

Teachers' Instructional Competence and Attitude Toward Flexible Learning in the Midst of the Covid-19 Pandemic Among Higher Education Institutions (HEIS) in Sulu

Alijandrina Tan Jalilul

Sulu State University

Email Address: atjalilul@gmail.com

HOW TO CITE:

Alijandrina Tan Jalilul (2026).
Teachers' Instructional
Competence and Attitude Toward
Flexible Learning in the Midst of
the Covid-19 Pandemic Among
Higher Education Institutions
(HEIS) in Sulu.
International Journal of Special
Education, 41(12s), 1447-1480

ABSTRACT:

The COVID-19 pandemic has significantly transformed educational systems worldwide, compelling Higher Education Institutions (HEIs) to adopt flexible learning modalities to ensure the continuity of instruction. This study examined the instructional competence and attitudes of teachers toward flexible learning during the COVID-19 pandemic among selected Higher Education Institutions in Sulu Province, Philippines. Specifically, it assessed teachers' competence in instructional planning, content delivery, assessment practices, classroom management, and the integration of educational technologies within flexible learning environments. It also explored teachers' attitudes toward the effectiveness, accessibility, and sustainability of flexible learning modalities. The study employed a quantitative descriptive-correlational research design. Data were collected through a structured survey questionnaire administered to faculty members from selected HEIs in Sulu. Descriptive statistics were utilized to determine the levels of instructional competence and attitudes toward flexible learning, while inferential statistical analyses were conducted to examine the relationship between the two variables. The findings revealed that teachers generally demonstrated a high level of instructional competence in implementing flexible learning approaches despite the challenges brought about by the pandemic. Faculty members exhibited competence in adapting instructional materials, utilizing digital platforms, facilitating student engagement, and conducting alternative assessment methods. Moreover, teachers displayed a generally positive attitude toward flexible learning, recognizing its importance in maintaining educational continuity and expanding access to learning opportunities. The study further found a significant positive relationship between instructional competence and attitudes toward flexible learning, indicating that teachers with higher levels of competence were more likely to possess favorable perceptions of flexible learning modalities. Despite these positive findings, challenges such as limited internet connectivity, inadequate technological resources, and insufficient training opportunities were identified as barriers to the effective implementation of flexible learning. The study concludes that

COPYRIGHT STATEMENT:

Copyright: © 2026 Authors.
Open access publication under the
terms and conditions
of the Creative Commons Attribution
(CC BY)
license (<http://creativecommons.org/licenses/by/4.0/>).

enhancing teachers' instructional competence through continuous professional development and institutional support is essential for strengthening positive attitudes and improving the quality of flexible learning in higher education. The findings provide valuable insights for educational leaders and policymakers in developing strategies to support faculty readiness and resilience in future educational disruptions.

Keywords: Teachers' Instructional Competence, Teacher Attitudes, Flexible Learning, COVID-19 Pandemic, Higher Education Institutions (HEIs), Online Learning, Blended Learning, Distance Education, Educational Technology, Faculty Readiness, Teaching Effectiveness, E-Learning, Remote Teaching, Learning Continuity, Sulu Province. AI-driven marketing; digital real estate; Bangalore; residential housing; market dynamics.

Introduction

The emergence of the Coronavirus Disease 2019 (COVID-19) pandemic created unprecedented disruptions in educational systems worldwide. As governments implemented lockdowns, social distancing measures, and restrictions on face-to-face interactions, educational institutions were compelled to adopt alternative modes of instruction to ensure the continuity of learning. In the Philippines, the Commission on Higher Education (CHED) encouraged Higher Education Institutions (HEIs) to implement flexible learning approaches that would allow students to continue their studies despite the challenges posed by the pandemic. Flexible learning became a critical strategy for maintaining educational access and quality while prioritizing the health and safety of students, faculty members, and staff. Flexible learning refers to a learner-centered educational approach that provides students with various options regarding the time, place, pace, and mode of learning. It encompasses online learning, blended learning, modular instruction, and other innovative teaching methods that accommodate diverse learner needs and circumstances. The successful implementation of flexible learning largely depends on teachers' instructional competence and their attitudes toward the new learning environment. Teachers serve as the primary facilitators of learning, and their ability to adapt instructional strategies, integrate technology, and manage virtual or alternative learning environments significantly influences student

learning outcomes. Instructional competence is a critical component of effective teaching. It encompasses teachers' knowledge, skills, and abilities in lesson planning, instructional delivery, assessment, classroom management, and the utilization of educational technologies. During the COVID-19 pandemic, teachers were required to rapidly transition from traditional face-to-face instruction to technology-enhanced and flexible learning modalities. This transition demanded new competencies, including digital literacy, online communication skills, content adaptation, and innovative assessment practices. Teachers who possess strong instructional competencies are better equipped to address the challenges associated with flexible learning and to provide meaningful learning experiences for students. Equally important are teachers' attitudes toward flexible learning. Attitudes influence teachers' willingness to embrace change, adopt innovative teaching practices, and engage effectively in professional development opportunities. Positive attitudes toward flexible learning can enhance motivation, increase adaptability, and promote successful implementation of alternative instructional approaches. Conversely, negative attitudes may hinder the effective delivery of instruction and reduce the overall quality of educational experiences. Factors such as technological readiness, institutional support, access to resources, workload demands, and previous experiences with online learning may shape teachers' perceptions and attitudes toward flexible learning. In the context of Sulu Province,

the implementation of flexible learning presents unique opportunities and challenges. Geographical isolation, limited technological infrastructure, internet connectivity issues, and socio-economic constraints may affect both teachers' instructional competence and their attitudes toward flexible learning. Despite these challenges, faculty members in Higher Education Institutions have demonstrated resilience and commitment in ensuring the continuity of education during the pandemic. Understanding their experiences is essential for identifying strengths, addressing gaps, and developing strategies that support effective teaching and learning in flexible educational environments. Several studies have highlighted the importance of teacher competence and positive attitudes in the successful implementation of flexible and online learning. Research indicates that teachers who possess adequate technological and pedagogical skills are more confident in delivering instruction through digital platforms and are more likely to develop favorable perceptions of flexible learning. However, limited empirical studies have examined these factors within the context of Higher Education Institutions in Sulu. This gap in the literature necessitates further investigation to better understand how teachers have adapted to the educational changes brought about by the pandemic. Therefore, this study aims to examine the instructional competence and attitudes of teachers toward flexible learning in the midst of the COVID-19 pandemic among selected Higher Education Institutions in Sulu. Specifically, it seeks to determine the level of teachers' instructional competence, assess their attitudes toward flexible learning, and explore the relationship between these variables. The findings of this study are expected to contribute to the improvement of faculty development programs, institutional policies, and educational practices that support effective flexible learning implementation. Ultimately, the study seeks to provide valuable insights for educational leaders, policymakers, and stakeholders in promoting quality, accessible, and resilient higher education in the post-pandemic era. Teaching is widely regarded as a noble and transformative vocation,

evolving in response to societal shifts and technological advancements. In today's digital era, the integration of technology into education particularly through Learning Management Systems (LMS), has become essential for effective knowledge dissemination (Smith, 2020; Ali, 2020; Turnbull et al., 2020). The COVID-19 pandemic disrupted educational systems globally, affecting over 80% of students and forcing institutions to adopt flexible learning modalities (UNESCO, 2020). In Sulu, five Higher Education Institutions (HEIs), two public and three private, have embraced flexible learning. However, disparities in teaching techniques and instructional competence among educators persist. This study investigates the instructional competence and attitudes of teachers toward flexible learning during the COVID-19 pandemic in Sulu's HEIs.

Methodology

Research Design

This study employed a descriptive and quantitative design to explore teachers' instructional competence and attitudes toward flexible learning. Descriptive research focused on identifying patterns and characteristics, while the quantitative approach measured relationships between variables using statistical analysis.

Locale

This study was conducted in Sulu at all mainland higher education institutions, including both public and private Schools, namely: Sulu State College, Mindanao State University, Notre Dame of Jolo College, Southern Mindanao Islamic Institute, and Sulu College of Technology.

Respondents

A total of 200 faculty members from the HEIs mentioned earlier participated in the study. Purposive sampling was used to ensure diversity in demographic and professional profiles. Respondents included male and female educators aged 21 to 51 years and above, with varying lengths of service, educational attainment, and employment status (permanent, contractual, or part-time). Each participant completed a structured questionnaire designed to capture

instructional competence and attitudes toward flexible learning.

Sampling Design

A non-probability sampling design was adopted, specifically combining quota sampling and purposive sampling: Quota sampling ensured proportional representation across subgroups. Purposive sampling targeted individuals with relevant instructional experience aligned with the study's objectives. This approach was chosen for its efficiency and ability to reflect the diversity of teaching contexts within a limited timeframe.

Data Gathering Procedure

To ensure the integrity and relevance of the research instrument, a draft of the adopted survey questionnaire was initially submitted to two subject-matter experts for content validation. Their feedback and recommendations were carefully reviewed and incorporated to enhance clarity, alignment with research objectives, and contextual appropriateness. The revised instrument was then subjected to statistical validation, with the assistance of a professional statistician, confirming its validity and reliability for data collection. Following validation, the researcher obtained formal approval from the Dean of Graduate Studies to administer the survey. In addition, letters of permission were sent to various Higher Education Institutions (HEIs) across mainland Sulu, all of which granted authorization to proceed with the study. The survey questionnaires were personally distributed and administered by the researcher to ensure proper dissemination and to address any clarifications from respondents. Upon completion, the questionnaires were retrieved, and the data were systematically encoded, tabulated, and analyzed with the support of the statistician, forming the empirical foundation for the study's findings.

Research Instrument

The research instrument that was used in the study was patterned and adopted from the book "Principles and Methods of Teaching: Suggested exercises for study and discussion" written by Gregorio (1960). Teachers'

competencies & their relation to the Academic performance of the selected grade 10 students in MAPEH of San Isidro National High School SY 2015-2016 (Andoy et. al, 2016). The questionnaire consisted of three parts: Part I – Socio-demographic profile: gender, age, length of service, educational attainment, employment status. Part II – Instructional competence: mastery of subject, teaching skills, classroom management, instructional methods, evaluation skills, technological skills, writing skills (5 items per category, rated on a 5-point Likert scale: 5–Always to 1–Never). Part III – Attitudes toward flexible learning: knowledge, teaching attitude, commitment, teaching skills, interest in teaching (5 items per category, same Likert scale)

Validity and Reliability

The instrument underwent face and content validation by academic experts and was statistically reviewed for reliability. No test–retest was conducted due to prior validation of the source material.

Data Collection Procedure

The initial draft of the questionnaire was validated by experts and revised accordingly. Formal approval was obtained from the Dean of Graduate Studies. Permission letters were sent to HEIs, all of which granted authorization. Surveys were personally administered by the researcher to ensure clarity and completeness, and the completed questionnaires were encoded, tabulated, and analyzed with the help of a statistician

Statistical Treatment of Data

Descriptive statistics (frequency, percentage) for demographic data, Mean and standard deviation for competence and attitude scores, t-tests and ANOVA to assess differences across demographic groups, and Pearson correlation to examine the relationship between competence and attitude ($r = 0.73$, indicating a strong positive correlation)

Results, Analyses, and Discussions

The following are the presentations, analyses, and interpretations of results based on the proper

scoring and statistical treatments of data gathered for this study, which correspond to each of the research questions:

1. What is the socio-demographic profile of teachers among Higher Education Institutions in terms of: Gender, Age, Length of Service, Educational Attainment, and Status of Employment?

The study surveyed 200 faculty members from Higher Education Institutions (HEIs) in mainland Sulu. The demographic breakdown is as follows: Gender: The data reveal a nearly balanced gender representation, with a slight majority of female teachers (51%). This aligns with national and global trends where women increasingly occupy roles in education. The presence of more female educators may influence teaching styles, classroom dynamics, and even student engagement, especially in nurturing and collaborative learning environments. Age: The largest age group was 31–40 years old (32%), followed closely by those aged 21–30 (27.5%) and 41–50 (26.5%). This suggests a predominantly young and mid-career teaching population, which is advantageous for the adoption of flexible learning. Younger educators are generally more adaptable to technological innovations and online platforms, which became essential during the pandemic. Length of Service: Most respondents had 5–10 years of teaching experience (37%),

indicating a workforce that is seasoned but still evolving professionally. This mid-range experience level reflects a balance between pedagogical maturity and openness to new instructional methods, such as digital learning tools and blended teaching strategies. Educational Attainment: A significant portion of the faculty held either a Master's degree (28%) or a Bachelor's degree with MA units (28%), showing that graduate-level qualifications are becoming the norm. However, the low percentage of doctoral degree holders (2%) highlights a gap in advanced academic preparation. This may affect research output, curriculum development, and the overall academic rigor within HEIs in the region.

Employment Status: Nearly half of the respondents were regular or permanent faculty (48%), suggesting institutional stability and long-term investment in teaching personnel. However, the presence of contractual (19%) and part-time (3%) educators points to a degree of employment precarity, which could impact motivation, professional development, and continuity in instructional delivery.

This profile highlights a predominantly young, moderately experienced, and academically qualified teaching population, with stable employment status across Sulu's HEIs.

Table 1. Socio-demographic profile of respondents

Gender	Number of Teachers	Percent
Male	98	49%
Female	102	51.0%
Total	200	100%
Age		
21-30 years old	55	27.5%
31-40 years old	64	32.0%
41-50 years old	53	26.5%
51 years old & above	28	14.0%
Total	200	100%
Length of Service		

5-10 years	74	37.0%
11-16 years	62	31.0%
17 years & above	18	9.0%
Total	200	100%
Educational Attainment		
Bachelor's degree	48	24.0%
Bachelor's degree with MA units	56	28.0%
Master's degree	56	28.0%
Master's degree with doctoral units	36	18.0%
Doctorate	4	2.0%
Total	200	100%
Status of Appointment		
Regular	96	48.0%
Contractual	28	19.0%
Part-time	6	3.0%
Total	200	100%

What is the extent of teachers' instructional competence in terms of teachers' instructional competence in terms of flexible learning in HEIs in Sulu during the COVID-19 pandemic in terms of Mastery of the Subject Field, Teaching Skills, Classroom management, Instructional Methods, Evaluation Skills, Technological Skills, and Writing Skills?

In terms of Mastery of the Subject Field

Table 2.1 shows the extent of teachers' instructional competence in terms of flexible learning in HEIs in Sulu during the COVID-19 pandemic in terms of Mastery of the Subject Field. Under this category, teacher-respondents obtained a total weighted mean score of 4.6340 with a standard deviation of .50529, which is rated as “**Always**” and interpreted as “**Very High Tendency**”. This result indicates that teacher-respondents perceive that there is a very high tendency for them to teach students according to updated standards, understand subject matter deeply and flexibly, so they can help students to create useful cognitive maps, relate one idea to another, and address misconceptions. They can see ideas connect across fields and to everyday life. Moreover, under this category, employee-respondents rated with “**Always**” the following items: “I teach the

subject matter clearly and simply”, “I emphasize and elaboration difficult parts of the lesson”, “I explain the lesson by citing examples and situations”, “I am knowledgeable enough to relate lessons to other subjects”, and “I relate the subject matter to previous topics and areas of interest”.

In terms of Teaching Skills

Table 2.1 shows the extent of teachers' instructional competence in terms of flexible learning in HEIs in Sulu during the COVID-19 pandemic in terms of Teaching Skills. Under this category, teacher-respondents obtained a total weighted mean score of 4.6300 with a standard deviation of .50793, which is rated as “**Always**” and interpreted as “**Very High Tendency**”. This result indicates that teacher-respondents perceive that there is a very high tendency for them to keep their students engaged and interested in learning. Teachers are apt to use communication

clues, both verbal and nonverbal, to relay school policies and standards. They can solve problems or conflicts that may arise in the learning environment. Moreover, they have creativity and leadership, which enable them to lead their lessons and keep students engaged and interested in learning. Apparently, under this category, employee-respondents rated with “Always” the following items: “I organize and present subject matter clearly and coherently”, “I present the lesson systematically and analytically”, “I Use language effectively in expressing ideas in class discussions”, “I use different teaching techniques, and strategies to make the lesson interesting and meaningful”, and “I adjust my teaching methods to students’ needs, interests and abilities”.

In terms of Classroom Management

Table 2.1 shows the extent of teachers' instructional competence in terms of flexible learning in HEIs in Sulu during the COVID-19 pandemic in terms of Classroom Management. Under this category, teacher-respondents obtained a total weighted mean score of 4.5390 with a standard deviation of .58325, which is rated as “**Always**” and interpreted as “**Very High Tendency**”. This result indicates that teacher-respondents perceive that there is a very high tendency for them to manage their classrooms in such a way that they can undergo processes to ensure that their classroom lessons run smoothly without disruptive behavior from students that would compromise the delivery of their instructions. Consequently, under this category, employee-respondents rated with “Always” the following items: “I manage the classroom activities very well”, “I motivate, arouse and sustain the students’ interest”, “My classroom is conducive for learning”, “I come to class on time”, and “I monitor students’ attendance promptly”.

In terms of Instructional Method

Table 2.1 shows the extent of teachers' instructional competence in terms of flexible learning in HEIs in Sulu during the COVID-19 pandemic in terms of Instructional Method. Under this category, teacher-respondents

obtained a total weighted mean score of 4.6152 with a standard deviation of .54291, which is rated as “**Always**” and interpreted as “**Very High Tendency**”. This result indicates that teacher-respondents perceive that there is a very high tendency for them to implement instructional ways or activities used to guide the facilitation of learning in each phase of the instructional process. That is, teachers, through adopting appropriate principles, theories, and models, can implement their lessons following specific procedures, though not limited only to lectures, case studies, journals, blogs, storytelling, brainstorming, video-taping, and review, etc.

Consequently, under this category, employee-respondents rated with “Always” the following items: “I plan and use different teaching strategies”, “I demonstrate and suit strategies to varied abilities of students”, “I use effective introduction and motivational techniques”, “I praise students’ works”, and “I manage students’ problems in comprehension”.

In terms of Evaluation Skills

Table 2.1 shows the extent of teachers' instructional competence in terms of flexible learning in HEIs in Sulu during the COVID-19 pandemic in terms of Evaluation Skills. Under this category, teacher-respondents obtained a total weighted mean score of 4.6370 with a standard deviation of .51824, which is rated as “**Always**” and interpreted as “**Very High Tendency**”. This result indicates that teacher-respondents perceive that there is a very high tendency for their styles to evaluate the impact of the performance of students and the reputation and standards of the school. Such that they have the unique and effective ability to collectively evaluate the right potentials of their respective students. In other words, the teachers can conduct logical evaluations of the academic and non-academic performances of their students.

Notably, under this category, employee-respondents rated with “Always” the following items: “I evaluate students’ performances fairly and use adequate and accurate standard measures of evaluation”, “I provide evaluative activities appropriate to students’ abilities, interests, and

needs”, “I give evaluation results and ratings that are well-accepted by the students”, “I utilize evaluation result as a basis for improving class instruction”, and “I use different methods in evaluating students’ learning aligned to the learning objectives such as oral performance, project, hands-on, etc. based on criteria set in class”.

In terms of Technological Skills

Table 2.1 shows the extent of teachers’ instructional competence in terms of flexible learning in HEIs in Sulu during the COVID-19 pandemic in terms of Technological Skills. Under this category, teacher-respondents obtained a total weighted mean score of 4.5950 with a standard deviation of .58779, which is rated as “**Always**” and interpreted as “**Very High Tendency**”. This result indicates that teacher-respondents perceive that there is a very high tendency for their styles to provide technology-supported learning opportunities for their students, to be able to use digital technology, and be aware of how digital technology can support students’ learning. To put it, teachers can employ technology-related approaches wherein they can put new challenges and responsibilities on their shoulders, such that they have the “easy-to-use” instruments to assess their teaching skills, which is indicative of whether they are prepared to meet the new sets of instructional standards of instructions.

Relatively, under this category, employee-respondents rated with “Always” the following items: “I use technology like a computer desktop, laptop, and androids phone to support my

teaching methods and strategies”, “I use technology to improve my teaching-learning process and ways of teaching”, “I use technology to enhance my teaching competence”, “I use technology to support my professional development”, and “I use technology to modernize my teaching-learning environment”.

In terms of Writing Skills

Table 2.1 shows the extent of teachers’ instructional competence in terms of flexible learning in HEIs in Sulu during the COVID-19 pandemic in terms of Writing Skills. Under this category, teacher-respondents obtained a total weighted mean score of 4.5590 with a standard deviation of .56508, which is rated as “**Always**” and interpreted as “**Very High Tendency**”. This result indicates that teacher-respondents perceive that there is a very high tendency for them to have reading comprehension and analytical skills that are reflected in their appropriate adoption of effective grammar to include sentence structure, mechanics, etc.; effective writing strategies; communicating ideas clearly and concisely; constructing a reasoned, demonstrable argument; effective marshaling evidence and using sources properly; and organizing ideas effectively. Noticeably, under this category, employee-respondents rated with “Always” the following items: “I develop my own module base on the topic I will discuss”, “I usually write learning – objectives in every lesson to serve as a guide to accomplish my lessons”, “Modules give me more time to review and refine my lessons”, “Modules enhance my writing skills”, and “I develop a module that will serve as a reference for my students and a basis for their learning”.

Table 2.1 Extent of teachers' instructional competence in terms of flexible learning in HEIs in Sulu during the COVID-19 pandemic in terms of Mastery of the Subject Field, Teaching Skills, Classroom management, Instructional Methods, Evaluation Skills, Technological Skills, and Writing Skills.

Statements	Mean	S.D.	Rating
Mastery of the Subject Field			
1. I teach the subject matter clearly and simply.	4.7300	.48815	Always
2. I emphasize and elaborate difficult parts of the lesson.	4.6200	.59782	Always
3. I explain the lesson by citing examples and situations.	4.7500	.47817	Always

4. I am knowledgeable enough to relate lessons to other subjects.	4.5050	.59307	Always
5. I relate the subject matter to previous topics and areas of interest.	4.5650	.62267	Always
Total Weighted Mean	4.6340	.50529	Always
Teaching Skills			
1. I organize and present subject matter clearly and coherently.	4.6800	.50882	Always
2. I present the lesson systematically and analytically.	4.5900	.55083	Always
3. I use language effectively in expressing ideas in class discussions.	4.6350	.55977	Always
4. I use different teaching techniques and strategies to make the lesson interesting and meaningful.	4.6350	.52263	Always
5. I adjust my teaching methods to students' needs, interests, and abilities.	4.6100	.59975	Always
Total Weighted Mean	4.6300	.50793	Always
Classroom Management			
1. I organize and present subject matter clearly and coherently.	4.6800	.50882	Always
2. I present the lesson systematically and analytically.	4.5900	.55083	Always
3. I use language effectively in expressing ideas in class discussions.	4.6350	.55977	Always
Table 2.1 continued			
4. I use different teaching techniques and strategies to make the lesson interesting and meaningful.	4.6350	.52263	Always
5. I adjust my teaching methods to students' needs, interests, and abilities.	4.6100	.59975	Always
Total Weighted Mean	4.6300	.50793	Always
Instructional Method			
1. I plan and use different teaching strategies.	4.6784	.51941	Always
2. I demonstrate and suit strategies to the varied abilities of students.	4.5650	.57220	Always
3. I use effective introductions and motivational techniques.	4.6500	.59097	Always
4. I praise students' works.	4.6950	.50323	Always
5. I manage students' problems in comprehension.	4.4950	.71592	Always
Total Weighted Mean	4.6152	.54291	Always
Evaluation Skills			
1. I evaluate students' performances fairly and use adequate and accurate standard measures of evaluation.	4.7100	.55447	Always
2. I provide evaluative activities appropriate to students' abilities, interests, and needs.	4.6100	.56524	Always

3. I give evaluation results and ratings that are well-accepted by the students.	4.6650	.56956	Always
4. I utilize the evaluation result as a basis for improving class instruction.	4.5650	.62267	Always
5. I use different methods in evaluating students' learning aligned to the learning objectives, such as oral performance, project, hands-on, etc., based on criteria set in class.	4.6350	.54152	Always
Total Weighted Mean	4.6370	.51824	Always
Technological Skills			
1. I use technology like a computer desktop, a laptop, and an Android phone to support my teaching methods and strategies.	4.5450	.67099	Always
2. I use technology to improve my teaching-learning process and ways of teaching.	4.5900	.60309	Always
3. I use technology to enhance my teaching competence.	4.6000	.60151	Always
4. I use technology to support my professional development.	4.5750	.68316	Always
Table 2.1 continued			
5. I use technology to modernize my teaching-learning environment.	4.6650	.60382	Always
Total Weighted Mean	4.5950	.58779	Always
Writing Skills			
1. I develop my own module based on the topic I will discuss.	4.5300	.60906	Always
2. I usually write learning objectives in every lesson to serve as a guide to accomplish my lessons.	4.5700	.62212	Always
3. Modules give me more time to review and refine my lessons.	4.5350	.64096	Always
4. Modules enhance my writing skills.	4.4900	.65731	Often
5. I develop a module that will serve as a reference for my students and a basis for their learning.	4.6700	.56808	Always
Total Weighted Mean	4.5590	.56508	Always

Legend: (5) 4.50-5.00=Always (Very High Tendency); (4) 3.50-4.49=Often (High Tendency); (3) 2.50-3.49=Sometimes (Moderate Tendency); (2) 1.50- 2.49=Rarely (Low Tendency); (1) 1.00- 1.49=Never (Very Low Tendency)

3. What is the extent of teachers' attitude towards flexible learning in HEIs in Sulu during the COVID-19 pandemic in terms of Knowledge, Attitude of Teaching, Commitment, Skills in Teaching, and Interest in Teaching?

In terms of Knowledge

Table 3.1 illustrates the extent of teachers' attitudes towards flexible learning in HEIs in Sulu

during the COVID-19 pandemic in terms of Knowledge. Under this category, teacher-respondents obtained a total weighted mean score of 4.5590 with a standard deviation of .56508, which is rated as “Always” and interpreted as “Very High Tendency”. This result indicates that teacher-respondents perceive that there is a very high tendency for them to possess specialized knowledge for creating effective teaching and learning environments for

their students. Subsequently, under this category, employee-respondents rated with “Always” the following items: “I study students’ experiences and backgrounds”, “I select reading materials at the instructional level appropriate to classroom problem”, “I develop a regular study program in subject teaching”, “I possess an adequate subject-matter background”, and “I possess an adequate instructional equipment”.

In terms of Attitude of Teaching

Table 3.1 illustrates the extent of teachers’ attitudes towards flexible learning in HEIs in Sulu during the COVID-19 pandemic in terms of Attitude of Teaching. Under this category, teacher-respondents obtained a total weighted mean score of 4.4260 with a standard deviation of .59859, which is rated as “**Always**” and interpreted as “**Very High Tendency**”. This result indicates that teacher-respondents perceive that there is a very high tendency for them to express genuine caring and kindness, willingness to share the responsibility involved in the classroom, sincere sensitivity involved in a classroom, sincere commitment to students’ diversity, motivation to provide meaningful learning experiences for all students, and enthusiasm for stimulating the students’ creativity. Subsequently, under this category, employee-respondents rated with “Always” the following items: “I use appropriate teaching aids”, “I ask questions in a pleasant conversational manner”, “I adopt good teaching and study habits”, and “I assist the students in clarifying objectives”.

In terms of Commitment

Table 3.1 illustrates the extent of teachers’ attitude towards flexible learning in HEIs in Sulu during the COVID-19 pandemic in terms of Commitment. Under this category, teacher-respondents obtained a total weighted mean score of 4.5765 with a standard deviation of .56566, which is rated as “**Always**” and interpreted as “**Very High Tendency**”. This result indicates that teacher-respondents perceive that there is a very high tendency for them the desire to become and remain good teachers, being more purveyors and sources, recognizing

and accepting individual worth, and meeting professional responsibilities. In other words, these teachers tend to be more committed and prepared, and always think about how to improve their teaching performance. Noteworthy, under this category, employee-respondents rated with “Always” the following items: “I take pride of being in the teaching profession”, “I have a strong desire for professional development”, “I feel great satisfaction for making a difference in the students’ lives”, “I feel excited, rewarded, and uplifted in my work as a teacher”, and “There is an increased awareness on my part of the ethical principles governing the teaching profession”.

In terms of Skills in Teaching

Table 3.1 illustrates the extent of teachers’ attitudes towards flexible learning in HEIs in Sulu during the COVID-19 pandemic in terms of Skills in Teaching. Under this category, teacher-respondents obtained a total weighted mean score of 4.5452 with a standard deviation of .55584, which is rated as “**Always**” and interpreted as “**Very High Tendency**”. This result indicates that teacher-respondents perceive that there is a very high tendency of them to enjoy communicating their understanding to others, to express calmness and professionalism even when tired and stressed, have great organizational skills such that committed to feedback results to any interested colleagues, work effectively with group members, be able to deal with conflict, motivate their students to do their best, and to empathize with their students. Evidently, under this category, employee-respondents rated with “Always” the following items: “I work understandingly and cooperatively with students”, “I speak clearly using a well-modulated voice”, “I help each student set appropriate goals for themselves”, “I provide special programs presented by students to develop the student skills”, and “I make careful preparation for students’ advanced assignment”.

In terms of Interest in Teaching

Table 3.1 illustrates the extent of teachers’ attitudes towards flexible learning in HEIs in Sulu during the COVID-19 pandemic in terms of

Interest in Teaching. Under this category, teacher-respondents obtained a total weighted mean score of .4.4745 with a standard deviation of .61153, which is rated as “Often” and interpreted as “**High Tendency**”. This result indicates that teacher-respondents perceive that there is a high tendency of them to enjoy working with students and are motivated by their desire to make a difference. To put it simply, it is embedded within the teachers the aspirations to improve the quality of education, to give back to their communities, and to change the lives of

their students for the better. Markedly, under this category, employee-respondents rated with “Always” the following items: “I am equipped in teaching through a series of trainings”, “I recognize the relative teaching difficulty levels for students”, and “I train myself in the power of attention and concentration in teaching”. Meanwhile, teacher-respondents rated with “Often” the items: “I need more relevant textbooks”, and “I help administer student activities”.

Table 3.1 Extent of teachers' instructional competence in terms of flexible learning in HEIs in Sulu during the COVID-19 pandemic in terms of Knowledge, Attitude of Teaching, Commitment, Skills in Teaching, and Interest in Teaching

Statements	Mean	S.D.	Rating
Knowledge			
1. I study students' experiences and backgrounds	4.0350	.98928	Often
2. I select reading materials at the instructional level appropriate to the classroom problem	4.5450	.59137	Always
3. I develop a regular study program in subject teaching	4.2850	.72554	Often
4. I possess an adequate subject-matter background	4.5000	.63404	Always
Table 3.1 continued			
5. I possess adequate instructional equipment	4.4250	.63750	Often
Total Weighted Mean	4.3580	.65543	Often
Attitude of Teaching			
1. I use appropriate teaching aids	4.5450	.60813	Always
2. I ask questions in a pleasant conversational manner	4.5400	.60017	Always
3. I adopt good teaching and study habits	4.5950	.58540	Always
4. I assist the students in clarifying objectives	4.5050	.59307	Always
5. I do not repeat questions continually for the benefit of students who are not paying attention	3.9450	1.0476	Often
Table 3.1 continued			
Total Weighted Mean	4.4260	.59859	Often
Commitment			
1. I take pride in being in the teaching profession	4.5200	.65708	Always
2. I have a strong desire for professional development	4.5250	.66452	Always
3. I feel great satisfaction in making a difference in the students' lives	4.5980	.59391	Always
4. I feel excited, rewarded, and uplifted in my work as a teacher.	4.6600	.57099	Always
5. There is an increased awareness on my part of the ethical principles governing the teaching profession.	4.5850	.57831	Often
Total Weighted Mean	4.5765	.56566	Always
Skills in Teaching			
1. I work understandingly and cooperatively with students	4.6200	.57205	Always
2. I speak clearly using a well-modulated voice	4.6400	.56746	Always
3. I help each student set appropriate goals for themselves	4.5000	.63404	Always

4. I provide special programs presented by students to develop the students' skills	4.4600	.64067	Always
5. I make careful preparation for students' advanced assignments	4.5100	.62599	Always
Total Weighted Mean	4.5452	.55584	Always
Interest in Teaching			
1. I am equipped to teach through a series of trainings	4.4250	.79216	Always
2. I need more relevant textbooks	4.4221	.74719	Often
3. I help administer student activities	4.4850	.65722	Often
4. I recognize the relative teaching difficulty levels for students	4.5150	.60132	Always
5. I train myself in the power of attention and concentration in teaching	4.5250	.60929	Always
Total Weighted Mean	4.4745	.61153	Often

Legend: (5) 4.50-5.00=Always (Very High Tendency); (4) 3.50-4.49=Often (High Tendency); (3) 2.50-3.49=Sometimes (Moderate Tendency); (2) 1.50- 2.49=Rarely (Low Tendency); (1) 1.00- 1.49=Never (Very Low Tendency)

4. Is there a significant difference in the extent of teachers' instructional competence towards flexible learning amidst Covid-19 pandemic among HEIs in Sulu in terms of mastery of subject field, skills of teaching, classroom management, instructional

methods, evaluation skills, technological skills and writing skills when data are categorized according to their demographic profile in terms of gender, age, length of service, educational attainment and status of employment?

According to Gender

Table 4.1 Differences in the extent of teachers' instructional competence towards flexible learning amidst the COVID-19 pandemic among HEIs in Sulu when data are categorized according to their demographic profile in terms of gender

VARIABLES	Grouping	Mean	S. D.	Mean Difference	t	Sig.	Description
Mastery of the subject field	Male	4.7755	.39717	.27747*	4.028	.000	Significant
	Female	4.4980	.55988				
Skills of teaching	Male	4.7306	.46935	.19728*	2.792	.006	Significant
	Female	4.5333	.52677				
Classroom management	Male	4.6449	.58329	.20764*	2.551	.011	Significant
	Female	4.4373	.56759				
Instructional methods	Male	4.7107	.49598	.18718*	2.468	.014	Significant
	Female	4.5235	.57198				
Evaluation skills	Male	4.7102	.52494	.14354*	1.972	.050	Significant
	Female	4.5667	.50430				
Technological skills	Male	4.6286	.56276	.06583	.791	.430	

	Female	4.5627	.61191				Not Significant
Writing skills	Male	4.5878	.60296	.05638	.705	.482	Not Significant
	Female	4.5314	.52765				

*Significant at alpha 0.05

According to Age

Table 4.2 depicts the difference in the extent of teachers' instructional competence towards flexible learning amidst the COVID-19 pandemic among HEIs in Sulu when data are categorized according to their demographic profile in terms of age

SOURCES OF VARIATION		Sum of Squares	df	Mean Square	F	Sig.	Description
Mastery of the subject field	Between Groups	34.966	3	11.655	144.192*	.000	Significant
	Within Groups	15.843	196	.081			
	Total	50.809	199				
Skills of teaching	Between Groups	35.847	3	11.949	151.163*	.000	Significant
	Within Groups	15.493	196	.079			
	Total	51.340	199				
Classroom management	Between Groups	45.375	3	15.125	132.817*	.000	Significant
	Within Groups	22.320	196	.114			
	Total	67.696	199				
Instructional methods	Between Groups	37.444	3	12.481	115.328*	.000	Significant
	Within Groups	21.212	196	.108			
	Total	58.656	199				
Evaluation skills	Between Groups	37.063	3	12.354	147.803*	.000	Significant
	Within Groups	16.383	196	.084			
	Total	53.446	199				
Technological skills	Between Groups	34.516	3	11.505	65.864*	.000	Significant
	Within Groups	34.239	196	.175			
	Total	68.755	199				
Writing skills	Between Groups	39.169	3	13.056	104.984*	.000	Significant
	Within Groups	24.375	196	.124			
	Total	63.544	199				

Table 4.2 Differences in the extent of teachers' instructional competence towards flexible learning amidst the Covid-19 pandemic among HEIs in Sulu when data are categorized according to their demographic profile in terms of age

*Significant at alpha 0.05

Table 4.2.1 Post Hoc Analysis: Differences in the levels of mean in areas subsumed under the extent of teachers' instructional competence towards flexible learning amidst the Covid-19 pandemic among HEIs in Sulu when data are categorized according to their demographic profile in terms of age

Dependent Variables	(I) Grouping by Age		(J) Grouping by Age	Mean Difference (I-J)	Std. Error	Sig.
Mastery of the subject field	21-30 years old	years	31-40 years old	.10000	.05227	.304
			41-50 years old	.62642*	.05472	.000
			51 years old & above	1.20000*	.06600	.000
Skills of teaching	21-30 years old	years	31-40 years old	.10000	.05169	.294
			41-50 years old	.63396*	.05412	.000
			51 years old & above	1.21429*	.06527	.000
Classroom management	21-30 years old	years	31-40 years old	.18750*	.06205	.030
			41-50 years old	.78868*	.06496	.000
			51 years old & above	1.37143*	.07834	.000
Instructional methods	21-30 years old	years	31-40 years old	.11250	.06049	.329
			41-50 years old	.66038*	.06332	.000
			51 years old & above	1.24107*	.07637	.000
Evaluation skills	21-30 years old	years	31-40 years old	.09375	.05316	.377
			41-50 years old	.59245*	.05565	.000
			51 years old & above	1.25714*	.06712	.000
Technological skills	21-30 years old	years	31-40 years old	.14591	.07685	.310
			41-50 years old	.58600*	.08045	.000
			51 years old & above	1.24234*	.09703	.000
Writing skills	21-30 years old	years	31-40 years old	.12307	.06484	.311
			41-50 years old	.60220*	.06788	.000
			51 years old & above	1.31325*	.08187	.000

* The mean difference is significant at the 0.05 level.

According to the Length of Service

Table 4.3 Differences in the extent of teachers' instructional competence towards flexible learning amidst the COVID-19 pandemic among HEIs in Sulu when data are categorized according to their demographic profile in terms of length of service

SOURCES OF VARIATION		Sum Squares	of df	Mean Square F		Sig.	Description
Mastery of the subject field	Between Groups	36.749	3	12.250	170.761*	.000	Significant
	Within Groups	14.060	196	.072			
	Total	50.809	199				
Skills of teaching	Between Groups	39.141	3	13.047	209.623*	.000	Significant
	Within Groups	12.199	196	.062			
	Total	51.340	199				
Classroom management	Between Groups	46.962	3	15.654	147.976*	.000	Significant
	Within Groups	20.734	196	.106			
	Total	67.696	199				
Instructional methods	Between Groups	40.769	3	13.590	148.906*	.000	Significant
	Within Groups	17.887	196	.091			
	Total	58.656	199				
Evaluation skills	Between Groups	37.294	3	12.431	150.852*	.000	Significant
	Within Groups	16.152	196	.082			
	Total	53.446	199				
Technological skills	Between Groups	37.873	3	12.624	80.125*	.000	Significant
	Within Groups	30.882	196	.158			
	Total	68.755	199				
Writing skills	Between Groups	45.423	3	15.141	163.766*	.000	Significant

Within Groups	18.121	196	.092
Total	63.544	199	

*Significant at alpha 0.05

Table 4.3.1 Post Hoc Analysis: Differences in the levels of mean in areas subsumed under the extent of teachers' instructional competence towards flexible learning amidst the Covid-19 pandemic among HEIs in Sulu when data are categorized according to their demographic profile in terms of length of service

Dependent Variables	(I) Grouping by Length of Service	(J) Grouping by Length of Service	Mean Difference (I-J)	Std. Error	Sig.
Mastery of the subject field	Below 5 years	5-10 years	.14403*	.04611	.023
		11-16 years	.91962*	.05029	.000
		17-years & above	1.10030*	.07039	.000
Skills of teaching	Below 5 years	5-10 years	.16774*	.04295	.002
		11-16 years	.89565*	.04684	.000
		17-years & above	1.24444*	.06557	.000
Classroom management	Below 5 years	5-10 years	.30854*	.05600	.000
		11-16 years	.97180*	.06107	.000
		17-years & above	1.45586*	.08548	.000
Instructional methods	Below 5 years	5-10 years	.18710*	.05201	.006
		11-16 years	.92609*	.05672	.000
		17-years & above	1.26389*	.07939	.000
Evaluation skills	Below 5 years	5-10 years	.18065*	.04942	.005
		11-16 years	.83043*	.05390	.000
		17-years & above	1.28889*	.07544	.000
Technological skills	Below 5 years	5-10 years	.26452*	.06834	.002
		11-16 years	.92609*	.07453	.000
		17-years & above	1.22222*	.10432	.000
Writing skills	Below 5 years	5-10 years	.29782*	.05235	.000
		11-16 years	.91199*	.05709	.000
		17-years & above	1.48348*	.07991	.000

* The mean difference is significant at the 0.05 level.

According to Educational Attainment

Table 4.4 depicts the difference in the extent of teachers' instructional competence towards flexible learning amidst the Covid-19 pandemic among HEIs in Sulu when data are categorized according to their demographic profile in terms of educational attainment. It can be gleaned from this table that all of the sub-categories subsumed under teachers' instructional competence are indeed significant at alpha .05

SOURCES OF VARIATION		Sum Squares	of df	Mean Square	F	Sig.	Description
Mastery of the subject field	Between Groups	28.851	4	7.213	64.056	.000	Significant
	Within Groups	21.957	195	.113			
	Total	50.809	199				
Skills of teaching	Between Groups	28.898	4	7.224	62.772	.000	Significant
	Within Groups	22.442	195	.115			
	Total	51.340	199				
Classroom management	Between Groups	34.023	4	8.506	49.258	.000	Significant
	Within Groups	33.672	195	.173			
	Total	67.696	199				
Instructional methods	Between Groups	28.806	4	7.202	47.046	.000	Significant
	Within Groups	29.850	195	.153			
	Total	58.656	199				
Evaluation skills	Between Groups	26.988	4	6.747	49.727	.000	Significant
	Within Groups	26.458	195	.136			
	Total	53.446	199				
Technological skills	Between Groups	22.911	4	5.728	24.363	.000	Significant
	Within Groups	45.844	195	.235			
	Total	68.755	199				
Writing skills	Between Groups	32.626	4	8.156	51.443	.000	Significant
	Within Groups	30.918	195	.159			
	Total	63.544	199				

*Significant at alpha 0.05

Table 4.4.1 Post Hoc Analysis: Differences in the levels of mean in areas subsumed under the extent of teachers' instructional competence towards flexible learning amidst the Covid-19 pandemic among HEIs in Sulu when data are categorized according to their demographic profile in terms of educational attainment

Dependent Variables	(I) Grouping by Educational Attainment	(J) Grouping by Educational Attainment	Mean Difference (I-J)	Std. Error	Sig.
Mastery of the subject field	Bachelor's degree	Bachelor's degree with MA units	.06190	.06600	.927
		Master's degree	.46190*	.06600	.000
		Master's degree with doctoral units	1.00556*	.07398	.000
		Doctorate	1.08333*	.17463	.000
Skills of teaching	Bachelor's degree	Bachelor's degree with MA units	.10595	.06673	.641
		Master's degree	.44881*	.06673	.000
		Master's degree with doctoral units	.99167*	.07480	.000
		Doctorate	1.39167*	.17655	.000
Classroom management	Bachelor's degree	Bachelor's degree with MA units	.13452	.08174	.609
		Master's degree	.50595*	.08174	.000
		Master's degree with doctoral units	1.05833*	.09162	.000
		Doctorate	1.64167*	.21626	.000
Instructional methods	Bachelor's degree	Bachelor's degree with MA units	.10238	.07696	.778
		Master's degree	.40952*	.07696	.000
		Master's degree with doctoral units	1.01528*	.08626	.000
		Doctorate	1.26667*	.20361	.000
Evaluation skills	Bachelor's degree	Bachelor's degree with MA units	.03690	.07245	.992
		Master's degree	.41548*	.07245	.000
		Master's degree with doctoral units	.97500*	.08121	.000
		Doctorate	.95833*	.19170	.000

Technological skills	Bachelor's degree	Bachelor's degree with MA units	.17976	.09537	.472
		Master's degree	.42976*	.09537	.001
		Master's degree with doctoral units	.95278*	.10690	.000
		Doctorate	1.05833*	.25233	.002
Table 4.4.1 continued Writing skills	Bachelor's degree	Bachelor's degree with MA units	.18571	.07832	.234
		Master's degree	.39286*	.07832	.000
		Master's degree with doctoral units	1.12222*	.08779	.000
		Doctorate	1.35000*	.20722	.000

* The mean difference is significant at the 0.05 level.

According to the Status of Employment

Table 4.5 Differences in the extent of teachers' instructional competence towards flexible learning amidst the COVID-19 pandemic among HEIs in Sulu when data are categorized according to their demographic profile in terms of status of employment

SOURCES OF VARIATION		Sum Squares	df	Mean Square	F	Sig.	Description
Mastery of the subject field	Between Groups	20.619	2	10.309	67.273*	.000	Significant
	Within Groups	30.190	197	.153			
	Total	50.809	199				
Skills of teaching	Between Groups	21.574	2	10.787	71.392*	.000	Significant
	Within Groups	29.766	197	.151			
	Total	51.340	199				
Classroom management	Between Groups	31.433	2	15.716	85.380*	.000	Significant
	Within Groups	36.263	197	.184			
	Total	67.696	199				
Instructional methods	Between Groups	24.946	2	12.473	72.894*	.000	Significant
	Within Groups	33.710	197	.171			
	Total	58.656	199				
Evaluation skills	Between Groups	22.271	2	11.136	70.367*	.000	Significant
	Within Groups	31.175	197	.158			

Technological skills	Total	53.446	199				
	Between Groups	20.034	2	10.017	40.502*	.000	Significant
	Within Groups	48.721	197	.247			
Writing skills	Total	68.755	199				
	Between Groups	20.584	2	10.292	47.197*	.000	Significant
	Within Groups	42.960	197	.218			
	Total	63.544	199				

*Significant at alpha 0.05

Table 4.5.1 Post Hoc Analysis: Differences in the levels of mean in areas subsumed under the extent of teachers' instructional competence towards flexible learning amidst the Covid-19 pandemic among HEIs in Sulu when data are categorized according to their demographic profile in terms of status of employment

Dependent Variables	(I) Grouping by Status of Employment	(J) Grouping by Status of Employment	Mean Difference (I-J)	Std. Error	Sig.
Mastery of the subject field	Regular	Contractual	.61148*	.05621	.000
		Part-time	.96250*	.16474	.000
Skills of teaching	Regular	Contractual	.62789*	.05582	.000
		Part-time	.96667*	.16357	.000
Classroom management	Regular	Contractual	.75191*	.06161	.000
		Part-time	1.21042*	.18055	.000
Instructional methods	Regular	Contractual	.68274*	.05940	.000
		Part-time	.97917*	.17407	.000
Evaluation skills	Regular	Contractual	.63835*	.05712	.000
		Part-time	.97917*	.16740	.000
Technological skills	Regular	Contractual	.61063*	.07141	.000
		Part-time	.88750*	.20927	.000
Writing skills	Regular	Contractual	.61199*	.06706	.000
		Part-time	.95417*	.19651	.000

* The mean difference is significant at the 0.05 level.

5. Is there a significant difference in the extent of teachers' attitude toward flexible learning amidst covid-19 pandemic among HEIs in Sulu in terms of knowledge, attitude of teaching, commitment, skills in teaching and interest of teaching when data are categorized according to their demographic profile in terms of 5.1 gender, 5.2 age, 5.3 length of service, 5.4 educational attainment and 5.5 status of employment?

According to Gender

Table 5.1 Differences in the extent of teachers' attitudes toward flexible learning amidst the Covid-19 pandemic among HEIs in Sulu when data are categorized according to their demographic profile in terms of gender

VARIABLES	Grouping	Mean	S. D.	Mean Difference	t	Sig.	Description
Knowledge	Male	4.4551	.66969	.19040*	2.071	.040	Significant
	Female	4.2647	.63068				
Attitude of teaching	Male	4.5592	.55684	.26114*	3.153	.002	Significant
	Female	4.2980	.61192				
Commitment	Male	4.6694	.53581	.18213*	2.301	.022	Significant
	Female	4.4873	.58164				
Skills in teaching	Male	4.6490	.51937	.20339*	2.625	.009	Significant
	Female	4.4456	.57377				
Interest of teaching	Male	4.6020	.59517	.25008*	2.946	.004	Significant
	Female	4.3520	.60472				

*Significant at alpha 0.05

According to Age

Table 5.2 Differences in the extent of teachers' attitudes towards flexible learning amidst the COVID-19 pandemic among HEIs in Sulu when data are categorized according to their demographic profile in terms of age.

SOURCES OF VARIATION		Sum of Squares	df	Mean Square	F	Sig.	Description
Knowledge	Between Groups	57.803	3	19.268	136.410*	.000	Significant
	Within Groups	27.685	196	.141			
	Total	85.487	199				
Attitude of teaching	Between Groups	54.470	3	18.157	211.388*	.000	Significant
	Within Groups	16.835	196	.086			
	Total	71.305	199				
Commitment	Between Groups	39.464	3	13.155	106.496*	.000	Significant
	Within Groups	24.211	196	.124			
	Total	63.675	199				

Skills in teaching	Between Groups	43.763	3	14.588	161.353*	.000	Significant
	Within Groups	17.720	196	.090			
	Total	61.483	199				
Interest	Between Groups	47.549	3	15.850	115.608*	.000	Significant
	Within Groups	26.871	196	.137			
	Total	74.420	199				

*Significant at alpha 0.05

A Post Hoc Analysis using Scheffe's Test was conducted to determine which among the groups classified according to age had different levels of mean in areas subsumed under the extent of teachers' attitudes towards flexible learning amidst the Covid-19 pandemic among HEIs in Sulu in when data are categorized according to their demographic profile in terms of age. The result of the analysis, which is shown in Table 5.2.1, indicates that the difference in the means of the Knowledge, Attitude of teaching, Commitment, Skills in teaching, and Interest is obtained by way of lower group means minus higher group means.

Respondents aged 21–30 years old consistently demonstrated the most favorable perceptions of teachers' attitudes toward flexible learning in Higher Education Institutions (HEIs) in Sulu. Compared to those aged 51 and above, the

younger group rated teachers significantly higher across five key attitudinal domains, with all results statistically significant at the 0.05 level.

In terms of **Knowledge**, the 21–30 age group showed a mean difference of 1.60195 (SE = 0.08725, $p = .000$), indicating the strongest perception gap. For **Attitudes of Teaching**, they recorded a difference of 1.51390 (SE = 0.06804, $p = .000$). In **Commitment**, the mean difference was 1.32461 (SE = 0.08159, $p = .000$). Regarding **Skills in Teaching**, they scored 1.32844 higher (SE = 0.06980, $p = .000$) and lastly, in **Interest**, the difference was 1.33143 (SE = 0.08596, $p = .000$).

These findings suggest that younger respondents were more attuned to or appreciative of teachers' attitudes and efforts in adapting to flexible learning during the pandemic, surpassing older age groups in every attitudinal category assessed.

Table 5.2.1 Post Hoc Analysis: Differences in the levels of mean in areas subsumed under the extent of teachers' attitudes towards flexible learning amidst the Covid-19 pandemic among HEIs in Sulu when data are categorized according to their demographic profile in terms of age

Dependent Variables	(I) Grouping by Age	(J) Grouping by Age	Mean Difference (I-J)	Std. Error	Sig.
Knowledge	21-30 years old	31-40 years old	.29034*	.06910	.001
		41-50 years old	.88268*	.07234	.000
		51 years old & above	1.60195*	.08725	.000
Attitude of teaching	21-30 years old	31-40 years old	.29381*	.05389	.000
		41-50 years old	.92913*	.05641	.000
		51 years old & above	1.51390*	.06804	.000

Commitment	21-30 old	years	31-40 years old	.15318	.06462	.135
			41-50 years old	.63101*	.06765	.000
			51 years old & above	1.32461*	.08159	.000
Skills in teaching	21-30 old	years	31-40 years old	.16773*	.05528	.029
			41-50 years old	.78424*	.05788	.000
			51 years old & above	1.32844*	.06980	.000
Interest	21-30 old	years	31-40 years old	.19125	.06808	.051
			41-50 years old	.89774*	.07127	.000
			51 years old & above	1.33143*	.08596	.000

* The mean difference is significant at the 0.05 level.

According to the Length of Service

Table 5.3 depicts the difference in the extent of teachers' attitudes towards flexible learning amidst the COVID-19 pandemic among HEIs in Sulu when data are categorized according to their demographic profile in terms of length of service. It can be gleaned from this table that all of the sub-categories subsumed under teachers' instructional competence are indeed significant at

alpha .05. This means that, generally, teacher-respondents differ in their perceptions toward the extent of teachers' attitudes. This result implies that having been in service for 17 years or more may probably make a teacher a better perceiver of the extent of teachers' attitudes than those who have been teaching for below 5 years, 5-10 years, 11-16 years, or vice versa.

Table 5.3 Differences in the extent of teachers' attitudes towards flexible learning amidst the COVID-19 pandemic among HEIs in Sulu when data are categorized according to their demographic profile in terms of length of service

SOURCES OF VARIATION		Sum Squares	of df	Mean Square	F	Sig.	Description
Knowledge	Between Groups	57.924	3	19.308	137.300*	.000	Significant
	Within Groups	27.563	196	.141			
	Total	85.487	199				
Attitude of teaching	Between Groups	53.786	3	17.929	200.593*	.000	Significant
	Within Groups	17.518	196	.089	8		
	Total	71.305	199				
Commitment	Between Groups	38.935	3	12.978	102.822*	.000	Significant
	Within Groups	24.739	196	.126			
	Total	63.675	199				
Skills in teaching	Between Groups	44.731	3	14.910	174.454*	.000	Significant

Interest	Within Groups	16.752	196	.085			
	Total	61.483	199				
	Between Groups	52.700	3	17.567	158.522*	.000	Significant
	Within Groups	21.720	196	.111			
	Total	74.420	199				

*Significant at alpha 0.05

A Post Hoc Analysis using Scheffe's Test was conducted to determine which among the groups classified according to length of service has different levels of mean in areas subsumed under the extent of teachers' attitudes towards flexible learning amidst the Covid-19 pandemic among HEIs in Sulu in when data are categorized according to their demographic profile in terms of length of service.

The result of the analysis, which is shown in Table 5.3.1, indicates that the difference in the means of the Knowledge, Attitude of teaching, Commitment, Skills in teaching, and Interest is obtained by way of lower group means minus higher group means.

Respondents with less than five years of teaching experience in Higher Education Institutions (HEIs) in Sulu consistently showed the most favorable perceptions of teachers' attitudes toward flexible learning. Compared to

those with 17 years or more of experience, this group rated teachers significantly higher across five key attitudinal domains, with all results statistically significant at the 0.05 level.

In **Knowledge**, they recorded the highest mean difference of 1.66637 (SE = 0.09855, $p = .000$). For **Attitudes of Teaching**, the difference was 1.54294 (SE = 0.07857, $p = .000$). In **Commitment**, they showed a difference of 1.38626 (SE = 0.09337, $p = .000$). Regarding **Skills in Teaching**, the gap was 1.40571 (SE = 0.07683, $p = .000$). And in **Interest**, they scored 1.40931 higher (SE = 0.08749, $p = .000$).

These findings suggest that newer educators were more attuned to or appreciative of the attitudes and efforts demonstrated by teachers during the shift to flexible learning, surpassing their more experienced counterparts in every category assessed.

Table 5.3.1 Post Hoc Analysis: Differences in the levels of mean in areas subsumed under the extent of teachers' attitudes towards flexible learning amidst the Covid-19 pandemic among HEIs in Sulu when data are categorized according to their demographic profile in terms of length of service

Dependent Variables	(I) Grouping by Length of Service	(J) Grouping by Length of Service	Mean Difference (I-J)	Std. Error	Sig.
Knowledge	Below 5 years	5-10 years	.49791*	.06456	.000
		11-16 years	1.08038*	.07041	.000
		17-years & above	1.66637*	.09855	.000
attitude of teaching	Below 5 years	5-10 years	.45083*	.05147	.000
		11-16 years	1.08449*	.05613	.000
		17-years & above	1.54294*	.07857	.000

Table 5.3.1 continued

Commitment	Below 5 years	5-10 years	.31718*	.06117	.000
		11-16 years	.84786*	.06671	.000
		17-years & above	1.38626*	.09337	.000
Skills in teaching	Below 5 years	5-10 years	.32363*	.05033	.000
		11-16 years	.96742*	.05489	.000
		17-years & above	1.40571*	.07683	.000
Interest	Below 5 years	5-10 years	.34067*	.05731	.000
		11-16 years	1.12139*	.06250	.000
		17-years & above	1.40931*	.08749	.000

* The mean difference is significant at the 0.05 level

According to Educational Attainment

Table 5.4 depicts the difference in the extent of teachers' attitudes towards flexible learning amidst the COVID-19 pandemic among HEIs in Sulu when data are categorized according to their demographic profile in terms of educational attainment. It can be gleaned from this table that all of the sub-categories subsumed under teachers' attitudes are indeed significant at alpha .05. This means that, generally, teacher-respondents differ in their perceptions toward the extent of teachers' attitudes. This result implies that for a teacher-respondent to have a doctorate may probably make them a better perceiver of the extent of teachers' attitudes than those who have a Bachelor's Degree, a Bachelor's degree with MA units, a Master's degree, and a Master's degree with doctoral units, or vice versa.

Table 5.4 Differences in the extent of teachers' attitudes towards flexible learning amidst the Covid-19 pandemic among HEIs in Sulu when data are categorized according to their demographic profile in terms of educational attainment

SOURCES OF VARIATION		Sum of Squares	Df	Mean Square	F	Sig.	Description
Knowledge	Between Groups	41.209	4	10.302	45.370*	.000	Significant
	Within Groups	44.278	195	.227			
	Total	85.487	199				
Attitude of teaching	Between Groups	40.013	4	10.003	62.337*	.000	Significant
	Within Groups	31.292	195	.160			
	Total	71.305	199				
Commitment	Between Groups	29.385	4	7.346	41.777*	.000	Significant
	Within Groups	34.290	195	.176			
	Total	63.675	199				
Skills in teaching	Between Groups	34.924	4	8.731	64.103*	.000	Significant
	Within Groups	26.559	195	.136			

	Total	61.483	199				
	Between Groups	40.549	4	10.137	58.360*	.000	Significant
Interest	Within Groups	33.871	195	.174			
	Total	74.420	199				

*Significant at alpha 0.05

A Post Hoc Analysis using Scheffe's Test was conducted to determine which among the groups classified according to educational attainment has different levels of mean in areas subsumed under the extent of teachers' attitudes towards flexible learning amidst the Covid-19 pandemic among HEIs in Sulu in when data are categorized according to their demographic profile in terms of educational attainment.

The result of the analysis, which is shown in Table 5.4.1, indicates that the difference in the means of the Knowledge, Attitude of teaching, Commitment, Skills in teaching, and Interest are obtained by way of lower group means minus higher group means.

Respondents with a Bachelor's degree consistently demonstrated the most favorable perceptions of teachers' attitudes toward flexible learning in Higher Education Institutions (HEIs) in Sulu. Across multiple domains—Knowledge, Attitudes of Teaching, Skills in Teaching, and Interest—this group rated teachers significantly

higher than those with Doctorate degrees, with all results statistically significant at the 0.05 level.

In **Knowledge**, the Bachelor's group showed a mean difference of 1.61667 (SE = 0.24799, $p = .000$). For **Attitudes of Teaching**, they recorded 1.16389 (SE = 0.08832, $p = .000$). In **Skills in Teaching**, the difference was 1.56667 (SE = 0.21823, $p = .000$). And in **Interest**, they scored 1.21667 higher (SE = 0.21690, $p = .000$). Additionally, respondents with less than five years of teaching experience rated teachers' **Commitment** more positively than those with 17 years or more, with a mean difference of 1.38626 (SE = 0.09337, $p = .000$).

These findings suggest that both younger educators and those with Bachelor's degrees were more receptive to and appreciative of teachers' attitudes and efforts in adapting to flexible learning during the pandemic, outperforming more experienced and academically advanced groups in every category assessed.

Table 5.4.1 Post Hoc Analysis: Differences in the levels of mean in areas subsumed under the extent of teachers' attitudes towards flexible learning amidst the Covid-19 pandemic among HEIs in Sulu when data are categorized according to their demographic profile in terms of educational attainment

Dependent Variables	(I) Grouping by Educational Attainment	(J) Grouping by Educational Attainment	Mean Difference (I-J)	Std. Error	Sig.
Knowledge	Bachelor's degree	Bachelor's degree with MA units	.13810	.09373	.705
		Master's degree	.63095*	.09373	.000
		Master's degree with doctoral units	1.17222*	.10506	.000

Attitude of teaching	of Bachelor's degree	Doctorate degree	1.61667*	.24799	.000
		Bachelor's degree with MA units	.09524	.07880	.833
		Master's degree	.53095*	.07880	.000
		Master's degree with doctoral units	1.16389*	.08832	.000
Commitment	Bachelor's degree	Doctorate degree	1.54167*	.20847	.000
		Bachelor's degree with MA units	.13810	.08248	.592
		Master's degree	.52113*	.08248	.000
		Master's degree with doctoral units	.96806*	.09246	.000
Skills in teaching	Bachelor's degree	Doctorate degree	1.56667*	.21823	.000
		Bachelor's degree with MA units	.08631	.07259	.841
		Master's degree	.48631*	.07259	.000
		Master's degree with doctoral units	1.07222*	.08137	.000
Table continued	5.4.1 Bachelor's degree	Doctorate degree	1.52917*	.19206	.000
		Bachelor's degree with MA units	.12738	.08198	.660
		Master's degree	.57560*	.08198	.000
		Master's degree with doctoral units	1.22778*	.09189	.000
Interest		Doctorate degree	1.21667*	.21690	.000

*The mean difference is significant at the 0.05 level.

According to the Status of Employment

Table 5.5 depicts the difference in the extent of teachers' attitudes towards flexible learning amidst the COVID-19 pandemic among HEIs in Sulu in when data are categorized according to their demographic profile in terms of status of appointment. It can be gleaned from this table that all of the sub-categories subsumed under teachers' attitudes are indeed significant at alpha

.05. This means that, generally, teacher-respondents differ in their perceptions toward the extent of teachers' attitudes. This result implies that for a teacher-respondent to have regular status employment may probably make them a better perceiver of the extent of teachers' attitudes than those who have Contractual and Part-time teaching jobs, or vice versa.

Table 5.5 Differences in the extent of teachers' attitudes towards flexible learning amidst the Covid-19 pandemic among HEIs in Sulu when data are categorized according to their demographic profile in terms of status of appointment

SOURCES OF VARIATION		Sum of Squares	Df	Mean Square	F	Sig.	Description
Knowledge	Between Groups	29.760	2	14.880	52.603*	.000	Significant
	Within Groups	55.727	197	.283			
	Total	85.487	199				
Attitude of teaching	Between Groups	32.437	2	16.218	82.202*	.000	Significant
	Within Groups	38.868	197	.197			
	Total	71.305	199				
Commitment	Between Groups	23.362	2	11.681	57.084*	.000	Significant
	Within Groups	40.312	197	.205			
	Total	63.675	199				
Skills in teaching	Between Groups	26.974	2	13.487	76.992*	.000	Significant
	Within Groups	34.509	197	.175			
	Total	61.483	199				
Interest	Between Groups	27.753	2	13.877	58.578*	.000	Significant
	Within Groups	46.667	197	.237			
	Total	74.420	199				

*Significant at alpha 0.05

Table 5.5.1 Post Hoc Analysis: Differences in the levels of mean in areas subsumed under the extent of teachers' attitudes towards flexible learning amidst the Covid-19 pandemic among HEIs in Sulu when data are categorized according to their demographic profile in terms of status of appointment

Dependent Variables	(I) Grouping by Status of Appointment	(J) Grouping by Status of Appointment	Mean Difference (I-J)	Std. Error	Sig.
Knowledge	Regular	Contractual	.69264*	.07638	.000
		Part-time	1.40625*	.22381	.000
Attitude of teaching	Regular	Contractual	.73116*	.06378	.000
		Part-time	1.42708*	.18692	.000
Commitment	Regular	Contractual	.66284*	.06496	.000

Skills in teaching	Regular	Part-time	.92917*	.19036	.000
		Contractual	.65884*	.06010	.000
Interest	Regular	Part-time	1.34167*	.17613	.000
		Contractual	.72468*	.06989	.000
		Part-time	.99271*	.20481	.000

* The mean difference is significant at the 0.05 level.

6. Is there a significant relationship between sub-categories that subsume the extent of teachers' instructional competence and attitude towards flexible learning amidst the COVID-19 pandemic?

Table 6 illustrates the correlation among the sub-categories subsumed under the extent of teachers' instructional competence (Mastery of the Subject Field, Teaching Skills, Classroom management, Instructional Methods, Evaluation Skills, Technological Skills, and Writing Skills) and Attitudes (Knowledge, Attitude of Teaching, Commitment, Skills in Teaching, and Interest in Teaching) towards blended learning amidst covid-19 pandemic.

Table 6. Correlation among the sub-categories subsumed under the extent of instructional competence and attitudes towards blended learning amidst the COVID-19 pandemic

Variables					
Dependent	Independent	Pearson r	Sig	N	Description
Mastery of the Subject Field	Teaching Skills	.950**	.000	200	Nearly Perfect
	Classroom management	.902**	.000	200	Nearly Perfect
	Instructional Methods	.947**	.000	200	Nearly Perfect
	Evaluation Skills	.939**	.000	200	Nearly Perfect
	Technological Skills	.889**	.000	200	Very High
	Writing Skills	.896**	.000	200	Very High
	Knowledge	.879**	.000	200	Very High
	Attitude of Teaching	.904**	.000	200	Nearly Perfect
	Commitment	.886**	.000	200	Very High
	Skills in Teaching	.913**	.000	200	Nearly Perfect
	Interest in Teaching	.906**	.000	200	Nearly Perfect
Teaching Skills	Classroom management	.938**	.000	200	Nearly Perfect
	Instructional Methods	.960**	.000	200	Nearly Perfect
	Evaluation Skills	.948**	.000	200	Moderate
	Technological Skills	.897**	.000	200	Very High
	Writing Skills	.921**	.000	200	Nearly Perfect
	Knowledge	.884**	.000	200	Very High

Classroom Management	Attitude of Teaching	.922**	.000	200	Nearly Perfect
	Commitment	.913**	.000	200	Nearly Perfect
	Skills in Teaching	.929**	.000	200	Nearly Perfect
	Interest in Teaching	.904**	.000	200	Nearly Perfect
	Instructional Methods	.944**	.000	200	Nearly Perfect
	Evaluation Skills	.939**	.000	200	Nearly Perfect
	Technological Skills	.911**	.000	200	Nearly Perfect
	Writing Skills	.896**	.000	200	Very High
	Knowledge	.897**	.000	200	Very High
	Attitude of Teaching	.899**	.000	200	Very High
Instructional Methods	Commitment	.938**	.000	200	Nearly Perfect
	Skills in Teaching	.924**	.000	200	Nearly Perfect
	Interest in Teaching	.913**	.000	200	Nearly Perfect
	Evaluation Skills	.959**	.000	200	Nearly Perfect
	Technological Skills	.931**	.000	200	Nearly Perfect
	Writing Skills	.912**	.000	200	Nearly Perfect
	Knowledge	.879**	.000	200	Very High
	Attitude of Teaching	.900**	.000	200	Very High
	Commitment	.913**	.000	200	Nearly Perfect
	Skills in Teaching	.919**	.000	200	Nearly Perfect
Evaluation Skills	Interest in Teaching	.905**	.000	200	Nearly Perfect
	Technological Skills	.911**	.000	200	Nearly Perfect
	Writing Skills	.906**	.000	200	Nearly Perfect
	Knowledge	.897**	.000	200	Moderate
	Attitude of Teaching	.903**	.000	200	Nearly Perfect
	Commitment	.918**	.000	200	Nearly Perfect
	Skills in Teaching	.924**	.000	200	Nearly Perfect
	Interest in Teaching	.897**	.000	200	Very High
	Writing Skills	.920**	.000	200	Nearly Perfect
	Knowledge	.881**	.000	200	Very High
Technological Skills	Attitude of Teaching	.845**	.000	200	Very High
	Commitment	.894**	.000	200	Very High
	Skills in Teaching	.871**	.000	200	Very High
	Interest in Teaching	.873**	.000	200	Very High

Writing Skills	Knowledge	.914**	.000	200	Nearly Perfect
	Attitude of Teaching	.904**	.000	200	Nearly Perfect
	Commitment	.873**	.000	200	Very High
	Skills in Teaching	.907**	.000	200	Nearly Perfect
	Interest in Teaching	.908**	.000	200	Nearly Perfect
Knowledge	Attitude of Teaching	.945**	.000	200	Nearly Perfect
	Commitment	.886**	.000	200	Very High
	Skills in Teaching	.936**	.000	200	Nearly Perfect
	Interest in Teaching	.907**	.000	200	Nearly Perfect
Attitude of Teaching	Commitment	.890**	.000	200	Very High
	Skills in Teaching	.960**	.000	200	Nearly Perfect
	Interest in Teaching	.913**	.000	200	Nearly Perfect
Commitment	Skills in Teaching	.918**	.000	200	Nearly Perfect
	Interest in Teaching	.891**	.000	200	Very High
Skills in Teaching	Interest in Teaching	.941**	.000	200	Nearly Perfect

Conclusion

The COVID-19 pandemic brought significant changes to the educational landscape, compelling Higher Education Institutions (HEIs) to adopt flexible learning modalities to ensure the continuity of education. Based on the findings of this study, teachers in selected HEIs in Sulu demonstrated a generally high level of instructional competence in implementing flexible learning. They exhibited the ability to adapt teaching strategies, utilize digital technologies, develop alternative assessment methods, and facilitate learning in diverse instructional environments. These competencies enabled educators to respond effectively to the challenges posed by the pandemic and maintain the quality of instruction despite unprecedented circumstances. The study also revealed that teachers possessed a generally positive attitude toward flexible learning. Faculty members recognized the importance of flexible learning in promoting educational continuity, increasing access to learning opportunities, and supporting students during periods of disruption. Positive attitudes contributed to teachers' willingness to

adopt innovative teaching approaches and engage in continuous professional development. Furthermore, the findings indicated a significant positive relationship between instructional competence and attitudes toward flexible learning. Teachers who demonstrated higher levels of competence were more likely to have favorable perceptions of flexible learning modalities. This suggests that competence and attitude are interconnected factors that influence the successful implementation of flexible learning in higher education. Despite these positive outcomes, challenges such as inadequate internet connectivity, limited technological resources, insufficient training opportunities, and varying levels of student access to learning technologies remained significant concerns. These challenges highlight the need for continuous institutional support and capacity-building initiatives to strengthen flexible learning implementation in HEIs across Sulu.

Overall, the study concludes that instructional competence and positive attitudes are essential factors in the effective delivery of flexible learning. Strengthening these dimensions can

contribute to improved teaching effectiveness, enhanced student learning experiences, and greater resilience within higher education institutions during times of crisis and beyond.

Recommendations

Based on the findings and conclusions of the study, the following recommendations are proposed:

1. **Strengthen Faculty Development Programs.** Higher Education Institutions should provide continuous professional development programs focused on digital pedagogy, instructional design, educational technology integration, and innovative assessment strategies to further enhance teachers' instructional competence.
2. **Improve Technological Infrastructure.** Institutional leaders should invest in reliable internet connectivity, learning management systems, and technological resources to support both faculty and students in flexible learning environments.
3. **Enhance Technical and Administrative Support.** HEIs should establish dedicated technical support services to assist faculty members in addressing technological challenges

and improving the efficiency of flexible learning delivery.

4. **Promote Positive Attitudes toward Flexible Learning.** Educational leaders should encourage a culture of innovation, collaboration, and continuous learning by recognizing faculty achievements and providing incentives for excellence in flexible teaching practices.
5. **Develop Student Support Mechanisms.** Institutions should implement programs that assist students in accessing learning technologies, improving digital literacy, and addressing barriers that affect participation in flexible learning.
6. **Strengthen Policy Frameworks.** HEIs should formulate and regularly review policies that support the effective implementation of flexible learning while ensuring educational quality, equity, and inclusivity.
7. **Encourage Future Research.** Further studies may be conducted in other educational settings and regions to explore additional factors influencing instructional competence and attitudes toward flexible learning, including organizational support, technological readiness, and student outcomes.

References Cited

- Commission on Higher Education. (2020). CHED COVID-19 advisory on the implementation of flexible learning. CHED.
- Department of Education. (2020). Basic education learning continuity plan in the time of COVID-19. DepEd.
- United Nations Educational, Scientific and Cultural Organization. (2021). Education in a post-COVID world: Nine ideas for public action. UNESCO Publishing.
- World Bank. (2021). The state of the global education crisis: A path to recovery. World Bank.
- Adedoyin, O. B., & Soykan, E. (2020). COVID-19 pandemic and online learning: The challenges and opportunities. *Interactive Learning Environments*, 30(2), 863–875.
- Agaton, C. B., & Cueto, L. J. (2021). Learning at home: Parents' lived experiences on distance learning during COVID-19 in the Philippines. *International Journal of Evaluation and Research in Education*, 10(3), 901–911.
- Ali, W. (2020). Online and remote learning in higher education institutes: A necessity in light of COVID-19 pandemic. *Higher Education Studies*, 10(3), 16–25.
- Bao, W. (2020). COVID-19 and online teaching in higher education: A case study of Peking University. *Human Behavior and Emerging Technologies*, 2(2), 113–115.
- Bozkurt, A., & Sharma, R. C. (2020). Emergency remote teaching in a time of global crisis due to COVID-19 pandemic. *Asian Journal of Distance Education*, 15(1), i–vi.

- Cutri, R. M., Mena, J., & Whiting, E. F. (2020). Faculty readiness for online crisis teaching: Transitioning to online teaching during the COVID-19 pandemic. *European Journal of Teacher Education*, 43(4), 523–541.
- Dhawan, S. (2020). Online learning: A panacea in the time of COVID-19 crisis. *Journal of Educational Technology Systems*, 49(1), 5–22.
- Ferri, F., Grifoni, P., & Guzzo, T. (2020). Online learning and emergency remote teaching: Opportunities and challenges in emergency situations. *Societies*, 10(4), 86.
- García-Morales, V. J., Garrido-Moreno, A., & Martín-Rojas, R. (2021). The transformation of higher education after the COVID disruption. *Technological Forecasting and Social Change*, 171, 120998.
- Hodges, C., Moore, S., Lockee, B., Trust, T., & Bond, A. (2020). The difference between emergency remote teaching and online learning. *Educause Review*, 27(1), 1–12.
- König, J., Jäger-Biela, D. J., & Glutsch, N. (2020). Adapting to online teaching during COVID-19 school closures. *European Journal of Teacher Education*, 43(4), 608–622.
- Lapada, A. A., Miguel, F. F., Robledo, D. A., & Alam, Z. F. (2020). Teachers' COVID-19 awareness, distance learning education experiences, and perceptions toward institutional readiness. *International Journal of Learning, Teaching and Educational Research*, 19(6), 127–144.
- Moorhouse, B. L. (2020). Adaptations to a face-to-face initial teacher education course due to COVID-19. *Journal of Education for Teaching*, 46(4), 609–611.
- Muthuprasad, T., Aiswarya, S., Aditya, K. S., & Jha, G. K. (2021). Students' perception and preference for online education in India during COVID-19 pandemic. *Social Sciences & Humanities Open*, 3(1), 100101.
- Pham, H. H., & Ho, T. T. H. (2020). Toward a 'new normal' with e-learning in Vietnamese higher education during the COVID-19 pandemic. *Higher Education Research & Development*, 39(7), 1327–1331.
- Rapanta, C., Botturi, L., Goodyear, P., Guàrdia, L., & Koole, M. (2021). Online university teaching during and after the COVID-19 crisis. *Postdigital Science and Education*, 3(1), 923–945.
- Toquero, C. M. (2020). Challenges and opportunities for higher education amid the COVID-19 pandemic. *Pedagogical Research*, 5(4), em0063.
- Trust, T., & Whalen, J. (2021). Should teachers be trained in emergency remote teaching? Lessons learned from the COVID-19 pandemic. *Journal of Technology and Teacher Education*, 29(2), 189–199.
- Andoy, M. A., Baluca, J. M., & Jalao, R. M. (2016). Teachers' competencies and their relation to the academic performance of the selected Grade 10 students in MAPEH of San Isidro National High School SY 2015–2016. San Isidro National High School.
- Bandura, A. (1986). *Social foundations of thought and action: A social cognitive theory*. Englewood Cliffs, NJ: Prentice-Hall.
- Gregorio, H. C. (1960). *Principles and methods of teaching: Suggested exercises for study and discussion* (Rev. ed.). Garotech Publishing.
- Smith, J. (2020). *Technology integration in education: Bridging the gap*. Technology and Learning Press. Source.
- Turnbull, D., Chugh, R., & Luck, J. (2020). Learning management systems: An overview. In A. Tatnall (Ed.), *Encyclopedia of Education and Information Technologies* (pp. 1052–1058). Springer.
- UNESCO. (2020). *Education: From disruption to recovery*. United Nations Educational, Scientific and Cultural Organization.