Digital Literacy and Technical Competence: Assessing the Competence and Performance of Senior High School Physical Education Teachers in Online Distance Learning

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Abstract

The transition to online distance learning during the COVID-19 pandemic highlighted the importance of teachers' digital literacy and technical competence for effective virtual instruction. This quantitative study investigated the teaching competence and performance of 61 senior high school Physical Education (PE) teachers from Davao City, Philippines in implementing online learning delivery modalities. Data was collected through a structured questionnaire assessing digital literacy, technical competence, and teaching performance based on the Department of Education's standards for content delivery, pedagogy, and assessment. Results showed that respondents generally agreed on possessing digital literacy skills like utilizing ICT for learning and collaborating online (mean=4.06). However, they exhibited moderate technical competence in video editing and navigating learning management systems (mean=3.97). Regarding teaching performance, respondents were highly proficient in content delivery by establishing aligned goals and acknowledging learners' backgrounds (mean=3.28). They were also highly skilled in pedagogy through clear communication and designing advanced learning experiences (mean=3.31) and in assessment by implementing reliable evaluation methods and providing timely feedback (mean=3.29). The study found significant positive correlations between digital literacy and technical competence with teaching performance in pedagogy and assessment, but not content delivery. These findings suggest that while teachers demonstrate strong content knowledge, enhancing their technological skills could improve virtual pedagogy and assessment strategies. Targeted professional development focusing on emerging technologies and integrating them into instruction is recommended.

Keywords: *Distance Learning, Learning Delivery modes, Teaching competence, Teaching performance, Senior High School*

Introduction

School closures due to the COVID-19 pandemic have affected students, educators, educational organizations, and many other aspects of society globally. According to Adnan and Anwar (2020), academic institutions worldwide adopted a range of approaches and delivery methods to continue educating students. As a result, the ability to access information and instruction anytime and anywhere has contributed to the rising popularity of online distance learning.

The Department of Education (DepEd) in the Philippines issued DepEd Order No. 12 series of 2020 to develop new modalities of learning delivery for all levels. To maintain learning continuity while safeguarding the health, safety, and well-being of all teachers, staff, and other workers, the DepEd Order implemented the Learning Continuity Plan (LCP) for the school year 2020–2021. Accordingly, the Learning Enrollment and Survey Form (LESF) was distributed by DepEd and accomplished before the planned start of the school year. It was discovered that the most practical option for most Filipino students was modular learning, which uses self-learning modules (Govph, 2020). Most teachers, students, and staff in remote areas lacked access to technology, which hindered the DepEd's initiative to fully implement online distance teaching and learning (DepEd, 2020).

Locally, teachers were prepared for the commencement of the school year 2020-2021 under the "new normal" system. Despite obstacles and other concerns with their preparation, they were educated to manage a variety of modalities, such as remote learning. However, there was also a lack of preparation for re-opening public schools in the Davao region. He asserted that postponing the re-opening allowed them more time to prepare as the school year would soon begin in only two months (Llemit, 2020). In the senate panel, an official said that only 300,000 out of the 800,000 (40%) public school teachers nationwide had received training in remote learning (Magsambol, 2020). Furthermore, these teachers could still have digital and technological difficulties, such as a lack of or difficulty obtaining equipment and poor internet connectivity (Llemit, (2020).

Statement of the Problem

This study sought to assess the competence and performance of senior high school Physical Education (PE) teachers utilizing online learning delivery modalities (LDMs). It focused on evaluating their adaptability to online learning, providing valuable insights into potential support strategies. Specifically, the study examined their proficiency in digital literacy and technical skills, which are crucial for effective online instruction. The study examined their performance in content delivery, pedagogy, and student assessment during remote PE classes, analyzed variations based on teacher profiles, explored correlations between competence and performance, and proposed recommendations to improve training and support for online PE teaching. The study assessed the proficiency and effectiveness of the senior high schools PE teachers in Davao City public schools through the following research questions:

1. What is the level of teaching competence in terms of Digital Literacy and Technical Competence?
2. What is the level of teaching performance in terms of content, pedagogy, and assessment?
3. Is there a significant effect on teaching competence and teaching performance?

Hypothesis:

HO_1. There is no indication of a substantial correlation between teaching competency and teaching performance.

Review of Related Studies

Various disciplines and geographical areas have done thorough investigations on the influence of technology on teacher proficiency in the context of online distance learning (Yünkül, 2022). The University of Alberta's Distance Learning Program has researched on the impact of technological advancements on the effectiveness of teaching and learning during the shift from traditional in-person instruction to online distance learning (Branch-Mueller, 2021). The significance of teachers' digital competency, which includes their ability to utilize technology in the classroom ethically and skillfully, is further supported by this study (Falloon, 2020). Furthermore, Vahey and Vanides's study (2020) showed that there are still several barriers to technical and digital skills that provide more suitable learning environments. However, Vasilezhenko (2021) states that putting distance learning into the classroom requires changing the curriculum and creating new methodological resources to explore educators' online learning competencies, particularly when instructing students via online distance learning delivery. Applying these in practical situations might be difficult, as Dias-Trindade (2020) pointed out.

The use of conventional technology for task-oriented and result-oriented instruction during online distance learning is increasingly common for assessing teacher's proficiency in digital literacy and technical skills. Digital literacy encompasses an individual's proficiency to effectively use information technology and the internet to conduct searches, assess credibility, use, distribute, and create material (Walton, 2016). The European Commission (EC) has identified technical competence as one of the eight fundamental talents. Cyber literacy refers to the astute and wise use of digital technology for acquiring information, communicating, and addressing significant issues in many areas of life. According to the EC's 2015 Digital Agenda, inadequate technological proficiency affects 40% of the European Union (EU) population, including 22% of non-Internet users. The Philippine Institute for Development Studies (PIDS) investigated the gaps in digital skills. The findings indicate a deficiency in digital competency among the Filipino populace, with fewer than half of them skilled in at least one of the six tested ICT skills needed to meet the Sustainable Development Goals (Albert, 2021).

Furthermore, Albert (2021) stated that expanding access to ICTs will be possible by enhancing the ICT infrastructure in marginalized communities living in remote and rural locations. The study recommended allocating funds for digital skill development and assessment to ensure Filipinos can effectively use ICTs and their numerous applications. One reason for this is that the education sector faced challenges related to computer availability, high-speed internet, and digital literacy throughout the pandemic. Implementing a "digital inclusion" approach could help underprivileged populations by giving them access to ICT and the necessary skills (Ragnedda & Mutsvairo, 2018). However, Henebery (2015) emphasized that there are conflicts between those who commit to improving education and those who use traditional teaching methods. Education experts should examine problems that could prevent curricular changes. According to recent studies, it is recommended to encourage students to use technology, explore, collaborate, build social connections, and connect their

digital experiences to their academic pursuits. Furthermore, Lisenbee (2016) suggested that technology can benefit educational training.

The Philippines is the most recent nation in Southeast Asia to adopt a new educational system that extends primary education by two more years, providing students with more outstanding possibilities worldwide (Garcia et al., 2020). The 2013 Enhanced Basic Education Act (Republic Act 10533), which the Philippine Congress enacted, brought about this upgraded educational system. The Department of Education then implemented it with DepEd Order 31 s—2012, which set up a 13-year basic education transition that students must complete to graduate from high school. Physical Education teachers would teach Physical Education as one of the subjects included in the Basic Education Curriculum of senior high school from Grades 11 and 12. Araujo et al. (2016) stated that less than three years of experience impacts teachers' ability to impart knowledge. As a result, it is crucial to assess their performance to identify their training quality and degree of competence in accomplishing the intended competencies in all instructional strands. It would serve as the foundation for developing teacher development plans and forming the necessary interventions to help teachers reach the expected level.

Following the Philippine Professional Standards for Teachers (PPST), DepEd created the Results-Based Performance Management System (RPMS) to systematically review, monitor, and track teachers' performance. The necessary abilities and skills for qualified teachers are outlined in the PPST. Moreover, Philippine educational institutions and organizations have worked together to create and verify the RPMS-PPST instruments used to measure and track teachers' performance (DepEd, 2018).

In summary, several educational institutions are incorporating digital technology into physical classrooms. However, the proficiency and effectiveness of senior high school teachers in using online distance learning delivery create a significant obstacle for their students, mainly due to the traditional learning setting (Bandalaria, 2007). Moreover, the Philippines is behind developed countries in ICT affordability, accessibility, inclusivity of educational technology curriculum, innovation, implementation, and evaluation (Acosta, 2016). The study's results are expected to contribute to a thorough knowledge of teachers' competence and performance for the educational system to succeed.

Theoretical Framework

The study employed the framework of pedagogical content knowledge (Shulman, 1986) and the paradigm of technology-pedagogical content knowledge (TPACK) which aimed to investigate the organization, transformation, and presentation of subject matter for teaching purposes (Mishra & Koehler, 2006). Furthermore, the TPACK framework built upon Shulman's characterization of teacher knowledge from 1986 by including the importance of technology knowledge in successful teaching.

The TPACK paradigm asserts that teachers must profoundly comprehend each piece of knowledge mentioned above to effectively integrate and synchronize

technology, pedagogy, and content in their teaching. The TPACK framework is a complex, evolving knowledge that surpasses individual understanding of subject, pedagogy, and technology as it resides within a dynamic and interactive interaction.

Methodology

Research Design and Participants

This research investigated the effectiveness and competence of physical education (PE) teachers in online distance learning. The investigation focused on the demographic characteristics of the teachers teaching PE to grades 11 or 12 students, including their age, specialization, teaching experience, and highest degree of education. The study used a quantitative research approach to gather data. A total of sixty-one (61) Davao City PE teachers were included in the research. The participants must teach physical education subjects during the data collection process, which was gathered using a simple random sampling approach.

Ethical Considerations

This investigation was carried out following the specified guidelines. Before commencing the study, the researcher explicitly informed the respondents that their participation was entirely optional and would be kept anonymous. Participation in the research was restricted to responders who agreed and signed the informed consent form.

Instrument and Data Collection

The main instrument for collecting data was a structured questionnaire with scales modified from earlier instruments that had been verified. Teacher profiles, including years of experience, years of education, and age, were gathered in the first section. In the next section, participants were asked to indicate whether online distance learning modalities—online, modular, television/radio-based, or blended—were used at their institution.

Two items were included in the teaching competency section: a 10-item technical competence scale from Penn State University and a 10-item digital literacy scale developed by Ng (2012). Both made use of 5-point Likert scales with the options "never" to "always" for technical skill and "strongly disagree" to "strongly agree" for digital literacy.

The National Competency-Based Teacher Standards framework (2018) from DepEd included 28 questions to assess teaching effectiveness. These items covered content delivery (7 items), pedagogy (12 items), and assessment (9 items). The five points on the scale went from "below basic" to "highly proficient."

Experts verified the tool to ensure content validity and authenticity. Cronbach's alpha for technical competence was 0.892. For digital literacy it was 0.886; and for instructional performance, it was 0.991, according to a reliability study

conducted during pilot testing. Over a month, Google Forms questionnaires were sent to the instructors. Respondents were made aware of their anonymity and confidentiality.

Data Analysis

The data collected was analyzed using IBM SPSS v26. Descriptive statistics including frequency, percentage, mean, and standard deviation were used to characterize profiles, competence, and performance levels. The Analysis of Variance (ANOVA) analysis revealed substantial differences in competence levels when participants were categorized based on teacher variables such as age, educational degree, and experience. The Pearson correlation analysis revealed associations between competency and performance measurements. The survey results yielded quantitative findings that offered a comprehensive assessment of PE teachers' competence, performance, and correlations.

Results and Discussions

On the demographic profile of the respondents

Table 1 presents the characteristics of the participants, including their age, field of expertise, length of teaching experience, and highest level of education achieved.

Table 1
Profile of the respondents

Profile	Category	*f*	%
Age	18-24 years old	20	32.8
	25-38 years old	36	59.0
	39 years old and above	5	8.2
Specialization	PE	28	45.9
	Non-PE	33	54.1
Teaching Experience	0-5 years	31	50.8
	6-10 years	10	16.4
	11-15 years	8	13.1
	More than 15 years	12	19.7
Educational Highest Attainment	BA/BS Degree	47	77.0
	MA/MS Degree	12	19.7
	EdD/PhD Degree	2	3.3

As observed in Table 1, the majority of senior high school teachers in Davao City DepEd schools who took part in the survey were between the ages of 28 and 43. According to TechTarget (2021), these ages are technologically competent in creating online activities and worksheets and are open to embracing new technologies. They are comfortable and effective in creating activities and worksheets online.

In terms of specialization, data revealed that only 28 or 45.9% of respondents have a degree in physical education and allied fields. In comparison, about 33 or 54.1% of the respondents did not specialize in physical education. Therefore, these teachers need to adapt to the new modality and the subject. Aguinaldo (2021) asserted that during online distance education, the curriculum redefined and reduced the performance and practical skills necessary for delivering effective PE classes. This result followed the findings of Daum and Buschner (2014) in which a considerable number of distance PE teachers from senior high schools redesigned the PE curriculum to focus on philosophical and core components in delivering the PE subject using the chosen learning delivery mode. Thus, the result showed that teachers had to focus more on the fundamental aspects of physical education since physical interaction is temporarily restricted.

Moreover, most participants have 0-5 years of teaching experience (31 or 50.8%) as a result of the senior high school program's first implementation in S.Y 2016–2017 under the requirements of the Enhanced Basic Education Act of 2013 (RA 10533). Most participants (77.0%) have obtained a bachelor's degree as their highest level of education, while 19.7% have a master's degree. Only (3.3%) of teachers have a doctoral degree. The results indicated that a bachelor's degree in education is the minimum required for senior high school teaching.

Level of Teaching Competence

Table 2 presents the mean and the corresponding interpretation of the level of teaching competence in terms of digital literacy. The section presents the mean rating distribution of the level of teaching competence in terms of digital literacy and technical competence, which are presented in the following tables. The frequency of the respondents who rated each teaching competence indicator for Digital Literacy with SA (Strongly Agree), A (Agree), N (Neutral), D (Disagree), or SD (Strongly Disagree) and the description Rating Scale (Appendices p.111). Technical Competence with A (Always), O (Often), S (Sometimes), R (Rarely), or N (Never). Furthermore, each indication has a verbal interpretation to see how they influence teaching competence's overall mean rating distribution.

Table 2
Level of Teaching Competence in terms of Digital Literacy

Indicators	Mean	Verbal Interpretation
Acquire the knowledge and skills necessary to resolve my issues with digital literacy	4.11	Agree
Have the ability to rapidly acquire proficiency in emerging technologies	4.18	Agree
Stay updated with essential emerging technology	4.31	Strongly Agree

Indicators	Mean	Verbal Interpretation
Possess a deep understanding of various technologies	3.77	Agree
Digitally literate, able to utilize ICT for learning and produce artifacts that show my grasp of the material being studied	3.97	Agree
Possess proficient ICT and digital literacy abilities	3.84	Agree
Proficient at using search and evaluation abilities to get information from the Internet	4.02	Agree
Proficient in matters pertaining to web-based activities, such as cyber safety, search concerns, and plagiarism	4.03	Agree
Digital proficiency will enhance collaboration with colleagues on projects and other educational endeavors	4.31	Strongly Agree
Regularly seek assistance for academic tasks from online acquaintances, such as via platforms like Skype, Facebook, and blogs	4.08	Agree
General Mean	4.06	Agree

Range

4.20 – 5.00 = Strongly Agree *1.80 – 2.59 = Disagree* *2.60 – 3.39 = Neutral*

3.40 – 4.19 = Agree *1.00 – 1.79 = Strongly Disagree*

As presented in Table 2, the respondents generally "Agree" with most indicators related to digital literacy competence. They agreed on acquiring the necessary skills, understanding technologies, utilizing ICT for learning, proficiency in web-based activities, and working effectively with others using digital tools. The overall mean of 4.06 suggests a relatively high level of digital literacy competence. These findings align with Pettersson's (2018) components of digital competence, including technical skills and cognitive abilities, as well as the European Framework for the Digital Competence of Educators (Redecker & Punie, 2017) which emphasizes proficiency in areas like digital resources and facilitating learners' digital competence.

In an interview with SunStar Davao during the Kolokabildo 2020 virtual forum of the Holy Cross of Davao College Mass Communication Program, DepEd-Davao Regional Assistant Supervisor for Action Emma Camporedondo emphasized that "*They have done training for teachers on learning management systems as well as Microsoft Software*" (Llemit, 2020). Thus, these numerous training sessions could provide teachers with basic knowledge of various software skills.

However, the respondents had relatively lower mean scores for indicators like possessing a deep understanding of various technologies (3.77) and having proficient ICT abilities (3.84). Instefjord and Munthe (2017) emphasize the importance of continuing professional development in order to stay updated

with technological advancements. In addition, although the participants have a relatively high level of digital literacy skills, specific professional development and training initiatives could assist them in keeping current on emerging technologies and enhancing their comprehension and expertise in different digital tools and resources.

Table 3
Level of Teaching Competence in terms of Technical Competence

Indicators	Mean	Verbal Interpretation
Possess proficiency in performing fundamental computer tasks	4.49	Always
Proficient in navigating the learning management system	3.90	Often
Ability to form teams or groups using the learning management system's course roster	3.66	Often
Capable of using web-based collaboration tools	4.21	Always
Proficient in video creation and editing	3.69	Often
Able to exchange publicly available learning materials	3.95	Often
Able to use the tools and online help desk for support	3.89	Often
General Mean	**3.97**	**Often**

Range

4.20 – 5.00 = Always *2.60 – 3.39 = Sometimes* *1.00 – 1.79 = Never*

3.40 – 4.19 = Often *1.80 – 2.59 = Rarely*

According to Table 3, respondents who chose "Always" are proficient in both fundamental computer activities (4.49) and web-based collaborative tools (4.21). This supports the findings of Pettersson (2018) showing more technologically proficient teachers. A moderate level of skill is indicated by the mean scores on other criteria, which fall into the "Often" group. The capacity to interact with the learning management system (3.90), trade publicly available learning resources (3.95), form teams or groups using the course roster (3.66), make and edit films (3.69), and use the tools and online help desk (3.89). As such, the average mean score of 3.97, which indicates modest technical competence, represents the "Often" category. Data analysis suggests that the PE teachers are computer literate and have access to DepEd collaboration tools. The nation's technological expansion and the computerization of education have been driven by teachers' enhanced technical proficiency acquired through webinar seminars and training sessions.

However, they could become more tech-savvy by utilizing learning management systems, video editing software, and online help tools. It can be possible to improve their technical competency by offering them targeted training or professional development in certain areas. Potential obstacles to teachers'

technical competence in these domains should also be investigated.

On the Level of Teaching Performance

The information covers the content, pedagogy, and assessment mean rating distribution for the Teaching Performance level. The mean rating distributions of various levels of teaching performance in terms of content, pedagogy, and assessment are presented in Table 4. The frequency of the respondents who rated each teaching performance with Highly Proficient (HP), Proficient (P), Basic (B), or Below Basic (BB), Furthermore, each indication has a verbal interpretation to see how they influence teaching performance overall mean rating distribution.

Table 4
Level of Teaching Performance in terms of Content

Indicators	Mean	Verbal Interpretation
Establish goals that align with the learners' experiences and abilities	3.26	Highly Proficient
Employ diverse designs, methodologies, and exercises that catered to the many types of learners	3.21	Proficient
Systematic instruction tailored to the specific requirements and challenges of learners	3.28	Highly Proficient
Implement suitable intervention strategies for learners who are at a higher risk of academic challenges	3.16	Proficient
Acknowledge the many cultural backgrounds of learners while offering learning opportunities	3.28	Highly Proficient
Execute strategies to meet the needs of students with limitations	3.34	Highly Proficient
Exhibit objectivity and care for all students, regardless of their socioeconomic background	3.44	Highly Proficient
General Mean	**3.28**	**Highly Proficient**

Range

3.25 – 4.00 = Highly Proficient *1.75 – 2.49 = Basic*

2.50 – 3.24 = Proficient *1.00 – 1.74 = Below Basic*

According to Table 4, most content knowledge factors about teaching performance show that the respondents are "Highly proficient" overall. As per Shulman's (1986) definition of pedagogical subject knowledge, the high ratings in areas like adapting instruction, acknowledging cultural backgrounds, and catering to various learners imply great content understanding and ability to adjust teaching. These results are also consistent with differentiated instruction (Tomlinson, 2001) and culturally responsive teaching (Gay, 2018). However, using a variety of approaches and implementing interventions for at-risk learners,

the teachers' mean ratings were somewhat lower (3.16, though still proficient). This aligns with the conclusions drawn by Hill et al. (2005), who observed that teachers often struggle to adapt classes and provide targeted interventions while possessing an extensive understanding of the subject matter.

Darling-Hammond et al. (2020) propose enhancing teaching through professional development focused on differentiated instruction, culturally relevant pedagogy, and interventions for struggling learners. By incorporating the TPACK framework (Koehler et al., 2013), physical education teachers can create goals that align with learners' experiences and effectively utilize technology and other instructional approaches. TPACK and focused professional development can enhance educators' comprehension of the subject matter and improve their teaching effectiveness. By incorporating the solutions proposed by students at risk of falling behind academically, teachers can enhance their teaching methods and promote better student learning outcomes.

Table 5
Level of Teaching Performance in terms of Pedagogy

Indicators	Mean	Verbal Interpretation
Provide precise and up-to-date information utilizing suitable procedures, tactics, and strategies	3.30	Highly Proficient
Implement the integration of language, literacy, numeracy skills, and values in the educational process	3.28	Highly Proficient
Effectively communicated learning objectives, instructional methodologies, and subject matter with clarity and precision to students	3.38	Highly Proficient
Establish a connection between the present subject and previous and upcoming classes	3.28	Highly Proficient
Ensure that the lesson goals, teaching techniques, learning activities, and instructional materials or resources are appropriately matched to the learners	3.36	Highly Proficient
Design learning experiences that promote the use of advanced cognitive abilities by learners, using the native language, if necessary	3.36	Highly Proficient
Captivate and maintained learners' attention by ensuring the information was significant and relevant to their needs	3.34	Highly Proficient
Incorporate academic literature and concepts to enhance the lesson	3.28	Highly Proficient
Create systematic and standardized protocols to optimize the use of teaching time	3.30	Highly Proficient

Indicators	Mean	Verbal Interpretation
Choose, organize, and use suitable technology and instructional resources appropriate for the learners and the learning goals	3.28	Highly Proficient
Offer suitable educational assignments, portfolios, and projects that facilitate the development of effective study routines	3.28	Highly Proficient
Use Information and Communication Technology (ICT) resources to strategize and create teaching-learning activities	3.26	Highly Proficient
General Mean	**3.31**	**Highly Proficient**

Range

3.25 – 4.00 = Highly Proficient *1.75 – 2.49 = Basic*

2.50 – 3.24 = Proficient *1.00 – 1.74 = Below Basic*

The teacher has demonstrated a proficient mastery of pedagogical performance on modular distance learning, as seen by the overall mean of 3.31. It was adequately delivered across all significant responsibility areas, which consistently exceeded performance.

Table 6
Level of Teaching Performance in terms of Assessment

Indicators	Mean	Verbal Interpretation
Design and implement formative and summative assessments that were both accurate and dependable	3.28	Highly Proficient
Implement suitable alternative evaluation methods such as portfolios, notebooks, and rubrics	3.30	Highly Proficient
Analyze and use test outcomes to enhance pedagogy and educational outcomes	3.25	Highly Proficient
Assess educational challenges and any underlying factors	3.28	Highly Proficient
Supervise and organize educational interventions to address learning difficulties	3.18	Proficient
Utilize methodologies for evaluating substantial learning	3.34	Highly Proficient
Deliver prompt and precise feedback to learners, fostering their ability to assess and contemplate their own progress in learning	3.31	Highly Proficient
Maintain precise documentation of learners' grades and performance levels	3.39	Highly Proficient

Indicators	Mean	Verbal Interpretation
Organize regular meetings with students and parents to provide updates on students' academic progress	3.28	Highly Proficient
General Mean	**3.29**	**Highly Proficient**

Range

3.25 – 4.00 = Highly Proficient *1.75 – 2.49 = Basic*

2.50 – 3.24 = Proficient *1.00 – 1.74 = Below Basic*

Table 6 presents the level of teaching performance in terms of assessment. The data revealed that the highest weight mean (3.39) showed that the teachers were driven enough to monitor and document the student performance outcomes to have a complete record and evaluation of each student. The overall mean (3.29) showed that teachers had exceedingly accomplished and contributed to students' assessment and feedback by providing appropriate tools for assessing authentic learning evaluation for students to keep track of their student's performance levels. This indicated that the teacher consistently exceeds performance in terms of assessment.

Effects of Teaching Competence on Teaching Performance

The data presents the impact of teaching competence in terms of digital literacy and technical competence on teaching performance in terms of content, pedagogy, and assessment using a Pearson correlation, indicating whether there is any significant relationship between teaching competence and teaching performance.

Table 7
Significant effect on teaching competence and teaching performance

Competence	Performance	*r-value*	*p-value*	Conclusion	Decision
Digital Literacy	Content	0.226	0.080	Not Significant	Accept H_o
	Pedagogy	0.362	0.004	Significant	Reject H_o
	Assessment	0.341	0.007	Significant	Reject H_o
Technical Competence	Content	0.247	0.055	Not Significant	Accept H_o
	Pedagogy	0.294	0.022	Significant	Reject H_o
	Assessment	0.318	0.012	Significant	Reject H_o

***p<0.00 *p>0.05*

Table 7 reveals the correlation coefficient values between teaching competence

and teaching performance. In both aspects of competence, digital literacy, and technical competence, data showed no significant difference between teaching competence and teaching performance in terms of content (p= 0.080 and p=0.055, respectively).

However, when pedagogy and assessment were considered, the data in Table 7 demonstrate a significant correlation between teaching skills and teaching performance. The relationship between digital literacy and pedagogy was substantial and positive ($r=0.362$, $p<0.05$). Similarly, digital literacy and assessment had a strong and positive correlation ($r=0.341$, $p<0.05$). There were consistent findings indicating a positive correlation between technical competence and pedagogy ($r=0.294$, $p<0.05$) as well as evaluation ($r=0.318$, $p<0.05$). This implies digital and technical skills enable proficient teaching strategies and student evaluations in the online setting.

Moreover, enhanced comprehension, discovery, utilization, and generation of knowledge using digital technologies correlate with senior high teachers' proficiency in utilizing fundamental computer functions in their teaching practices. Teachers need to demonstrate various technologies necessary for pedagogy and assessment effectively. The result correlated in Table 1, which shows that most respondents between 25-38 years old were competent in digital and technical skills. This suggests that teachers who possess a higher level of technical proficiency are more adept at using computer technology to offer teaching and evaluate online learning.

Conclusions

This research evaluated the competence and performance of Physical Education senior high school teachers utilizing online distance learning during the COVID-19 pandemic in Davao City.

The study concluded that the senior high school PE teachers in Davao City generally possessed a relatively high level of digital literacy competence, agreeing on indicators related to acquiring necessary skills, understanding technologies, utilizing ICT for learning, and working effectively with digital tools. However, continuous professional development is needed to deepen their understanding and proficiency in various technologies. Regarding technical competence, the teachers exhibited proficiency in performing fundamental computer tasks and using web-based collaboration tools. Still, their competence was moderate in areas like navigating learning management systems, video creation and editing, and leveraging online resources and support tools.

In terms of teaching performance, the teachers demonstrated highly proficient performance in content knowledge, exhibiting strengths in tailoring instruction, acknowledging cultural backgrounds, and catering to diverse learners, although further development is needed in implementing interventions for at-risk learners and employing diverse methodologies. The teachers performed exceptionally well in terms of pedagogy, effectively conveying learning objectives, adapting instructional methods to the requirements of students, and effectively employing resources and technology. Additionally, the teachers demonstrated exceptional

proficiency in formative and summative assessment design and implementation, alternate assessment techniques utilization, feedback provision, and accurate student performance documentation.

Moreover, the study discovered that teaching performance in pedagogy and evaluation positively correlated with digital literacy. Similarly, technical competence also correlated favorably with pedagogy and assessments. However, teaching competency and content knowledge performance were not significantly correlated. Although the teachers had good technical proficiency and digital literacy, they might still benefit from focused professional development to improve their proficiency in particular areas. Furthermore, their pedagogical practices and assessment tactics in the online learning environment were clearly influenced by their digital literacy and technical competence, demonstrating their highly proficient teaching performance in content, pedagogy, and assessment.

Recommendations

Based on the findings, the following are recommended.

1. Establish inclusive and extensive professional development initiatives to improve teachers' digital literacy and technical competence. Prioritize areas of improvement, such as proficiency in navigating learning management systems, video editing, and effectively utilizing online resources and support tools.

2. Offer focused instruction on using a variety of teaching approaches, customizing how content is delivered to meet the needs of various learning styles, and putting in place efficient intervention plans for students who are struggling or academically at risk.

3. Encourage teachers to collaborate through professional learning communities, mentoring programs, and peer observation to share their digital tools for online teaching and learning best practices and partner with educational technology providers and researchers.

4. Future researchers must conduct similar studies using a larger population and different levels of competencies, including SUCs, CHED, and TESDA teaching Physical Education subjects.

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