

Secondary School Educators' Awareness, Perceived Skills, And Their Performance Towards Change In Educational Trends

Princess M. Zaide

zaideprincess@gmail.com

Secondary Teacher, Masapang Integrated National High School, Victoria 4011 Laguna, Philippines

Abstract

The study aimed to determine the secondary school educators' awareness, perceived skills, and their performance towards change in Educational Trends in the Division of Laguna. The presentation and discussion of the significant findings followed the order of the production of the problem statement. It was utilized with the thirteen (13) secondary schools and three hundred (300) teachers from public secondary schools in the province of Laguna were requested to serve as the study's respondents.

The gathered data was statistically computed and analyzed using the mean, standard deviation, and regression formulas in describing the direction of relationship between the given and among the foregoing variables respectively, as basis for the empirical testing of null hypotheses at a specified percentage level of significance in order to come up into valid analyses and interpretation of the findings as basis for reliable conclusions and feasible recommendations. The teachers' level of awareness was interpreted as Aware; and Sub-variables were interpreted as Highly Aware. Whereas teachers' perceived skills interpreted as Skillful; while Sub – variables interpreted as Very Skillful. The teachers' performance was interpreted as Highly Practiced and sub-variable was interpreted as Practiced. On the relationship of variables between teachers' awareness of the components of Educational Trends and teachers' performance show a moderate but significant relationship. The relationship of variables between teachers' perceived skills and teachers' performance shows a strong and significant relationship except on instructional delivery which shows a moderate but significant relationship, thus the hypothesis was rejected.

Keywords: Educational Trends; Educators' Awareness; Perceived Skills; Teachers Performance

1. Main Text

Introduction

The new education system is expected to provide services, and the processes should be built on success in life. According to Schwab (2016), the evolution of technologies has influenced the education sector through time and has to be studied and analyzed. Determine their varied impacts on the services and processes catered by education. Hence, pedagogy, teaching philosophies, educational models, information sources, learning methods, and students' and educators' roles have been included in the conceptualization. Therefore, educational innovation projects have emerged to achieve current educational challenges (Luo et al., 2020). Unfortunately, situations in the Philippines and its educational system are still in the process of strengthening the implementation of digitization. In the words of Alda (2020), administrators and faculty members today perceived that they were ready regarding their skills in selecting and integrating digital resources for teaching and learning. They are also given capacity building through seminars and conferences related to technological literacy.

Guided by the above arguments, this study was conceptualized to determine the secondary educators' awareness, perceived skills, and their performance toward change for Educational Trends. With these data at hand, it can provide first-hand data concerning the state of secondary school educators' preparedness in embracing the current development brought about by Industry 4.0. Likewise, the expected data from this study may also be used as a guidepost for education administrators in planning appropriate programs to train educators and get them equipped with the necessary skills demanded by the era, particularly in the province of Laguna.

Statement of the Problem

The study aims to determine the secondary school educators' awareness, perceived skills, and their performance toward change in Educational Trends in the Division of Laguna. Specifically, it will attempt to answer the following problems:

1. What is the level of the Teachers Awareness with regards to:
 - 1.1 Internet of things;
 - 1.2 Internet of data;
 - 1.3 Internet of services; and
 - 1.4 Internet of people?
2. What is the level of Teachers Perceived Skills in terms of:
 - 2.1 Accountability;
 - 2.2 Communication;
 - 2.3 Collaboration;
 - 2.4 Critical thinking;
 - 2.5 Creativity and Innovativeness;
 - 2.6 Decision-making;
 - 2.7 Problem-solving; and
 - 2.8 Managing change?
3. What is the level of Teachers' Performance relative to:
 - 3.1 Teaching Strategies;
 - 3.2 Monitoring Assessment;
 - 3.3 Instructional Delivery;
 - 3.4 Extension Research; and
 - 3.5 Professional Development?
4. Do the Teacher's Awareness have significant relationship to the teachers' performance in selected Secondary Schools in the Division of Laguna?
5. Do the Teachers' Perceived Skills have significant relationship to the teachers' performance in selected Secondary Schools in the Division of Laguna?

Review of Related Literature

According to Shwab (2016), the 4IR is beyond the enhancement of the 3IR, in which the advancement of new technologies blurs the lines between the physical, digital, and biological worlds. In the Fourth Industrial Revolution (4IR), new technologies evolved exponentially, and no historical precedent marked the beginning of the evolution, hence being called disruptive technologies. These advancements are led by the emergence of artificial intelligence, robotics, the internet of things, autonomous vehicles, bio and nanotechnology, 3-D printing, material science, quantum computing, and energy storage. The IR 4.0 affects not only business, governance, and the people but also education.

As a rejoinder to the initial ideas, Dimkpa (2015) has the opinion that 21st century refers to specific core competencies such as collaboration, digital literacy, critical thinking, and problem-solving that advocate and believes that schools need to teach to help students thrive in today's world (Mustapha, 2012). 21st-century learning also means hearkening to cornerstones of the past to help navigate our future (Wessling, 2015). The teacher's performances are the most significant contribution to the educational process; whatever policies he may lay down, eventually, the teacher has to interpret and implement these policies through the teaching-learning process. The term covers the effect or conduct of instruction, like achievement or personal growth, and not teacher characteristics. Instead, teachers' performance is apprehensive, with progress rather than product variables (Taylor, 2012).

Methodology

This study used the descriptive–quantitative research method being the most commonly used method in educational research. This method is preferred because it is objective in data collection, quantifies variables, and describes phenomena using numbers to characterize them. Saunders et al. (2008) assert that concepts, variables, and hypotheses are chosen before the study begins and remain fixed throughout the study in a static design. Simple random sampling technique was used in the selection of the respondents. Data were gathered from 13 secondary school and 300 teachers from Cluster 6 of the Department of Education (DepEd), Division of Laguna. Survey questionnaire with four – point scale checklist was adopted and used to gather data.

The data gathering instrument is the questionnaire the researcher constructed based on related literature survey. The completed questionnaire underwent validation and reliability test by processing the questionnaire through Cronbach's reliability test available in SPSS. Then, the researcher used both descriptive and inferential statistics to highlight the educators' awareness, perceived skills, and their performance for Educational Trends and it relate on school performance. The descriptive statistics include the frequency count, standard deviation, and weighted mean. The inferential statistics was done using the Regression Analysis to determine the relationship between the variables.

Result and Discussion

Table 1. Summary of Teachers' Level of Awareness on the Components of Educational Trends - the Internet of Things

Table 1 illustrated the general observation of the data suggests that the overall mean (M-3.31; SD – 0.52) has a verbal interpretation of High. As reflected in Table 1, every mean gained by each indicator varies from one another but shares common remarks of Aware. This suggests that teachers' awareness of the existence, operation, and use of Internet of Things (IoT) technologies proved that they are trying to keep themselves abreast with the technological development that could help them improve their daily life in the classroom.

Internet of Things means ...	Mean	Standard Deviation	Remarks
...anything can be interconnected with the global information and communication infrastructure.	3.32	0.47	Aware
...it is capable of providing thing-related services within the constraints of things, such as privacy protection and semantic consistency between physical things and their associated virtual things.	3.39	0.49	Aware

...the devices in the IoT are heterogeneous and based on different hardware platforms and networks and can interact with other devices or service platforms through various networks.	3.19	0.47	Aware
...the state of devices changes dynamically, such as sleeping and waking up, connected and/or disconnected, as well as the context of devices, including location and speed.	3.28	0.60	Aware
...connectivity enables network accessibility and compatibility. Accessibility is getting on a network, while compatibility provides the standard ability to consume and produce data.	3.37	0.56	Aware
Weighted Mean		3.31	
SD		0.52	
Verbal Interpretation		High	

Table 2. Summary of Teachers' Level of Awareness on the Components of Educational Trends - Internet of Services

Internet of services means...	Mean	Standard Deviation	Remarks
...all services needed can be speedily accessed through the internet.	3.52	0.50	Highly Aware
...an internet service must be consistent with its services and should have minimal downtime	3.51	0.57	Highly Aware
...having an excellent technical support line and proactive service staff will ease all your worries related to your internet connection.	3.69	0.46	Highly Aware
...in a country that's driven by value, the cost is something we all closely relate with	3.50	0.50	Highly Aware
...seamless on-the-go service in a one-stop destination eases all your account management needs.	3.59	0.49	Highly Aware
Weighted Mean		3.56	
SD		0.51	
Verbal Interpretation		Very High	

Table 2 illustrated the preliminary appreciation of the data showed a mean (M – 3.56; SD – 0.51) with a verbal interpretation of very high. This proved that teachers are mindful and sensitive to the opportunities and benefits of internet services. The above finding is supplemented by the means derived from each. Although the mean varies, it is almost close to one another and is uniformly interpreted as Highly Aware.

Table 3. Summary of Teachers' Level of Awareness on the Components of Educational Trends - Internet of Data

Initial observation of the data in Table 3 showed that the overall mean (M- 3.37; SD- 0.53) is verbally interpreted as High. This means that teachers possess high consciousness of the existence of data

resources via the internet, which could be utilized in favor of upgrading classroom teaching and learning.

Internet of services means...	Mean	Standard Deviation	Remarks
...the user has the power and flexibility to sort and access your web-based data in any way you choose using powerful generic search abilities.	3.48	0.50	Highly Aware
...sophisticated online control provide different data views to your employees, clients, and suppliers. Control who can edit, add or delete data based on your company's rules	3.41	0.56	Highly Aware
...web pages generated are tried and tested, giving you the reliability of a product coupled with the flexibility of a bespoke system.	3.34	0.55	Aware
...as a fully managed solution, there is no need to worry about data backups as they are included under your support contract.	3.34	0.50	Aware
...as we employ rapid application development (RAD) techniques, your database can be aligned to your everchanging business cost-effectively and frequently.	3.30	0.53	Aware
Weighted Mean		3.37	
SD		0.53	
Verbal Interpretation		High	

Table 4. Summary of Teachers' Level of Awareness on the Components of Educational - Internet of People

Internet of people	Mean	Standard Deviation	Remarks
...forms a network of collective intelligence and stimulates interactive communication among our digital selves through digital devices, the internet, and sharing of data	3.39	0.49	Aware
...is the digitalization of relationships between people	3.37	0.48	Aware
...is the collection, processing, and application of personal data.	3.52	0.50	Highly Aware
...is the connectivity and sharing of digital selves enable improved and more personalized predictive and participatory relationships for the individual, a group, or the population in general.	3.42	0.49	Highly Aware
...is a powerful tool for deeper interactions among individuals in the cloud.	3.35	0.55	Aware
Weighted Mean		3.41	
SD		0.51	
Verbal Interpretation		Very High	

Table 4 showed the overall mean (M=3.41; SD= 0.51) is verbally interpreted as Very High. This means that teachers are keen on the digitalization of relationships among people. Other indicators, such as Indicators 1, 2, and 5, almost generated similar means and are verbally interpreted as Aware. Overall, the teachers manifest a high level of awareness, meaning they keep abreast with technology development that can affect education and their daily lives.

Table 5. Summary of the Level of Teachers' Perceived Skills for Educational Trends on Accountability

STATEMENTS	Mean	Standard Deviation	Remarks
I have the technical knowledge to screen and apply the best knowledge available to regulate the benefits and hazards of technology.	3.28	0.53	Skillful
As a public official, I know what data is available and what is missing.	3.41	0.56	Very Skillful
To sustain the Fourth Industrial Revolution, I can create effective interfaces and channels with public officials for public input, early warnings, data, and collaboration.	3.27	0.65	Skillful
I am familiar with oversight and rules for the Fourth Industrial Revolution, which was the product of collaboration between officials, businesses, and the public, to gather information, share best practices, and stop harmful effects.	3.19	0.73	Skillful
As a public official, I must maintain a constant sense of curiosity alongside a clear sense of the role of government in setting standards and ensuring public safety.	3.38	0.62	Skillful
Weighted Mean		3.30	
SD		0.63	
Verbal Interpretation		Skillful	

Table 5 manifested the overall mean (M=3.30; SD= 0.63) with the verbal Interpretation of Skillful. Further observation of the data from the means of the indicators under this sub-variable showed that only one indicator - Indicator No. 2, registered a mean (M=3.41, SD=0.56) and was verbally interpreted as Very Skillful. The remaining variables shared similar means and were verbally interpreted as Skillful. This is followed by Indicator No. 5 with a mean score (M= 3.38, SD=0.62). On the other hand, the Indicator No. 4 received the lowest mean score of responses with (M= 3.19, SD=0.73). This means that the teachers know their accountability and responsibility for their students and his/her learning progress.

Table 6. Summary of the Level of Teachers' Perceived Skills in Educational Trends based on Communication

Table 6 suggested that the teachers' perceived skills in Educational Trends based on communication earned a mean (M= 3.40; SD= 0.62) verbally interpreted as Very Skillful. This means that teachers believe that they can communicate in the language of the 21st century very skillfully. In support of this belief, Indicator 2 registered the highest mean (M=3.46, SD=0.57) and was verbally interpreted as Very Skillful. Likewise, Indicator No 3 earned a mean (M= 3.45, SD=0.65) and was verbally interpreted as Very Skillful. On the other

hand, the Indicator No 4 received the lowest mean score of responses with (M=3.33, SD=0.61) yet was also remarked Very Skillful. Though the rest of the indicators were rated variedly and earned various means, there is only a slight difference in points.

STATEMENTS	Mean	Standard Deviation	Remarks
I can present information and express ideas clearly and effectively through written and oral modes.	3.33	0.61	Skillful
I can listen and respond to the ideas of other people actively.	3.46	0.57	Very Skillful
I can communicate with people of different cultures.	3.45	0.65	Very Skillful
I make a clear presentation confidently and appropriately to the audience.	3.36	0.62	Skillful
I can use technology in presentation	3.39	0.63	Skillful
Weighted Mean		3.40	
SD		0.62	
Verbal Interpretation		Very Skillful	

Table 7. Summary of the Level of Teachers' Perceived Skills in Educational Trends based on Collaboration

STATEMENTS	Mean	Standard Deviation	Remarks
I keep communication open and never withhold information necessary to carry out tasks.	3.23	0.55	Skillful
I strive to reach a consensus about goals and methods for completing projects or tasks.	3.46	0.57	Very Skillful
I place group goals above personal satisfaction and/or recognition, especially if I am the leader.	3.25	0.56	Skillful
I offer recognition of the contributions of others on our team, giving credit where credit is due	3.20	0.68	Skillful
I identify obstacles and address problems cooperatively as they occur.	3.29	0.53	Skillful
Weighted Mean		3.29	
SD		0.59	
Verbal Interpretation		Skillful	

Preliminary observation of the data in Table 7 above showed the overall mean earned by the sub-variable – Collaboration is (M- 3.29; SD – 0.59) verbally interpreted as Skillful. This means that teachers believed that they were skillful in assuming collaborative tasks. This claim is reinforced by Indicator No. 2 which earned the highest mean (M=3.46, SD=0.57) was interpreted as Very Skillful. This is followed Indicator No. 5 with a mean score (M=3.29, SD=0.53) On the other hand, Indicator No. 4 received the lowest mean score of responses with (M=3.20, SD=0.68). These four indicators gained various means between (M- 3.20 – 3.29; SDs – 0.53 – 0.68) and shared similar verbal interpretations of Skillful).

Table 8. Summary of the Level of Teachers' Perceived Skills in Educational Trends based on Critical Thinking

Based on initial observation in Table 8, the overall mean (M- 3.35; SD- 0.59) verbally interprets

Skillful. This means that teachers are claiming that they are skillful critical thinkers. This finding is supplemented by the means generated by every indicator, which Indicator No. 1 earned the highest mean ($M=3.45$, $SD=0.57$) and was verbally interpreted as Very Skillful. This proved the claim that teachers must evaluate all aspects of the issue before deciding. The other remaining indicators have various means ($M = 3.29 - 3.35$; $SDs = 0.55- 0.62$), but all shared a common verbal interpretation of Skillful. This is followed by Indicator No. 2 with a mean score ($M=3.35$, $SD=0.62$, 0.55). On the other hand, the Indicator No. 5 received the lowest mean score of responses with ($M=3.29$, $SD=0.60$).

STATEMENTS	Mean	Standard Deviation	Remarks
I question the status quo.	3.45	0.57	Very Skillful
I am open to change and innovating things.	3.35	0.62	Skillful
I can formulate problems clearly and precisely and interpret them using abstract ideas.	3.31	0.61	Skillful
I can be a successful change-maker.	3.35	0.55	Skillful
I use logic, conceptualize a series of alternatives, and test them using relevant criteria before coming to a well-reasoned conclusion.	3.29	0.60	Skillful
Weighted Mean		3.35	
SD		0.59	
Verbal Interpretation		Skillful	

Table 9. Summary of the Level of Teachers' Perceived Skills in Educational Trends based on Creativity and Innovativeness

STATEMENTS	Mean	Standard Deviation	Remarks
I come up with new ideas and approaches when looking at things at work and outside work.	3.32	0.67	Skillful
I enjoy doing things differently than usual.	3.35	0.63	Skillful
I change things for the better.	3.46	0.57	Very Skillful
I have a curious mind.	3.49	0.57	Very Skillful
Mistakes are learning moments.	3.38	0.56	Skillful
Weighted Mean		3.40	
SD		0.61	
Verbal Interpretation		Very Skillful	

As illustrated in the Table 9, the overall mean ($M = 3.40$; $SD= 0.61$) with a verbal interpretation of Very Skillful. This affirms the teachers' beliefs that they are very skillful in the practice of creativity and innovativeness. This finding is collaborated employing generated by two indicators- Indicator 4 registered the highest mean ($M=3.49$, $SD=0.57$), and Indicator 3 with a mean ($M=3.46$, $SD=0.57$). Both indicators have verbal interpretations of Very Skillful. On the other hand, the Indicator 1 received the lowest mean score of responses with ($M=3.32$, $SD=0.67$). The remaining indicators possessed various means ($M=3.35 - 3.38$; $SDs = 0.56 - 0.67$) and were verbally interpreted as Skillful.

Table 10. Summary of the Level of Teachers' Perceived Skills in Educational Trends based on Decision-Making

Preliminary observation of the data in Table 10 shows the overall mean ($M = 3.48$; $SD= 0.60$) is verbally interpreted as Very Skillful. This means that teachers claim they are very skillful in making decisions. This assertion is strengthened by the generated means in the four indicators from Indicator 1 –

Indicator 4, whose means (3.44 – 3.54; SDs – 0.57 – 0.63) gained verbal interpretation of Very Skillful. Indicator No. 5 received the lowest mean (M=3.38, SD=0.62) and was verbally interpreted as Skillful.

STATEMENTS	Mean	Standard Deviation	Remarks
I consider different viewpoints to make a thoughtful decision	3.53	0.57	Very Skillful
I take time to build strong relationships with my coworkers, so I can get to know them and they will feel comfortable speaking freely around me.	3.44	0.63	Very Skillful
I promote integrity in the workplace by making ethical choices and helping the school maintain a positive image.	3.52	0.57	Very Skillful
I consider all available and relevant points of data to help me guide my decision-making.	3.54	0.57	Very Skillful
I can work productively even through setbacks and failures.	3.38	0.62	Skillful
Weighted Mean		3.48	
SD		0.60	
Verbal Interpretation		Very Skillful	

Table 11. Summary of the Level of Teachers' Perceived Skills in Educational Trends based on Problem Solving

STATEMENTS	Mean	Standard Deviation	Remarks
I gather more information about a problem by brainstorming with other team members, consulting more experienced colleagues, or acquiring knowledge through online research or courses.	3.38	0.56	Very Skillful
I use analytical skills during research to help distinguish between effective and ineffective solutions.	3.34	0.61	Very Skillful
I know what communication channels are the most appropriate when seeking assistance.	3.43	0.57	Very Skillful
I strive to develop dependability skills to become an effective problem solver.	3.27	0.59	Very Skillful
I believe that it is appropriate to take some time to craft a solution on tough problems.	3.37	0.56	Very Skillful
Weighted Mean		3.36	
SD		0.58	
Verbal Interpretation		Very High	

Table 11 summarized the overall mean generated in this sub-variable (M- 3.36; SD- 0.58) was verbally interpreted as Skillful. This means that teacher-respondents are an admission that they are skillful in problem-solving. This is supported by the means generated by the four indicators (Indicators 1, 2, 4, and 5) through each earned a different mean from one another (M- 3.27 – 3.38; SDs – 0.56 – 0.61); all means were verbally interpreted as Skillful. However, Indicator No. 3 gained the highest mean (M=3.43, SD=0.57) and was verbally interpreted as Very Skillful it has not affected the overall mean of this sub-variable.

Table 12. Summary of the Level of Teachers' Perceived Skills in Educational Trends based on Managing Change

STATEMENTS	Mean	Standard Deviation	Remarks
I use persuasive communication to overcome resistance to change from subordinates.	3.49	0.57	Very Skillful
I actively solicit feedback from people at all levels of the project and then apply that feedback moving forward.	3.29	0.60	Skillful
I study to learn best practices for managing change based on past results.	3.34	0.73	Skillful
I engage in strategic thinking to translate general needs and goals into a clear roadmap for meeting them.	3.37	0.73	Skillful
Managing change means managing people effectively.	3.40	0.63	Very Skillful
Weighted Mean		3.38	
SD		0.66	
Verbal Interpretation		Skillful	

As illustrated in table 12 the overall mean (M- 3.38; SD – 0.66) and with the verbal interpretation of Skillful. Further, considering the earned means of Indicator No.1 gained the highest mean (M=3.49, SD=0.57) and was verbally interpreted as Very Skillful. Similar to Indicator No 5 has a mean of (M=3.40, SD=0.63) and was also verbally interpreted as Very Skillful. The three remaining indicators registered various means (M-3.29 –3.37; SDs - .0.60 – 0.73) but were similarly interpreted as Skillful.

Table 13. Summary of the Level of Teachers' performance based on Teaching Strategies

The teachers...	Mean	Standard Deviation	Remarks
<i>...encourage the active involvement of students in class.</i>	3.55	0.50	Highly Practiced
<i>...efficiently handle and answer the questions of students</i>	3.60	0.49	Highly Practiced
<i>...use real-world examples to give the students a tangible and meaningful experience, which they can use to increase their knowledge and skills.</i>	3.72	0.45	Highly Practiced
	3.67	0.47	Highly Practiced
<i>...take feedback from students about the quality of teaching and learning outcomes increases their trust towards teachers, as they feel more valuable that their opinion is being listened to by the teachers</i>	3.55	0.57	Highly Practiced
Weighted Mean		3.62	
SD		0.50	
Verbal Interpretation		High Practiced	

Based on the data in Table 13, it is inspiring to see that teachers' performance based on teaching

strategies manifests positivity. The overall mean (M- 3.62; SD- 0.50) generated a verbal interpretation of Highly Practiced, meaning that teachers consistently use varied teaching strategies in their everyday classroom. It also showed that teachers are on the deck adjusting their classrooms according to the demands of the 21st century and Educational Trends. In support of the previous claim, it can further be observed that all five indicators in this sub-variable generated varying means (M- 3.55 – 3.72; SDs- 0.45 – 0.57) but also registered a common verbal interpretation of Highly Practiced.

Table 14. Summary of the Level of Teachers' performance based on Monitoring and Assessment

The teachers...	Mean	Standard Deviation	Remarks
<i>...discuss assessment purposes and methods involving a wide range of people interested in education.</i>	3.56	0.57	Highly Practiced
<i>...resent to educators, schools, districts, and states clearly and regularly discuss assessment system practices and student and program progress with students, families, and the community.</i>	3.54	0.57	Highly Practiced
<i>...use of assessment systems depends on educators who understand the full range of assessment purposes, use various suitable methods appropriately, work collaboratively, and engage in ongoing professional development to improve their capability as assessors.</i>	3.58	0.57	Highly Practiced
<i>... Adopting assessment systems, including instruments, policies, practices, and uses, are fair to all students.</i>	3.68	0.47	Highly Practiced
<i>...implement assessment systems that provide helpful information about whether students have reached .important learning goals and about each student's progress.</i>	3.56	0.57	Highly Practiced
Weighted Mean		3.58	
SD		0.55	
Verbal Interpretation		High Practiced	

The information collected through monitoring reveals gaps or issues, which require resources to address the gaps. Monitoring clarifies areas that require prioritization. Table 14 highlights the level of teacher performance based on monitoring and assessment. As illustrated, the overall mean generated by this sub-variable (M- 3.58; SD- 0.55) and verbally interpreted as Highly Practiced. This finding is substantiated by the means gained by the five indicators whose means (M- 3.54 – 3.68; SDs – 0.47 – 0.57) vary but have a common verbal interpretation of Highly Practiced.

Table 15. Summary of the Level of Teachers' performance based on Instructional Delivery

Initial observation of the data in Table 15 showed that the overall mean generated by this sub-variable ((M – 3.58; SD- 0.51) was verbally interpreted as Highly Practiced. This finding is strengthened by the means earned by every indicator (M- 3.48- 3.70; SDs – 0.46 – 0.57) and was verbally interpreted as Highly Practiced.

The teachers...	Mean	Standard Deviation	Remarks
...set criteria for success.	3.65	0.48	Highly Practiced
...inform students of the criteria ahead of the lesson	3.70	0.46	Highly Practiced
...demonstrate to the students the successful use of the knowledge/skills through modeling.	3.52	0.50	Highly Practiced
...provide remedial opportunities for acquiring the knowledge/skills, if necessary.	3.48	0.57	Highly Practiced
...select the learning area to be taught.	3.54	0.50	Highly Practiced
Weighted Mean		3.58	
SD		0.51	
Verbal Interpretation		High Practiced	

Table 16. Summary of the Level of Teachers' performance Based on Extension Research

The teachers...	Mean	Standard Deviation	Remarks
...initiate extension work based on the cultural background of the people with whom the work is done	3.30	0.72	Practiced
...as extension professionals, teachers must seek to discover and understand the limitations, taboos, and cultural values related to each phase of the program to select an acceptable approach in the locality.	3.29	0.71	Practiced
...understand improvement can only begin from the level of the people where they are	3.39	0.68	Practiced
...start extension education with the knowledge that it is essential to solicit the cooperation of people and their participation in work.	3.34	0.70	Practiced
...encourage participants to learn by doing the work themselves and by participating in it.	3.51	0.57	Highly Practiced
Weighted Mean		3.36	
SD		0.68	
Verbal Interpretation		Practiced	

Table 16 showed the overall mean (M-3.36; SD-0.68) was verbally interpreted as Practiced. However, as shown in the means of Indicators 1 to 4, the means (M- 3.29 – 3.39; SDs – 0.68 – 0.72) share a common verbal interpretation of Practiced. Though Indicator No 5 earned the highest mean (M=3.51, SD=0.57) and verbally interpreted as Highly Practiced, it can be gleaned that among the teachers' perceived skills, this sub -variable received the lowest overall mean.

Table 17. Summary of the Level of Teachers' performance based on Professional Development

Table 17 summarized the overall mean (M- 3.44; SD – 0.58) gained by this sub-variable has a verbal interpretation of Highly Practiced. This means that teachers are conscious of their professional development and attentive to the activities that will help them improve their profession. As shown in Indicator no. 1 gained the highest mean (M=3.54, SD=0.50) and was verbally interpreted as Highly Practiced. This is proof that teachers are genuinely concerned about their professional development. The other indicators – Indicators 2

and 3 also earned means (M- 3.37 and 3.46; SD – 0. 57) were verbally interpreted as Highly Practiced. The last two indicators – Indicators 4 and 5 earned means (M -3.34 and 3.38 respectively; SDs – 0. 55 and 0.68 respectively) but have a common verbal interpretation of Practiced.

The teachers...	Mean	Standard Deviation	Remarks
...deepen their knowledge of content areas, instructional strategies, and assessment strategies based on research and professional wisdom to help learners meet their goals.	3.54	0.50	Highly Practiced
...prepare themselves to create supportive learning environments and hold high expectations for all learners.	3.47	0.57	Highly Practiced
...use data from multiple sources such as needs assessment of practitioners, programs, teachers, and funders, and student data) to determine professional development priorities, monitor progress, and help sustain continuous improvement for programs and learners.	3.46	0.57	Highly Practiced
...use multiple evaluation strategies to guide improvement and demonstrate its impact.	3.34	0.55	Highly Practiced
...enhance their abilities to evaluate and apply current research, theory, evidence-based practices, and professional wisdom.	3.38	0.68	Highly Practiced
Weighted Mean		3.44	
SD		0.58	
Verbal Interpretation		Very High	

Table 18. The Significant Relationship between Teacher Awareness and the Teachers Performance in the Division of Laguna

	Teachers Performance	r value	Degree of Correlation	Analysis
Teachers' Awareness	Teaching Strategies	0.431	Moderate Relationship	Significant
	Monitoring Assessment	0.4242	Moderate Relationship	Significant
	Instructional Delivery	0.5267	Moderate Relationship	Significant
	Extension Research	0.2946	Moderate Relationship	Significant
	Professional Development	0.2868	Moderate Relationship	Significant
Scale		Strength		
0.80 – 1.00		Very Strong		
0.60 – 0.79		Strong		
0.40 – 0.59		Moderate		
0.20 – 0.39		Weak		
0.00 – 0.19		Very Weak		

Table 18 showed the initial observation of the data, teachers' awareness of the components of Educational trends has a significant relationship to the Teacher Performance in the Division of Laguna. This is based on the computed r values obtained from the tests with the moderate relationship.

Table 19. The Significant Relationship between Teachers' Perceived Skills and the Teachers Performance in the Division of Laguna

	Teachers Performance	r value	Degree of Correlation	Analysis
Teachers' Perceived Skills	Teaching Strategies	0.6003	Strong Relationship	Significant
	Monitoring Assessment	0.6648	Strong Relationship	Significant
	Instructional Delivery	0.5821	Moderate Relationship	Significant
	Extension Research	0.7154	Strong Relationship	Significant
	Professional Development	0.6906	Strong Relationship	Significant
	Scale		Strength	
	0.80 – 1.00		Very Strong	
	0.60 – 0.79		Strong	
	0.40 – 0.59		Moderate	
	0.20 – 0.39		Weak	
	0.00 – 0.19		Very Weak	

Table 19 showed that these could not be immediately translated into their performance, thus the moderate relationship but yet significant. While the *Teachers' Perceived Skills* were observed to have a significant relationship with the Teachers' Performance in the Division of Laguna. This is based on the computed r values obtained from the tests with moderate to strong relationships. Furthermore, the p-values obtained were less than the significance alpha 0.05; hence there is a significant relationship.

Conclusion

Based on the findings and procedures, the study's conclusions were as follows.

It was concluded that there is a moderate but significant relationship between teachers' awareness and performance and a moderate to strong relationship between teachers' perceived skills and performance. Therefore, the null hypothesis is rejected.

Recommendations

Based on the findings and conclusions drawn, the following are hereby recommended:

1. The Department of Education has to gear up to this massive transformation of bringing technology-driven design into the curricula with the assistance of educationists and other visionaries. Giving today's learners the right tools will help create a more multifaceted society where everyone plays their part well, adding to a self-sustainable education model.

2. Both administrators and educators of the Department of Education should value digital technology's power to transform education as anticipated with the introduction of Educational trends. This will enable the educational system to keep itself up-to-date with the current development in Industry 4.0.

3. The national government should strive to develop tools to provide 24/7 virtual learning, platforms to offer personalized learning and to connect easily with educators, faculty members, and other students. Likewise, provide tools to develop a curriculum on how you prefer, admit, and enroll students, conduct online assessments, and other related educational services.

4. The education authorities should strengthen the technical-related internet skills to enhance the teachers' knowledge and competence in the teaching-learning processes of the 21st century.

5. The content-related internet skills, knowledge, and less device-dependent attitudes must be addressed adequately in educational efforts as they are critical in a scenario where information and communication are mediated through technology.

Acknowledgments

The researcher desires to express her sincere gratitude to the following, who shared their authentic, and unselfishness concern, assistance and spiritual support.

Almighty Father, the source of wisdom, strength to make this research fruitful;

Mr. Reynaldo S. Zaide, Mrs. Marissa M. Zaide, Reymond M. Zaide and Marimar M. Zaide, for the support in reaching this professional attainment;

Moreover, her cheerful and handsome son, **Prince Zachary Z. Borja**, for the inspiration and happiness he brings to the life of researcher.

References

- Alda, Rivika Boholano, Helen, and Dayagbil Filomena (2020) Teacher Education Institutions in the Philippines towards Education 4.0, International Journal of Learning, Teaching and Educational Research Vol. 19, No. 8, pp. 137-154,
- Dimkpa, Daisy I. (2015). Teachers' Conduct in the 21st Century: The Need for Enhancing Students' Academic Performance, Journal of Education and Practice www.iiste.org ISSN 2222-1735 (Paper) ISSN 2222-288X (Online), Volume 6, 45
- Luo J, Boland R, Chan CH.(2020). How to Use Technology in Educational Innovation. In: Roberts L. (eds) Roberts Academic Medicine Handbook. Springer; p. 141–7. https://doi.org/10.1007/978-3-030-31957-1_15.
- Mustafa, Z. (2018). Asean experience for IR 4.0. New Straits Times, pp.1-6 Retrieved from <https://www.nst.com.my/education/2018/05/369959/aseanexperience-ir-40>
- Schwab, K. (2016). The Fourth Industrial Revolution. World Economic Forum
- Taylor, E.S, & Tyler, J.H. (2012). The effect of evaluation on teacher performance. American Economic Review, 102(7), 3628-51. <https://cepa.stanford.edu/content/effect-evaluation-teacher-performance>
- Wessling, S.B. (2015). How do you define 21st-century learning? <http://www.edweek.org/tsb/articles/2010/10/12/01panel.hO4.html> Retrieved 5th September 2022.