



Compliance of Pre-Service Teachers in the 21st-Century Teaching Environment

BY

Annalene Grace E. Co

Quirino State University Maddela Campus Dipintin, Maddela, Quirino 3404 Philippines



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Abstract

*To succeed in this globally and digitally interconnected world, all learners, from cradle to career, require new skills and knowledge. Teaching has never been more difficult or important, nor has the desperate need for more student success been more pressing. The purpose of this descriptive quantitative research study was to determine the level of compliance of student teachers during their on-campus internship duties in the modern teaching environment scenario of the twenty-first century. This study relied heavily on Andrew Churches's *The Eight Habits of an Effective Twenty-First-Century Teacher* and Tony Wagner's *The Seven Survival of a Twenty-First-Century Educator*. The questionnaire was modified for the study, which was administered to 117 Quirino State University student teachers and mentors. The Likert Scale was used to provide the descriptive equivalent of the weighted means. According to the findings, student teachers rated being a model as the highest skill, implying that they are an exemplar of global values and tolerance, as well as having a dignified image, while being an adaptor was rated as the lowest skill, implying that student teachers still need to improve their skills in adapting to current hardware and software tools in teaching. Furthermore, the overall findings showed that the student teachers are well-versed in their internship responsibilities. It is recommended, however, that they spend more time in the actual classroom and participate in regular activities to improve their skills in using modern teaching technologies.*

Keywords: Pre-Service Teachers, Level of compliance, 21st-century teaching environment, Competences

1. Introduction

Teachers' roles have shifted as school systems have evolved. These modifications refer to the various roles that twenty-first-century teachers play, which differ significantly from traditional and traditional educators. With the vast evolution of today's multifaceted generation of learners. As a result, today's young teachers may find it difficult to keep up with these rapid changes.

According to Andrew Churches (2012), 21st-century educators are student-centered and holistic, and they teach about how to learn as well as the subject matter. They must be collaborative, adaptable, information, media, and technology savvy, effective communicators, and immediate and instant gratification seekers. It would be interesting to learn how our new teachers are prepared for this ever-changing and difficult role. Teaching in the twenty-first century necessitates more than a basic understanding of educational theory and classroom management. Teachers must also work with other educators to learn how to use new technology in the classroom and how to prepare students for a global economy.

As a result, it is critical to understand the various qualities and skills required of teachers in the modern era. K to 12 education is now being implemented in the Philippines. As a result, teachers who can effectively manage today's technology-driven learning environment are essential. It is the primary responsibility of a teacher to make each learning experience worthwhile and full of new learning; this can only be accomplished by a teacher who understands how to manage an active classroom environment. It is impossible to deny that proper exposure to the field of teaching adds to and improves any student skills, teacher's particularly during years of practice teaching and the like. In this manner, it is the researchers' prime task to somehow measure if today's emerging educators possess the required 21st-century teaching skills to be able to survive in this modernized time.

Theoretical Framework

The theory of Andrew Churches, *Eight Habits of Highly Effective 21st Century Teachers*, is the foundation for this study (Special Topics in Education, Lucido, et.al, 2012). Andrew Churches is a classroom teacher and ICT enthusiast. He is adamant that we must teach our students to question and

think, to adapt and modify, to shift and sort in order to prepare them for the future. Good educators are holistic and student-centered, teaching as much about how to learn as they do about the subject matter. They must also be 21st-century learners, but in today's classrooms, highly effective teachers are more than that. According to Churches (2009), 21st-century teachers must be highly effective at adapting, being visionary, collaborating, taking risks, learning, communicating, modeling behavior, and leading.

Tony Wagner's theory "Seven Survival Skills of 21st Century Educators" in his book "The Global Achievement" backs up this study (2008). Tony Wagner is the founder and co-director of the Harvard Graduate School of Education's Change Leadership Group and the author of several books, including *The Global Achievement Gap* (2008) and *Creating Innovators: The Making of Young People Who Will Change the World* (2012). Seven essential skills for today's new teachers were identified by the model. Some of these include critical thinking and problem-solving, network collaboration and learning by influence, agility and compliance, initiatives and entrepreneurialism, effective oral communication, assessing and analyzing information, and curiosity and imagination. Wagner stated that today's students are referred to as digital learners, and today's teachers are referred to as digital immigrants.

The Communicator. 21st-century teachers are effective oral communicators. They are fluent in tools and technologies that enabled them to properly communicate and collaborate with the students.

The Learner. As a 21st-century educator, one should not stop learning and continue accessing and analyzing information. A teacher must continue to absorb experiences and knowledge. One must learn and change as the horizon of knowledge constantly widens.

The Risk-Taker. Teachers must also strive to enhance the critical thinking and problem-solving skills of the students. There is so much to learn, 21st-century teachers must take risks and sometimes surrender themselves to students' knowledge. One should trust his/her students and let them learn by teaching each other.

The Collaborator. Teachers must encourage collaboration across networks and learn by influence. One must be familiar with today's trends in technologies and can incorporate these in his/her teaching experiences to enhance and captivate learners.

The Visionary. A visionary teacher is an open-minded person, someone who is imaginative and curious, open to others' ideas, and could handle how to relate these in their class. One must link different ideas to reinforce and value learning.

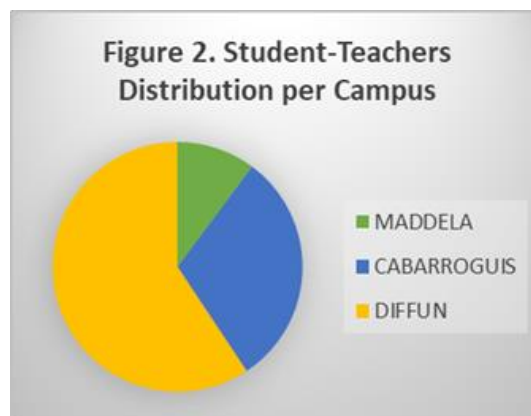
The Adaptor. The 21st-century educator must be able to adapt to the new curriculum and requirements in his/her teaching. One must be able to adapt software and hardware tools for a more dynamic teaching experience.

The Leader. A 21st-century teacher is a leader because he/she has own initiative for igniting students' interest in learning especially by using the process of ICT integration. Learning projects using these technologies need crucial leadership.

The Model. Modern teachers must directly model the behaviors that are expected from the students. They directly showcase professionalism and behave as a good example to all. It means that today's students are now immersed in the 21st-century media culture and they work well in the presence and use of these advanced tools in learning.

Teachers are referred to as digital immigrants because they are new to this culture and are still adjusting to these innovations in order to fit them into the standards of their students and society (Lucido, 2012). Learning in the twenty-first century expands on previous learning concepts, such as "core knowledge in subject areas," and recasts them for today's world, where a global perspective and collaboration skills are required. It is no longer enough to "know things," according to Milton Chen, author of "Education Nation: Six Leading Edges of Innovation in Our Schools." It is even more important to be curious about learning new things, according to Milton Chen. A teacher with 21st-century skills seeks out methods and tools that will improve not only their students' learning but also their own personal growth. (Braun, 2010). As a result, in order to provide students with true media literacy and to deliver curriculum content in a relevant manner, teachers in the twenty-first century must be able to access and use multimedia tasks.

2. METHODS



This study aimed to determine the level of compliance of student teachers in the 21st-century teaching environment based on the ratings of their mentors. This study is a descriptive quantitative research design. It is used to obtain information concerning the current status of the phenomena to describe "what exists" with respect to variables or conditions in a situation. Data are gathered and descriptive statistics are then used to analyze such data. The study was conducted at Quirino State University with its three campuses specifically in the College of Teacher Education. One hundred seventy-one interns or student teachers have randomly selected from the total 168 student teachers enrolled for the 1st semester of 2017-2018 and their corresponding mentors were the respondents of this research.

Figure 2 shows the distribution of the student teachers involved in this study. Most population belonged to the College of Teacher Education of Diffun Campus with 69 respondents, Cabarroguis campus with 36 respondents, and Maddela campus with 12 respondents.

The research instruments used were the researcher's adapted questionnaires based on Eight Habits of Highly Effective 21st Century Teachers as outlined by Andrew Churches. The researcher visited the working area of the respondents for the data collection period during their on-campus internship duties in the secondary schools of the province. There will be five ratings of choices with 5 (Excellent), 4 (Very Good), 3 (Good), 2 (Fair), and 1 (Needs Improvement) accordingly to the rate at which the mentioned traits are evident in the respective student teachers. The last part of the questionnaire is also a checklist of the degree of readiness of the intern for the 21st-century teaching environment based solely on the mentor's observation. Results were analyzed using the weighted mean for the level of compliance and readiness for the 21st-century learning and teaching environment.

3. RESULTS AND DISCUSSION

The competencies of the student teachers in each of the eight habits of an effective 21st-century teacher are presented in the next tables.

The Teacher as a Communicator: This habit includes various criteria such as displaying good grammar and proper diction, being able to explain the lesson clearly and fluently, and being able to focus students' attention, as well as personal qualities such as the quality of voice and mannerism and gestures shown in Table 1. The results revealed a weighted mean of 3.95, indicating that the student-teachers have excellent communication skills. The criterion with the highest weighted mean, however, is the teacher's lack of unwanted mannerisms and gestures. This implies that, while they are good communicators, they need to improve their diction and grammar, as well as use a loud voice to focus the student's attention. When the message as understood by the sender is perceived as exactly the same by the receiver, one is considered a good communicator. As a result, it is critical that teachers communicate effectively.

Table 1. The Teacher as Communicator

Criteria	WM	DE
Exhibit good grammar and proper diction.	3.85	VG
Explains the lesson clearly and fluently in the medium of instruction used.	3.9	VG
Has the ability to focus students' attention to the lesson.	3.98	VG
Has a clear and modulated voice.	3.98	VG
Free from unwanted mannerisms and gestures.	4.15	VG

MEAN	3.95	VG
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Legend: 1.00-1.79 Needs Improvement; 1.80-2.59 Fair; 2.6-3.39 Good; 3.40-4.19 Very Good; 4.20-5.00 Excellent

The Teacher as a Model: This habit is made up of competencies that reveal how students and co-teachers perceive student teachers. It consists of characteristics such as dressing appropriately, acting dignifiedly, displaying professionalism, and establishing professional connections. Table 2 illustrates this. According to the findings, mentors saw the student-teachers as valuable models of 21st-century teachers. Because the average mean of 4.59 demonstrated that they were excellent in this domain, the result implied that the student-teachers still needed to expand their network of contacts and organizations.

Table 2. The Teacher as a Model

Criteria	WM	DE
Wears neat and appropriate clothes and is well-groomed	4.83	E
Behaves in a dignified and respectable manner	4.68	E
Exhibits professionalism and is a role model for other teachers and students.	4.48	E
Builds professional links and organizations with colleagues to enrich practice.	4.4	E
Mean	4.59	E

Legend: 1.00-1.79 Needs Improvement; 1.80-2.59 Fair; 2.6-3.39 Good; 3.40-4.19 Very Good; 4.20-5.00 Excellent

The Teacher as a Learner. This demonstrates the teacher's ongoing quest for knowledge. It reflects the teacher's willingness to stay current on educational trends, as shown in Table 3. As the outcome suggests, student-teachers are consistent learners. It means that, even if they are now teaching, they continue to participate in activities that will help them grow and improve as teachers and individuals. They must, however, be consistent in their attendance at the curriculum and instructional materials committee meetings.

Table 3. The Teacher as a Learner

Criteria	WM	DE
Well-updated on the current trends in education.	4.00	VG
Involves in professional growth activities.	4.05	VG
Attends committee meetings and other sessions relative to curriculum and instructional activities.	3.95	VG
Used self-assessment to enhance strengths and correct weaknesses.	4.08	VG
MEAN	4.02	VG

Legend: 1.00-1.79 Needs Improvement; 1.80-2.59 Fair; 2.6-3.39 Good; 3.40-4.19 Very Good; 4.20-5.00 Excellent

The Teacher as a Collaborator. This criterion demonstrates the teacher's ability to facilitate curricular instructions using current technologies and modern gadgets. It will demonstrate how teachers captivate students by employing the various strategies and tools listed in Table 4. The results indicate that the student teachers are excellent collaborators because they blend well with the students as well as the other interns, demonstrating that they are working together to create more productive experiences. It also demonstrates that the majority of student teachers are involved in community outreach activities that aid in the provision of services to others. This is a good sign that they are collaborating with other community beneficiaries to improve the students' learning experience.

Table 4. The Teacher as a Collaborator

Criteria	WM	DE
1. Works harmoniously with students and other interns.	4.30	E
2. Uses collaboration tools to enhance and motivate learners	3.95	VG
3. Uses school and community resources to enrich instruction	3.80	VG
4. Participates in community activities that promote learning.	4.05	VG
5. Encourages students to apply classroom learning in the community.	3.95	VG
MEAN	4.01	VG

Legend: 1.00-1.79 Needs Improvement; 1.80-2.59 Fair; 2.6-3.39 Good; 3.40-4.19 Very Good; 4.20-5.00 Excellent

The Teacher as a Leader. This domain demonstrates how the teacher acts as a responsible leader in igniting students' interest and leading the use of ICT tools to create a more productive learning experience, as shown in Table 5. The results demonstrated that the interns are carrying out their primary role as leaders and that they are self-starters with a lot of initiative to lead students to do their best. It demonstrates that they are self-motivators who deal effectively with the stress of classroom chaos, piles of lesson plans, and other teaching demands. It can be seen from this that student teachers are truly leading the way to becoming effective 21st-century teachers.

Table 5. The Teacher as a Leader

Criteria	WM	DE
1. Shows leadership in cooperative and building-level initiatives.	4.13	VG
2. Establishes rules and procedures which govern student movement in the classroom during different types of instructional activities.	3.88	VG

3. Effectively copes with the demands and stresses of teaching.	3.95	VG
4. Sets objectives that are within the experiences and capabilities of learners.	3.88	VG
5. Shows fairness and consideration to all learners regardless of socio-economic background.	4.10	VG
MEAN	3.99	VG

Legend: 1.00-1.79 Needs Improvement; 1.80-2.59 Fair; 2.6-3.39 Good; 3.40-4.19 Very Good; 4.20-5.00 Excellent

The Teacher as an Adaptor. It demonstrates the teacher's ability to adapt to the current curriculum. It will demonstrate how the teacher employs appropriate tools and strategies, such as the incorporation of software and hardware learning tools. It is critical because integrating core concepts and key skills will better prepare students for the workplace and college (McKinley, 2012), as shown in Table 6. The results also show that, despite the stresses of the profession, the student teachers exhibit traits of being very flexible teachers. The highest weighted mean demonstrates that the student teachers have the sufficient initiative to implement various teaching strategies and audio-visual materials for a more interactive class. It is clear that they are up to date on current trends and modern instructional materials to use in the classroom, and that they are capable of maintaining the level of learning in the classroom by utilizing captivating software and hardware tools.

Table 6. The Teacher as an Adaptor

Criteria	WM	DE
1. Uses appropriate teaching strategies with audio-visual materials to enhance learning.	3.93	VG
2. Adapts software and hardware designed for learning tools.	3.85	VG
3. Adapt different teaching styles to be inclusive in different modes of learning.	3.68	VG
4. Delivers accurate and updated content knowledge using appropriate methodologies, approaches, and strategies.	3.88	VG
5. Uses integration of language, literacy, numeracy skills, and values in teaching.	3.88	VG
MEAN	3.84	VG

Legend: 1.00-1.79 Needs Improvement; 1.80-2.59 Fair; 2.6-3.39 Good; 3.40-4.19 Very Good; 4.20-5.00 Excellent

Teacher as a Visionary. This demonstrates that the teacher must be open-minded. It will demonstrate how the teacher accepts other students' ideas and makes them relevant to the discussion at hand, as shown in Table 7. According to the findings, the student teachers exhibited nonjudgmental characteristics. It can be concluded that the mentors saw them as open-minded individuals willing to consider any ideas from the students and turn them into something that the class could relate to. Being a visionary also entails being aware of the

diverse needs and interests of the students and, as a result, ensuring that strategies that can motivate different types of learners to contribute ideas to the class are used.

Table 7. The Teacher as a Visionary

Criteria	WM	DE
Accepts other ideas from other students and is open-minded	4.25	E
Encourages student's participation in class through different ways	4.20	E
Demonstrates awareness of students' health/special needs.	3.25	VG
Facilitate in synthesizing the most relevant ideas in the class	3.90	VG
Encourages open and non-judgmental discussions with the students	3.95	VG
MEAN	3.91	VG

Legend: 1.00-1.79 Needs Improvement; 1.80-2.59 Fair; 2.6-3.39 Good; 3.40-4.19 Very Good; 4.20-5.00 Excellent

The Teacher as a Risk-Taker. This domain encompasses how modern teachers take risks. Table 8 demonstrates how they accept criticism in order to improve instruction and answer students' questions profoundly. The student teachers accepted suggestions and answered questions profoundly, according to the highest weighted mean rounded. This implies that student teachers are well aware that students have diverse viewpoints and must continue to accept new ideas. This also implies that student teachers encourage students to use critical thinking skills when answering questions.

Table 8. The Teacher as a Risk-Taker

Criteria	WM	DE
Accepts suggestions and answers questions thoroughly.	4.05	VG
Encourages students to demonstrate pride and quality in their work and motivates them to set goals.	3.85	VG
Ask higher-order thinking questions to develop such skills.	3.78	VG
Initiates reinforcement activities when necessary.	3.88	VG
MEAN	3.89	VG

Legend: 1.00-1.79 Needs Improvement; 1.80-2.59 Fair; 2.6-3.39 Good; 3.40-4.19 Very Good; 4.20-5.00 Excellent

The overall findings in Table 9 serve to conclude that the student teachers are compliant by being adaptable and prepared for the modern teaching scenario and that they are equipped with the necessary skills to survive in the twenty-first-century teaching environment. The table also shows that the mentors believed in the student teachers' ability and potential, as most of them rated them very good in their

classroom demonstrations. This demonstrates that today's student teachers are highly adaptable in any classroom setting, despite the inevitable adjustments and difficulties.

Table 9. Summary of 21st-Century Teaching Skills

Skills	WM	Rank	DE
The Communicator	3.95	5	VG
The Model	4.59	1	E
The Learner	4.02	2	VG
The Collaborator	4.01	3	VG
The Leader	3.98	4	VG
The Adaptor	3.84	8	VG
The Visionary	3.91	6	VG
The Risk-Taker	3.88	7	VG
MEAN	4.02		VG

Legend: 1.00-1.79 Needs Improvement; 1.80-2.59 Fair; 2.6-3.39 Good; 3.40-4.19 Very Good; 4.20-5.00 Excellent

4 CONCLUSION

Preparing students for work, citizenship, and life in the twenty-first century is difficult. Globalization, technology, migration, international competition, changing markets, and transnational environmental and political challenges have created a new sense of urgency for students to acquire the skills and knowledge needed for success in the twenty-first century. In this paper, the researcher focuses on how pre-service teachers learn 21st-century skills and how they can effectively apply them. The majority of the teaching skills required for the twenty-first century were demonstrated by the student teachers, as expected. The majority of them, according to Churches and Wagner, demonstrated the necessary 21st-century skills. As a result, the student teachers this semester demonstrate 21st-century skills in handling their respective demonstrations and assigned classes. It should also be noted that, despite the fact that the majority of their mentors gave them high marks, they are always expected to perform far above expectations. It entails exceeding mentor expectations and demonstrating that they are truly a 21st-century teacher by leveraging their knowledge not only in one subject area but also in other areas of specialization. A 21st-century teacher, according to experts, is a highly adaptable, versatile, and knowledgeable educator. To accomplish this, student teachers must be exposed to real-world working scenarios so that they can assess themselves on how they would handle such situations. Wagner believes that having the skills of an effective 21st-century educator, as outlined by Churches, ensures the survival of the 21st-century teaching environment. Indeed, the student teaching program is critical in developing future educators' 21st-century skills and honing their conformity to the modern world of teaching.

The following recommendations are made based on the study's findings: 1) Increase the amount of time or hours that student teachers are exposed to actual demonstrations and

observations before enrolling as intern students so that they are aware of the actual situations as soon as possible; 2) Constant monitoring of classes handled by student teachers in order to provide instant feedback to assess the interns' performance, and 3) Conduct more seminars and training. Other subjects should be connected and integrated. Modern tools should be used in all classroom settings to further enhance students' interests and creativity. Overall, the student teachers' performances and ratings demonstrated that they were capable of dealing with 21st-century learners. Enhancement seminars, on the other hand, could be held to help them improve their technological skills.

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