.50-4.49 | Important/I can do it |
| 4.50-5.00 | Very important/I can do it well |

## III. RESULT AND DISCUSSION

### A. Results

➢ *Demographic Profile*

There were fifty-seven (57) participants who responded in the invitation of answering the online self-survey on virtual teaching or 54.28% of the SHS faculty. Some participants did not answer certain items and could not be traced back; hence, percentages are based on the actual number of respondents for a specific question or item.

➢ *Age*

Table 2 shows that the majority of the respondents (61.41%) aged 20-25 years old. This is followed by 26-30 years old with 14 (24.56%) respondents. There were two (3.51%) participants aged 36-40 years old and one (1.75%) from the 46-50 age group. Two (3.51%) of them were 51 years old or above, the oldest ages among all the participants.

Table 2 Age of Respondents

| AGE | FREQUENCY |
|---|---|
| 20-25 years old | 35 (61.40%) |
| 26-30 years old | 14 (24.56%) |
| 31-35 years old | 3 (5.26%) |
| 36-40 years old | 2 (3.51%) |
| 46-50 years old | 1 (1.75%) |
| 51 or above | 2 (3.51%) |

➢ *Sex*

Table 3 displays the gender of the participants. Twenty-seven or 47.37% out of the 57 participants were male while 30 or 52.63% were female.

Table 3 Sex of Respondents

| SEX | FREQUENCY |
|---|---|
| Male | 27 (47.37%) |
| Female | 30 (52.63 %) |

➢ *Academic Rank*

Majority (49.10%) of the participants were ranked Teacher I as shown in Table 4. Five (8.80%) of the participants were Teacher II while 15 respondents (26.30%) were Teacher III. There were eight master teachers, specifically five (8.80%) Master Teacher I and three (5.30%) Master Teacher II. One (1.80%) of the respondents was a fixed termer. Ranks are based on educational attainment, years in teaching and other credentials such as seminars attended and researches.

Table 4 Academic Rank of Respondents

| ACADEMIC RANK | FREQUENCY |
|---|---|
| Teacher I | 28 (49.10%) |
| Teacher II | 5 (8.80%) |

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| | |
|---|---|
| Teacher III | 15 (26.30%) |
| Master Teacher I | 5 (8.80%) |
| Master Teacher II | 3 (5.30%) |
| Master Teacher III<br>Head Teacher I<br>Head Teacher II<br>Head Teacher III<br>Other (Fixed Termer) | 0<br>0<br>0<br>0<br>1 (1.80%) |

➢ *Years of Teaching Experience*

As shown in Table 5, 49 (86%) of the respondents have been teaching for 0 to 5 years. For those in the field for 6 to 10 and 11 to 15 years in teaching, the participants were both three or 5.30% each. This is also the same with 21 to 25 and 31 to 35 years in teaching, with one or 1.80% each.

Table 5 Respondents' years in Teaching

| YEARS IN TEACHING | FREQUENCY |
|---|---|
| 0 to 5 | 49 (86%) |
| 6 to 10 | 3 (5.30%) |
| 11 to 15 | 3 (5.30%) |
| 16 to 20 | 0 |
| 21 to 25 | 1 (1.80%) |
| 31 to 35 | 1 (1.80%) |

➢ *Educational Preparation*

Table 6 shows the educational preparation of respondents towards teaching. Most (86%) of the participants were Teacher Education graduates. Seven (12.30%) respondents were non-Education graduates but with 18 units of Education while one (1.80%) respondent was non-Education graduate without Education units earned.

Table 6 Educational Preparation of Respondents

| EDUCATIONAL | FREQUENCY PREPARATION |
|---|---|
| Education graduate | 49 (86%) |
| Non-Education graduate<br>Non-Education graduate with<br>18 units of Education | 1 (1.80%)<br>(12.30%) |

➢ *Department*

The next table shows the six departments in which each respondent belongs. There were 10 (17.50%) respondents from the English department, 11 (19.30%) respondents in from Science, nine (15.8%) respondents from Mathematics and Filipino and Physical Education respectively, 11 (19.30%) respondents from HUMSS and seven (12.3%) respondents from TVL. All departments were represented.

Table 7 Department of Respondents

| YEARS INTEACHING | FREQUENCY |
|---|---|
| English | 10 (17.50%) |
| Science | 11 (19.30%) |
| Mathematics | 9 (15.80%) |
| Filipino and<br>Physical Education | 9 (15.80%) |
| Humanities and Social<br>Sciences (HUMSS) | 11 (19.30%) |
| Accounting, Business<br>and Management (ABM)<br>and Technical-Vocational-Livelihood (TVL) | 7 (12.30%) |

Teachers' Perception on their Attitude and Ability in Online Teaching Table 8 shows the descriptive statistics and rating of each item in the competencies under course design, course communication, time management, and technical. The ratings for both attitude and ability were scored high in most items of the online survey.

➢ *Attitude*

In course design, write measurable learning objectives and design learning activities that provide students opportunities for interaction were recorded both the highest with the same mean of 4.79 and a descriptive rating of very important. These were followed by the item use different

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teaching methods in the online environment with a mean of 4.70 and a descriptive rating of very important.

In the second subscale, course communication, apply copyright law and fair use guidelines when using copyrighted materials (4.82 or very important) obtained the highest rating while communicate compliance regarding academic integrity policies and apply accessibility policies to accommodate student needs both gained 4.77.

For time management, allocate time to learn about new strategies or tools (4.77) and schedule time to design the course prior to delivery (4.70) were the items with the first and second highest ratings (very important). Under technical subscale, the competencies that were rated the highest were complete basic computer operations (4.74), and navigate within the course in the Learning Management System (4.70) which both have a descriptive rating of very important.

➢ *Ability*

In the first subscale course design, the items that ranked the highest were create online assignments (4.32) and create online quizzes and tests (4.25), both with the descriptive interpretation I can do it. The items use email to communicate with the learners (4.39 or I can do it) and send announcements/email reminders to course participants (4.33 or I can do it) rating were the top scorers in the course communication subscale. Meanwhile, in terms of time management, the item use features in Learning Management System in order to manage time (4.04 or I can do it) and allocate time to learn about new strategies or tools (4.02 or I can do it) were recorded the highest. In the last subscale, technical, complete basic computer operations (4.28 or I can do it) and navigate within the course in the Learning Management System (4.00 or I can do) were noted as highest scorers.

Descriptive statistics also revealed that of all competencies, create and edit videos (e.g., iMovie, Movie Maker, Kaltura) rated the lowest for both constructs, attitude (4.07) and ability (3.44), having an important and maybe I can do it descriptive ratings, respectively.

The overall mean of respondents' attitude on online teaching was 4.62 with very important as descriptive rating. Whereas on the perception of their ability, the mean was 4.03 with a descriptive rating of I can do it.

Table 8 Descriptive Statistics on Survey Responses by Item

| | Item | Attitude M | Descriptive Rating | Ability M | Descriptive Rating |
|---|---|---|---|---|---|
| | **Course Design** | | | | |
| 1 | Create an online course orientation (e.g., introduction, getting started) | 4.68 | Very important | 4.04 | I can do it |
| 2 | Write measurable learning objectives | 4.79 | Very important | 4.21 | I can do it |
| 3 | Design learning activities that provide students opportunities for interaction (e.g., discussion forums, wikis) | 4.79 | Very important | 3.96 | I can do it |
| 4 | Organize instructional materials into modules or units. | 4.67 | Very important | 4.04 | I can do it |
| 5 | Create instructional videos (e.g. lecture video, demonstrations, video tutorials) | 4.63 | Very important | 3.82 | I can do it |
| 6 | Use different teaching methods in the online environment (e.g. brainstorming, collaborative activities, discussions, presentations) | 4.70 | Very important | 3.96 | I can do it |
| 7 | Create online quizzes and tests | 4.65 | Very important | 4.25 | I can do it |
| 8 | Create online assignments | 4.30 | Important | 4.32 | I can do it |
| 9 | Manage grades online | 4.68 | Very important | 4.12 | I can do it |
| | **Course Communication** | | | | |
| 10 | Send announcements / email reminders to course participants | 4.68 | Very important | 4.33 | I can do it |
| 11 | Create and moderate discussion forums | 4.56 | Very important | 4.00 | I can do it |
| 12 | Use email to communicate with the learners | 4.39 | Important | 4.39 | I can do it |
| 13 | Respond to student questions promptly (e.g. 24 to 48 hours) | 4.46 | Important | 4.00 | I can do it |
| 14 | Provide feedback on assignments (e.g. 7 days from submission) | 4.46 | Important | 4.02 | I can do it |
| 15 | Use synchronous web conferencing tools (e.g. Adobe Connect, Webex, Blackboard Collaborate, Skype) | 4.63 | Very important | 4.07 | I can do it |
| 16 | Communicate expectations about student | 4.70 | Very important | 4.23 | I can do it |

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| | | | | | |
|---|---|---|---|---|---|
| | behavior (e.g. netiquette) | | | | |
| 17 | Communicate compliance regarding academic integrity policies | 4.77 | Very important | 4.23 | I can do it |
| 18 | Apply copyright law and Fair Use guidelines when using copyrighted materials | 4.82 | Very important | 4.04 | I can do it |
| 19 | Apply accessibility policies to accommodate student needs | 4.77 | Very important | 4.05 | I can do it |
| | **Time Management** | | | | |
| 20 | Schedule time to design the course prior to delivery (e.g. a semester before delivery) | 4.75 | Very important | 4.00 | I can do it |
| 21 | Schedule weekly hours to facilitate the online course | 4.70 | Very important | 3.98 | I can do it |
| 22 | Use features in Learning Management System in order to manage time (e.g. online grading, rubrics, speed grader, calendar) | 4.70 | Very important | 4.04 | I can do it |
| 23 | Use facilitation strategies to manage time spent on course (e.g. discussion board moderators, collective feedback, grading scales) | 4.63 | Very important | 3.89 | I can do it |
| 24 | Spend weekly hours to grade assignments | 4.51 | Very important | 4.00 | I can do it |
| 25 | Allocate time to learn about new strategies or tools | 4.77 | Very important | 4.02 | I can do it |
| | **Technical** | | | | |
| 26 | Complete basic computer operations (e.g. creating and editing documents, managing files and folders) | 4.74 | Very important | 4.28 | I can do it |
| 27 | Navigate within the course in the Learning Management System (e.g. Moodle, Canvas, Blackboard etc.) | 4.70 | Very important | 4.00 | I can do it |
| 28 | Use course roster in the Learning Management System to set up teams/groups | 4.58 | Very important | 3.88 | I can do it |
| 29 | Use online collaborative tools (e.g. Google Drive, Dropbox) | 4.60 | Very important | 3.96 | I can do it |
| 30 | Create and edit videos (e.g., iMovie, Movie Maker, Kaltura) | 4.07 | Important | 3.44 | Maybe I can do it |
| 31 | Share open educational resources (e.g. learning websites, web resources, games and simulations) | 4.65 | Very important | 3.86 | I can do it |
| 32 | Access online help desk/resources for assistance | 4.54 | Very important | 3.96 | I can do it |
| | **OVERALL MEAN** | **4.62** | Very important | **4.03** | I can do it |

The subscale means for attitude and ability in online teaching of the respondents are represented in Figure 1. In terms of attitude, all subscales were rated very important with time management (4.68) as highest rated. However, when it comes to ability, all subscales fall under “I can do it” with course communication (4.14) and course design (4.65) scoring higher means. For both attitude and ability, the lowest rated is technical, with 4.55 (very important) and 3.91 (I can do it), respectively.

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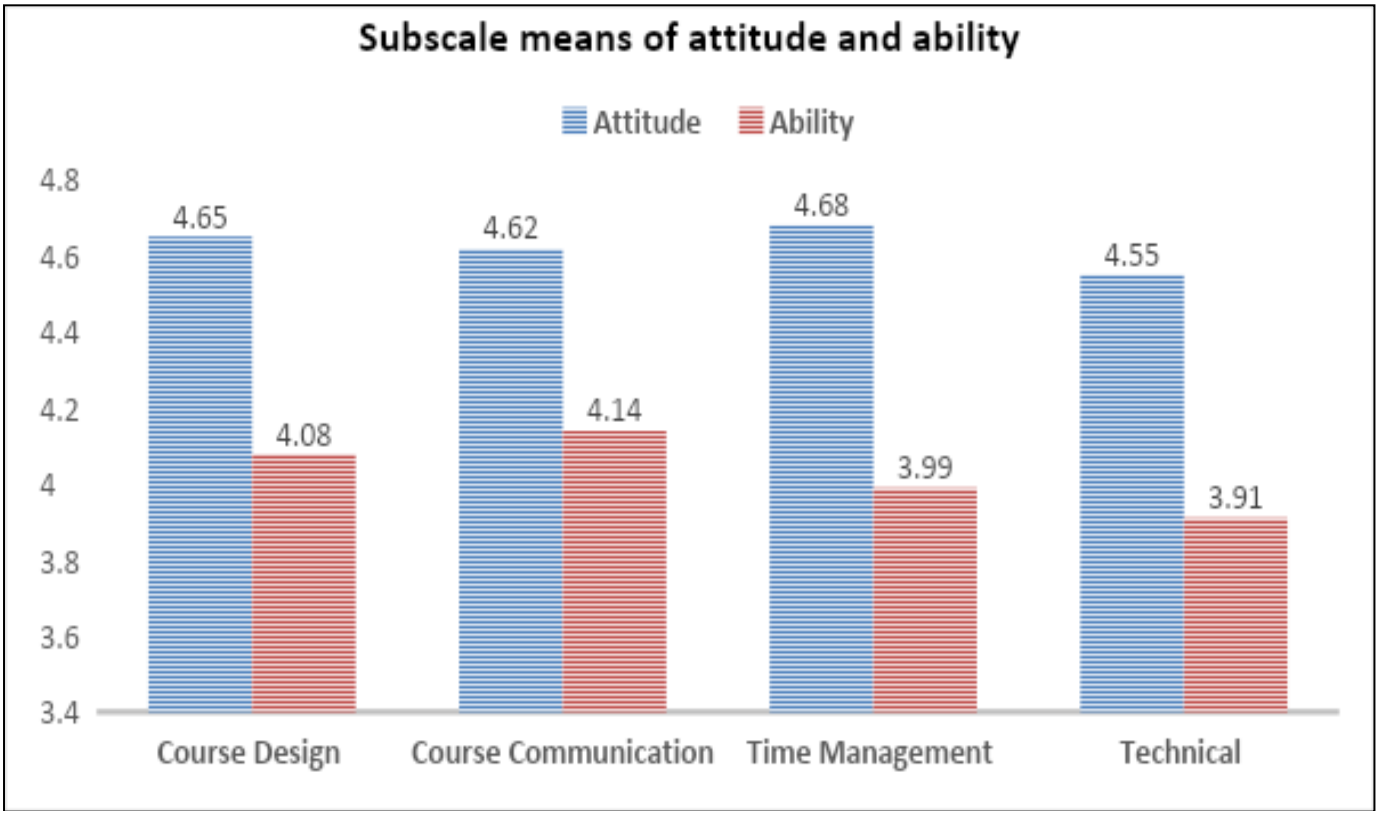


Fig 1 Subscale means of Attitude and Ability

Demographic Profile and Teachers' Perceptions of Attitude and Ability to Online Teaching Using ANOVA, the researcher identified the difference in teachers' attitude and ability with respect to age, sex, academic rank, years of teaching experience, educational preparation, and department. The descriptive statistics revealed no significant difference between gender (Sig. = .104), educational preparation (Sig. = .945), department (Sig. = .652), and academic rank (Sig. = .806) and teachers' attitude on online teaching as reported in Table 9.

Table 9 Gender, Educational Preparation, Department and Academic Rank with Attitude

| | | Sum of Squares | Df | Mean Square | F | Sig. |
|---|---|---|---|---|---|---|
| Gender | Between Groups | 8.030 | 25 | .321 | 1.611 | .104 |
| | Within Groups | 6.181 | 31 | .199 | | |
| | Total | 14.211 | 56 | | | |
| Educational Preparation | Between Groups | 7.519 | 25 | .301 | .532 | .945 |
| | Within Groups | 17.533 | 31 | .566 | | |
| | Total | 25.053 | 56 | | | |
| Department | Between Groups | 65.023 | 25 | 2.601 | .856 | .652 |
| | Within Groups | 94.240 | 31 | 3.040 | | |
| | Total | 159.263 | 56 | | | |
| Academic Rank | Between Groups | 39.973 | 24 | 1.666 | .709 | .806 |
| | Within Groups | 72.867 | 31 | 2.351 | | |
| | Total | 112.839 | 55 | | | |

As presented in Table 10, the same results were found on the perception of ability of teachers. No significant difference between gender (Sig.=.606), educational preparation (Sig.=.891), department (Sig.=.961), and academic rank (Sig.=.877) and the teachers' ability was explicitly noted.

Table 10 Gender, Educational Preparation, Department and Academic Rank with Ability

| | | Sum of Squares | Df | Mean Square | F | Sig. |
|---|---|---|---|---|---|---|
| Gender | Between Groups | 8.044 | 33 | .244 | .909 | .606 |
| | Within Groups | 6.167 | 23 | .268 | | |
| | Total | 14.211 | 56 | | | |
| Educational Preparation | Between Groups | 11.886 | 33 | .360 | .629 | .891 |
| | Within Groups | 13.167 | 23 | .572 | | |

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| | | | | | | |
|---|---|---|---|---|---|---|
| | Total | 25.053 | 56 | | | |
| Department | Between Groups | 67.541 | 33 | 2.047 | .513 | .961 |
| | Within Groups | 91.722 | 23 | 3.988 | | |
| | Total | 159.263 | 56 | | | |
| Academic Rank | Between Groups | 53.284 | 32 | 1.665 | .643 | .877 |
| | Within Groups | 59.556 | 23 | 2.589 | | |
| | Total | 112.839 | 55 | | | |

Results show in Table 11 that there is a statistically significant difference between age, (t=10.622, df=56) years in teaching (t=10.480, df=56) and attitude (t=91.73, df=56) given that the p-value (p = 0.00) is less than the set level of significance (alpha = 0.05).

T-test for age (mean=1.702) and years in teaching (mean=1.316) shows a significant result in attitude (mean=4.631).

Table 11 Age and Years in Teaching with Attitude

| One-Sample Test | | | | | | |
|---|---|---|---|---|---|---|
| | Test Value = 0 | | | | | |
| | | | | | 95% Confidence Interval of the Difference | |
| | t | df | Sig. (2-tailed) | Mean Difference | Lower | Upper |
| Age | 10.622 | 56 | .000 | 1.702 | 1.38 | 2.02 |
| Years in Teaching | 10.480 | 56 | .000 | 1.316 | 1.06 | 1.57 |
| Attitude | 91.733 | 56 | .000 | 4.631 | 4.53 | 4.73 |

The findings of attitude of teachers are in agreement with their ability as shown in Table 12. T-test for age (mean=1.702) and Years in teaching (mean=1.316) shows a significant result in attitude (mean=4.046).

Table 12 Age and Years in Teaching with Ability

| One-Sample Test | | | | | | |
|---|---|---|---|---|---|---|
| | Test Value = 0 | | | | | |
| | | | | | 95% Confidence Interval of the Difference | |
| | t | df | Sig. (2-tailed) | Mean Difference | Lower | Upper |
| Age | 10.622 | 56 | .000 | 1.702 | 1.38 | 2.02 |
| Years in Teaching | 10.480 | 56 | .000 | 1.316 | 1.06 | 1.57 |
| Ability | 70.261 | 56 | .000 | 4.046 | 3.93 | 4.16 |

*B. Discussion*

In terms of profile, all groups are well represented in terms of age, sex, and department. However, some ranks are not represented because no teachers have them. In terms of years in teaching, most are new in the profession and teacher education graduate. Therefore, majority possess the teacher education training and exposure to current educational technology, specifically online teaching and learning.

The ratings for both attitude and ability were scored high in most items of the online survey. This result is similar to the previous study of Martin, Budhrani, and Wang (2019) in which most of the competencies or items were also rated high. For both attitude and ability, the lowest rated is technical. The findings contradict those of Rhode et al., (2017) which revealed high technical ability among college instructors. In addition, teachers new to online teaching may need support in technical aspects (Downing & Dyment, 2013). They therefore need training centered on technical aspects because such build up facilitation and are associated with learning outcomes (Keramati at al., 2011).

While all the respondents consider all subscales very important, they think they can do them. Specifically, technical subscale received the lowest ratings for both constructs, which Espiritu (2016) and Martin, Budhrani and Wang (2019) confirmed and considered challenging or pressure inducing among teachers.

Overall, the respondents of this study rated their attitude higher than their perceived ability just like in the study of Hung and Jeng (2013) among doctoral students. In Martin, Budhrani, and Wang (2019), college instructors rated their attitude higher than their ability in course design, course communication, and technical but not in time management.

Results indicate the right attitude of the respondents or their readiness to teach online and their possession of most of the necessary skills rated “I can do it”. In Downing and Dyment (2013), the findings are opposite, telling that teachers may feel the lack of readiness to teach online.

A significant difference exists between teachers’ ages and years in teaching and their attitude and their ability to do online teaching. Martin, Budhrani, and Wang (2019) recorded unparalleled findings; they specified that years in teaching online showed no statistically significant relations to attitude. However, there were no significant differences found in teachers’ attitude and ability with respect to sex,

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academic rank, educational preparation, and department. This result suggests that sex, academic rank, educational preparation, and department do not affect the perceptions of attitude and ability of teachers towards online teaching.

In Martin, Budhrani, and Wang (2019), the results also imply a significant difference between teachers' years of teaching experience and perceived ability to teach online. In contrast, McAllister and Graham (2016) learned that teacher education institutions do not have resources to prepare pre-service teachers for online teaching. In the present study, the pre-service Education program must have prepared teachers, especially the recent graduates, for teaching online.

## IV. CONCLUSION

Most of the respondents are 20 to 25 years old which aligns with the 0 to 5 years in teaching. Since more than half (61.40%) were in their beginning teacher stage, most of them were ranked Teacher I. In terms of gender, there are more female than male participants. In terms of educational preparation, the majority were Education graduates and belonged to the six different departments.

The teachers rated their attitude higher than their perception of ability in all subscales. Because participants consider the competencies in the subscales very important, they are likely to want to learn them better and eventually do them well. While the training on LMS they attended allowed them to practice the competencies more, the actual teaching would enable them to enrich the skills.

There was no significant difference between gender, educational preparation, department, and academic rank and teachers' attitude on the importance of competencies and perception of their ability in online teaching. However, age and years in teaching showed a significant difference in attitude and in ability.

The perception of attitude and ability of teachers to online teaching imply their knowledge and skills. Although attitude is higher than ability, the SHS faculty of HAU are ready to teach online. Studies on competencies in online teaching are imperative as they provide baseline data on how schools may plan training, give support, and empower their teachers to teach online.

## RECOMMENDATIONS

HAU should design periodic seminar-workshops on the subscales, especially those which the faculty deem very important, but they cannot do very well. The training may also be on the basic and advanced uses of LMS, and the use of other productivity tools and available digital resources. Subject area or strand coordinators who supervise and coordinate with teachers in their preparation for online teaching may continue monitoring them to be more effective and efficient in the new ways of teaching and learning. A committee composed of more able colleagues who are open to feedback and queries may be also formed to help faculty members in their needs.

Future researchers could investigate additional subscales and competencies not included in the instrument used in this study. Further, they could also involve teachers in elementary, junior high school, college and graduate levels and include demographics such as educational attainment.

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## REFERENCES

[1]. Badia, A., Garcia, C., & Meneses, J. (2017). Approaches to Teaching Online: Exploring Factors Influencing Teachers in a Fully Online University. British Journal of Educational Technology, 48(6), 1193–1207.
[2]. Commission on Higher Education. (2016). CHED memorandum order 62, series of 2016.
[3]. Downing, J. J., & Dyment, J. E. (2013). Teacher educators' readiness, preparation, and perceptions of preparing preservice teachers in a fully online environment: An exploratory study. The Teacher Educator, 48(2), 96–109
[4]. Garcia, A. M. (2011). Research: Simplified guide to thesis writing. Philippines: Booklore.
[5]. Hatlevik, O. E. (2017). Examining the relationship between teachers' self-efficacy, their digital competence, strategies to evaluate information, and use of ICT at school. Scandinavian Journal of Educational Research, 61(5), 555–567. https://doi.org/10.1080/00313831.2016.1172501.
[6]. Heitner, K., & Jennings, M. (2016). Culturally responsive teaching knowledge and practices of online faculty. Online Learning, 20(4), 54-78.
[7]. Hung, W.C., & Jeng, I. (2013). Factors influencing future educational technologists' intentions to participate in online teaching. British Journal of Educational Technology, 44(2), 255–272.
[8]. Keramati, A., Afshari-Mofrad, M., & Kamrani, A. (2011). The role of readiness factors in Elearning outcomes: An empirical study. Computers & Education, 57(3), 1919–1929.
[9]. Martin, F., Budhrani, K., & Wang, C. (2019). Examining faculty perception of their readiness to teach online. Online Learning, 23(3), p97-119.
[10]. Martin, F., Wang, C., Jokiaho, A., May, B., and Grübmeyer, S. (2019). Examining faculty readiness to teach online: A comparison of US and German educators. European Journal of Open, Distance and E-Learning, 22(1), p53-69.
[11]. McAllister, L., & Graham, C. (2016). An analysis of the curriculum requirements for K-12 online teaching endorsements. U.S. Journal of Online Learning Research, 2(3), p247-282.

ISSN No:-2456-2165 https://doi.org/10.38124/ijisrt/25jun1376

[12]. Rappel, L. (2017). Self- Direction in On-Line Language Learning. Online Submission.
[13]. Rhode, J., Richter, S., & Miller, T. (2017). Designing personalized online teaching professional development through self-Assessment. TechTrends: Linking Research and Practice to Improve Learning, 61(5), 444–451.