

# Teachers' Participation in Online Professional Development Course, 21st Century Teaching Skills and Performance: Basis for Training Assessment Plan

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## Abstract

This research study determined the extent of Teachers' Participation in Online Professional Development Course, 21st century teaching skills and performance. The researcher utilized the descriptive and correlational design. The respondents of the study were 100 regular teachers of different elementary schools regardless of teaching experience. The researcher utilized the complete enumeration sampling. Mean and Pearson r moment correlation was used to analyze the data. The teachers' Participation in online professional development course was rated high. The 21st century Skills and teaching performance were rated high. The instructional competence of the teachers' online professional development described as High. Self-management obtained was described as high. Teachers joined the learning course in order to address their needs in relation to the technological advances and changing educational trends of the 21st century teaching. Most of the teachers have manifested the different 21st century skills needed to address the 21st century teaching. They have great performance such as enhancement of self-worth, maintaining their set goals and targets, engaging in a continuous learning process and improve the delivery of basic education.

Keywords: Teachers, Online Professional Development Course, 21st Century Teaching Skills, Performance

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## 1. Main text

### 1.1 Introduction

The growth and development of the modern teacher in the twenty-first century depends on professional development (PD). There are many different viewpoints, technology, and opportunities for students and educational leaders in the world of education today. Going beyond maintenance, professional development for educators aims to foster sustainability and career longevity. Realizing this and figuring out ways to improve teaching and learning techniques is how teachers can receive effective professional development in the twenty-first century (Washington, 2019).

Participation in teacher professional development is planned with the understanding that it will ultimately affect teacher learning, a shift in teacher practice, and ultimately, student learning. Teachers who are implementing new curriculum are frequently offered professional development programs, although these are typically one-time treatments provided only before deployment. By offering instructors knowledge and activities that are pertinent to their teaching in the classroom at the exact right time, ongoing professional development programs fulfill their changing needs. Aiming at the problems that teachers encounter in ways

that are deeply rooted in their current practices, training for teachers is emergent issues addresses these demands. Instead of only providing initial training or "one-shot deal" training programs, the importance of ongoing professional development (PD) programs for curriculum implementation is to continuously improve instructors' understanding and practice (Riel et al., 2015).

Teaching in the twenty-first century involves using the same methods as in the past, but with modern tools and technology. It entails utilizing all of the necessities of the contemporary globe to enable college students to thrive in the new economy, as well as having the ability to mentor pupils and prepare them for the future. Although the definition of 21st-century talents varies from person to person, location to location, or faculty to college, the word does reflect a broad, if very unreliable, consensus (Dominado, 2020).

Teaching involves more than just supervising students' daily activities. A teacher must be well aware of the duties and obligations placed upon them as well as the required education, experience, and training. The essential duty of a teacher is to enable students to fulfill their potential. Teachers must help students improve their capacity for investigation, analysis, and problem-solving as well as their critical and creative thinking abilities. Teachers must also be able to manage their classrooms effectively. Teachers are crucial in assisting students in succeeding in life, from using a variety of instructional strategies to ensure that knowledge has been transferred to accepting the chores of making assessments to track students' academic development. Teachers' primary responsibility is to help students' learning progress because promoting the teaching-learning process is any educational system's fundamental goal (Real, 2022).

In local setting, especially in Lambayong District II, there are still teachers who could hardly connect with latest trend and learning capacity in terms of 21st century skills. In a distance, the online training course is a call and solution to those teachers to develop their professional skills. However, due to limited access and sources and support funds for the learning fee, others teachers are still left behind compared to those availed the program. This is the reason, researcher conceptualize this research study on order determine the capacity of teachers to face the challenging tasks of 21st century to improve their performance.

## 1.2 Conceptual Framework

This study is viewed from the idea of Dwyer (1987) that good instructional theory tells us to keep the learner engaged and motivated, and that a variety of stimuli can help to achieve this goal. Online, however, these advanced efforts to engage may actually backfire, slowing computer performance to a crawl. The learner not only loses attention, but perhaps patience and temper. Learners will leave a computer e-learning environment faster than a face-to-face classroom. There is no one to insult but the computer (Burgos et al, 2018).

The independent variables of the study include teachers' participation in online professional development course and 21st century skills of teachers. The independent variable presents the concepts on the performance of teachers. The relationship of the variables is illustrated using the conceptual framework as shown below. The following diagram depicts how the two variables were treated and the relationship of the independent and dependent variable.

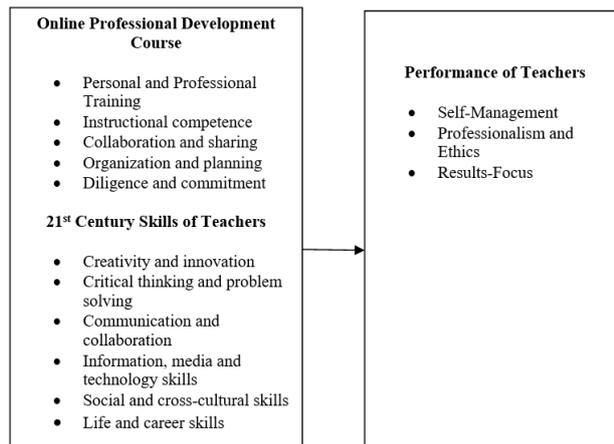


Figure 1. Research Paradigm

### 1.3 Statement of the Problem

This study aimed to determine the extent teachers' participation in online professional development course, 21st century teaching skills and performance. Findings served as basis for the development of the training assessment plan. Specifically, it sought to answer the following questions.

1. What is the extent the teachers' participation in online professional development course in terms of:
  - 1.1 Personal and Professional Training;
  - 1.2 Instructional competence;
  - 1.3 Collaboration and sharing;
  - 1.4 Organization and planning; and
  - 1.5 Diligence and commitment?
2. What is the extent of the 21st century teaching skills of teachers in terms of:
  - 2.1 Creativity and innovation
  - 2.2 Critical thinking and problem solving
  - 2.3 Communication and collaboration
  - 2.4 Information, media and technology skills
  - 2.5 Social and cross-cultural skills, and
  - 2.6 Life and career skills?
3. What is the extent of the teachers' performance in terms of:
  - 3.1 Self-Management;
  - 3.2 Professionalism and Ethics; and
  - 3.3 Results-Focus?
4. Is there a significant relationship between the extent of teachers' participation in online professional development course and their performance?
5. Is there a significant relationship between the 21st century skills and teachers' performance?

#### 1.4 Research Design

The study utilized the descriptive and correlational design. The needed data gathered with survey questionnaire. Eventually, the gathered data were organized in tabular form, analyzed and described according to appropriate scale. Possible relationships among variables were determined. In this study, descriptive method of research was applied to determine the extent of teachers' participation in online professional development course, 21st century teaching skills and their performance. The correlational method of research was applied to determine the relationship between the extent of teachers' participation in online professional development course and teachers' performance as well as relationship between the 21st century skills and teachers' performance.

The researcher utilized the complete enumeration sampling in the selection of respondents. Using enumeration sampling all regular permanent teachers who have an online courses completed are enumerated to serve as respondents of the study. To determine the extent of the teachers' participation in online professional development course, 21st century skills of teachers and performance mean were used. Pearson r was utilized to find out the relationship between the extent of teachers' participation in online professional development course and teachers' performance as well as relationship between the 21st century skills and teachers' performance.

The researcher formulated the survey tool to gather the data on the extent of the teachers' participation in online professional development course. The tool is composed of six (6) sub domains with five (5) statements for each domain reflecting how the teachers' participation in online course improve their professional growth. It has 5-likert scale with following interpretations and mean range bellow.

Scale	Range	Interpretation
5	4.50 – 5.00	Very High
4	3.50 – 4.49	High
3	2.50 – 3.49	Average
2	1.50 – 2.49	Low
1	1.00 – 1.49	Very Low

This research study utilized the adopted questionnaires on the 21st century teaching skills of teachers. Sources of data was obtained from the questionnaires of the 21st century skills adopted from the study of Pangilamen (2017). It was divided into six (6) sub variables such as creativity and innovation; critical thinking and problem solving; communication and collaboration; information, media and technology skills; social and cross-cultural skills; and life and career skills. Every domain will have 5-items or strands that will describe the prevalence or existing skills of the school heads. This follows the scale of 1-5 with a 1= Very Low, 2 = Low 3 = Average 4 = High 5 = Very High.

The survey questionnaire on the performance of teachers was adapted from the RPMS. Three (3) indicators best describe the situations on the performance of teachers. This follows the scale of 1-5 with 1= Very Low, 2 = Low 3 = Moderate 4 =High 5 = Very High.

#### 1.5 Teachers' Participation in Online Professional Development Course

The participation of teachers in some online professional development course such as GURO21 Course 1 Flexible Learning Course, Massive Online Course, and webinars aim to develop and enhance the facilitating skills of teachers in order to effectively play their role as learning leaders of the 21st century in a knowledge-based economy. The extent of teachers' participation in online professional development course is revealed in Table 1.

Table 1. Extent of Teachers' Participation in Online Professional Development Course

Indicators	Mean	Interpretation
Personal and Professional Training	3.52	High
Instructional competence	4.37	High
Collaboration and sharing	3.92	High
Organization and planning	4.40	High
Diligence and commitment	4.40	High
Overall mean	4.12	High

As shown, the overall mean of 4.12 was described as High. The consistent ratings for all the indicators further substantiate the overall result. This means that teachers are greatly participated and involved in the different online professional development courses that helped them develop their professional growth. This implies that teachers joined the online learning course in order to address their needs in relation to the technological advances and changing educational trends of the 21<sup>st</sup> century teaching. Teachers are expected to enhance knowledge, skills, attitudes, and values on teaching and learning in the new century.

Moreover, their participation in different online courses enables them to address learning challenges and up skilled their knowledge and skills in the field of instructions and pedagogy. It substantiates the performance and 21<sup>st</sup> century teaching that challenge the trend of technology.

In particular, when taken singly, instructional competence obtained the high mean of 4.36 and described as High. This means that the Guro21 flexible learning course gave emphasis on the development of the instructional competence of teachers. Teachers' ensure that learning have took place during their classes and have enhance their professional growth particularly on the 21<sup>st</sup> century teaching.

#### 1.6 The 21st Century Skills of Teachers

The 21st century skills of teachers are motivated by the belief that teaching learners the most relevant, useful, in-demand and universally applicable skills were prioritized in today's schools. The extent of the 21st century teaching skills of teachers is revealed in Table 2.

Table 2. Extent of 21st Century Skills of Teachers

Indicators	Mean	Interpretation
Creativity and innovation	4.00	High
Critical thinking and problem solving	3.96	High
Communication and collaboration	4.00	High
Information, media and technology skills	4.02	High
Social and cross-cultural skills	4.05	High
Life and career skills	4.09	High
Overall mean	4.02	High

As shown in Table 2, the overall mean of 4.02 was described as High. The consistent ratings for all the indicators further substantiate the overall result. This means that teachers manifested a great skills of the 21<sup>st</sup> century. This implies that most of the teachers have manifested the different 21<sup>st</sup> century skills needed to address the 21<sup>st</sup> century teaching. Teachers are more intentional about teaching cross-disciplinary skills in subject-area courses. Through their skills they are able to integrate ICT and other lessons across curriculum.

The result manifested that majority of the teachers kept in the abreast of 21<sup>st</sup> century skills to adapt the technological changes. Being a 21<sup>st</sup> century teachers, they have acquired skills relevant to the needs of the learners. Teachers were flexible, modernized and adaptable in their teaching profession using the technology-driven approaches that applies to real-world situations.

In particular, when taken singly, life and career skills obtained the high mean of 4.09 and described as High. This means that among the 21<sup>st</sup> century skills of teachers, they are better in life and career skills. In life and career skills, teachers focused on the ability of learners to work effectively with diverse teams, be open-minded to varying ideas and values, set and meet goals, manage projects effectively, being accountable for results, demonstrate ethical practices, and be responsible to both one's self and the larger community.

### 1.7 Performance of Teachers

The performance of teachers are determined through the Results-based Performance Management of Teachers is the intervention that the DepEd works to help teachers ensure the strategic, responsive, and effective delivery of services at all levels. Table 3 presents the findings.

Table 3. Performance of Teachers

Indicators	Mean	Interpretation
Self-Management	4.03	High
Professionalism and Ethics	3.99	High
Results-Focus	4.00	High
Overall mean	3.99	High

It was revealed that the overall mean of the performance of teachers was 3.99 described as High. The consistent ratings for all the indicators further substantiate the overall result. This means that most of the teachers have high performance rating as manifested in the RPMS. This implies that most of the teachers have great performance such as enhancement of self-worth, maintaining their set goals and targets, engaging in a continuous learning process and improve the delivery of basic education.

Similarly, the high performance indicates that teachers are productive, perform effectively and high instructional competence using the 21<sup>st</sup> century teaching skills. They manifested observable results and productive outputs in the classroom by improving the learning needs of the learners.

In particular, when taken singly, self-management obtained the high mean of 4.03 and described as High. This means that teachers show extreme performance by managing their own learning, performance and behavior. The teachers are capable of self-assessment in setting goals, monitoring behavior, and evaluating progress, self-monitoring, self-evaluation, and self-reinforcement. Moreover, self-management constitute to the independent responsibility and tasked delegated to them.

### 1.8 Significant Relationship between the Teachers' Participation in Online Professional Development Course and their Performance

The fourth research problem deals on the significant relationship between the teachers' participation in online professional development course and their performance. The correlational analysis was presented in Table 4.

Table 4. Correlational Analysis on the extent of Teachers' Participation in Online Professional Development Course and their Performance

Variables	r	t <sub>comp</sub>	t <sub>critical</sub>	p-value	Interpretation
Teachers' Participation in Online Professional Development Course and their Performance	0.889	3.796	1.980	0.003	Significant

As shown, the analysis on the extent of teachers' participation in online professional development course and their performance with t-computed value = 3.796 which is less than the t-critical value at 1.980 (p-value=0.004<0.05) indicates that there is a significant relationship existed between the two variables, thus null hypothesis is accepted.

This means that engaging in the online professional development learning course is a predictor of the teachers' performance. The performance of teachers is dependent to their participation in the different learning. The online learning course develops the professional growth of teachers and indicates the total reflections of their performance. It concluded that teachers' performance is measured by their participation in different online learning course.

### 1.9 Significant Relationship between the 21st century skills and teachers' performance

The fifth research problem deals on the significant relationship of the 21<sup>st</sup> century teaching skills and teachers' performance. The correlational analysis was presented in Table 5.

Table 5. Correlational Analysis on the Extent of 21st Century Skills and Teachers' Performance

Variables	r	t <sub>comp</sub>	t <sub>critical</sub>	p-value	Interpretation
21st Century Skills and Teachers' Performance	0.004	8.907	1.980	0.002	Significant

As shown, the analysis on the extent of the 21<sup>st</sup> century teaching skills and teachers' performance with t-computed value = 9.907 which is greater than the t-critical value at 1.98 (p-value=0.002<0.05) indicates that there is a significant relationship existed between the two variables, thus null hypothesis is accepted.

This implies that the degree of teachers' performance is affected by the level of their 21<sup>st</sup> century teaching skills. When the teachers perform poor or excellent in their performance is because they have higher or lower their 21<sup>st</sup> century skills. The performance of the teachers collectively indicated by adapting their 21<sup>st</sup> century teaching skills. It concluded that teachers could have excellent or poor performance with having their 21<sup>st</sup> century skills.

#### 1.10 Conclusions

Teachers joined the online learning course in order to address their needs in relation to the technological advances and changing educational trends of the 21<sup>st</sup> century teaching. Teachers are expected to enhance knowledge, skills, attitudes, and values on teaching and learning in the new century. Moreover, their participation in different online courses enables them to address learning challenges and up skilled their knowledge and skills in the field of instructions and pedagogy. It substantiates the performance and 21<sup>st</sup> century teaching that challenge the trend of technology.

Most of the teachers have manifested the different 21<sup>st</sup> century teaching skills needed to address the 21<sup>st</sup> century teaching. Teachers are more intentional about teaching cross-disciplinary skills in subject-area courses. Through their skills they are able to integrate ICT and other lessons across curriculum. Majority of the teachers kept in the abreast of 21<sup>st</sup> century teaching skills to adapt the technological changes. Being a 21<sup>st</sup> century teachers, they have acquired skills relevant to the needs of the learners. Teachers were flexible, modernized and adaptable in their teaching profession using the technology-driven approaches that applies to real-world situations.

Teachers have great performance such as enhancement of self-worth, maintaining their set goals and targets, engaging in a continuous learning process and improve the delivery of basic education. The high performance indicates that teachers are productive, perform effectively and high instructional competence using the 21<sup>st</sup> century teaching skills. They manifested observable results and productive outputs in the classroom by improving the learning needs of the learners.

#### 1.11 Recommendations

1. Teachers should ask technical assistance from school heads and master teachers to improve their least mastered key result areas.
2. They should work and collaborate with colleagues to share differentiated, developmentally appropriate opportunities to address learners' differences in gender needs, strengths, interests and experiences.
3. They should sustain the development of their 21<sup>st</sup> century skills.
4. It is encourage that more teachers will be enrolled to the flexible learning course

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