

# Industrial Revolution (4.0) Professional Skills of Grade Five Teachers: Relationship to The School Performance and School-Based Management of Central Schools in the Division of Laguna 582

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## Abstract

The study looked at the relationship between grade five teachers' Industrial Revolution (4.0) professional qualities and school performance along with school-based administration in the Division of Laguna's central schools. The descriptive method was used; the data were processed using descriptive statistics such as arithmetic mean and standard deviation. The correlation was also used to test the significant relationship of grade five teachers' Industrial Revolution (4.0) professional skills to the school performance and school-based management of central schools.

The study disclosed verbal and statistical information confirming that the industrial revolution 4.0 technical skills, guidance skills and learning skills were all extremely evident among Grade V teachers. The extent of school performance as to profile in different central schools in Laguna were all high except for the drop out which was low and mostly schools were in level three accreditation while the level of school-based management in Laguna were all very high. As to industrial revolution 4.0 professional skill as to technical skills, guidance skills and learning skills shows partial relationship to school performance in terms of profile and school-based management of different central schools in the division of Laguna.

From the findings it is concluded that the null hypotheses which state that there is no significant relationship between the grade five teachers' industrial revolution 4.0 professional skills and the school performance of central schools in the Division of Laguna and there is no significant relationship between the grade five teachers' industrial revolution 4.0 professional skills and the school-based management of central schools in the Division of Laguna were partially rejected

It is therefore recommended that educators assist educational leaders in choosing areas to better educate teachers to meet the demands of the 4th Industrial Revolution. More research on the difficulties raised by the 4<sup>th</sup> Industrial Revolution is needed in order to have a better knowledge on how to prepare educational systems, especially in developing nations like the Philippines. The concerns and challenges that the 4th Industrial Revolution raises should be thoroughly studied so that the education sector develops appropriate programs to equip teachers to implement the necessary reforms for the new trends. Through resource speakers who are neither biased nor discriminatory, teachers can benefit from seminars and workshops.

*Keywords: Industrial Revolution; Professional Skills; School Performance; School-based management*

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## 1. Introduction

Teachers can adapt learning for children due to technology. It allows educators to improve their teaching approaches and personalize learning, resulting in increased productivity and efficiency as instructors. The main goal of efficient guidance skills is to support students' academic, social, emotional, and personal growth. Guidance counseling services assist students in better understanding themselves and finding effective answers to their daily challenges to achieve this goal. Educators' learning skills impact student learning outcomes, which is why teachers must develop learning skills to attain educational objectives such as changing beliefs about their work or improved conduct. These skills are relevant to a teacher; excellent teaching skills such as these are required. These abilities assist educators in keeping their students engaged and motivated in learning.

All professional teachers should acquire relevant and significant skills in 21<sup>st</sup> century education. These skills are technological, guidance, and learning skills to become responsive to the demands of the dynamic educational environment. Educators need technological skills nowadays to fit into the society of teaching. Teachers' capacity to interact with and execute tasks using computer-based and related technologies is referred to as technology skills. They are frequently addressed in a classroom setting or through other means. Tech talents are usually quantifiable. How successfully educators can complete their job using the technology platform they are familiar with define their efficiency. It is stated from the study by Rodrigues et al. (2021) that the balanced development of students' technological skills is critical for their subjective, social, and professional futures, as well as their quality of life, with the integration of digital technologies being relevant in the changing academic work organization, relationships between learners, teachers, and institutions, and new teaching and learning methods.

Guidance skills are one of the essential skills of educators to understand learners' perceptions better. Guidance and counseling are vital educational tools for molding a child's orientation away from harmful beliefs. Educators are present to help the youngster shape their destiny through counseling therapy. Students look up to and appreciate their teacher as a role model. Teachers should be friends with students, listen to their complaints and shortfalls, and provide advice to them to mold them into the best person they can be in their career trajectory.

Counseling is an educational procedure in which a trained, experienced individual assists others in solving their problems by speaking with them face to face. Vendayagan stated that counseling is an accepting, trustworthy, and safe relationship in which clients learn to communicate freely what bothers them, identify their goals, acquire critical social skills, and develop the bravery and self-confidence to execute desired new behavior," says Vedanayagam (NCERT,2018).

Learning skills are continual processes that enhance teaching abilities, master new knowledge, and develop new expertise, all of which assist students in learning more effectively. Teacher learning skills impact student learning outcomes, which is why teachers must practice learning skills to attain learning outcomes such as changing beliefs about their work or improved conduct. Shulamit and Yossi (2017) comprehend that teaching in an E-Learning environment can improve your abilities to teach, learn, and most importantly, function as a link between the teacher and the learner. E-learning has the potential to be a powerful learning tool for encouraging students' desire and ability to master complex material due to the variety of learning environments and subjects.

Relatively, the Department of Education is currently looking into the performance of schools because the very least that today's schools deserve is flexible, tailored curricula taught by teachers who act as mentors to the students. School performance tells if the school is performing well or not and need assistance to get the required rating of Deped. Regarding school performance, teachers and principals must be aware of its relevance.

SBM is a strategy to improve education through transferring significant decision-making authority from individual schools; the Principal must know the managerial style in instructing teachers. An example is the accountability provisions of No Child Left Behind (NCLB) have produced a high-stakes educational climate. Therefore, accountability is a critical goal that schools might create the capacity to achieve the NCLB goals effectively. According to the Washington Office of Superintendent of Public Instruction, the main goal of No Child Left Behind is to narrow achievement gaps by giving all children a fair, equal, and meaningful chance to receive a high-quality education.

The study shows the relationship of the professional skills of grade five teachers in Industrial Revolution 4.0 to the school performance and school-based management of Central Schools in the Division of Laguna. Furthermore, it tackles how the teachers and principals adapt themselves to fit in the current educational set –up to impart knowledge towards the students' academic attainment and school performance.

### 1.1 Statement of the Problem

The study aimed to find out the relationship between grade five teachers' professional skills in industrial revolution 4.0 and the performance of central schools in the Division of Laguna S.Y 2021-2022.

Specifically, it sought to answer the following questions:

1. What are the industrial revolution 4.0 technical skills of grade five teachers in terms of:
  - 1.1 Word Processing Skills;
  - 1.2 Spread Sheet Skills; and
  - 1.3 Electronic Presentation Skills?
2. What are the industrial revolution 4.0 guidance skills of grade five teachers in terms of:
  - 2.1 Conflict Resolution;
  - 2.2 Positive Language Usage; and

- 2.3 Offering Choices?
3. What are the industrial revolution 4.0 learning skills of grade five teachers in terms of:
  - 3.1 Communication; and
  - 3.2 Creativity?
4. What is the extent of school performance as to the profile of central schools in the Division of Laguna with regard to:
  - 4.1 Graduation rate;
  - 4.2 Completion rate;
  - 4.3 Drop-out rate;
  - 4.4 Level of Accreditation; and
  - 4.5 Awards / Recognition?
5. What is the level of school-based management of central schools in the Division of Laguna with regard to:
  - 5.1 Leadership/Governance;
  - 5.2 Accountability;
  - 5.3 Human Resources; and
  - 5.4 Curriculum and development?
6. Do the industrial revolution 4.0 professional skills of grade five teachers have a significant relationship to the school performance of central schools in the Division of Laguna?
7. Do the industrial revolution 4.0 professional skills of grade five teachers significantly relate to the school-based management of central schools in the Division of Laguna?

## 2. Methodology

### 2.1 Research Design

The study used the descriptive method to determine the relationship of professional skills of grade five teachers in industrial revolution 4.0 comprises technical skills with word processing skills, spreadsheet skills, electronic presentation skills, guidance skills including conflict resolution, positive language, and offering choices. In addition, these learning skills include communication, creativity, and school performance based on the school profile.

According to McCombes (2020), a descriptive research design can use various research methods to investigate one or more variables. Unlike in experimental research, the researcher does not control or manipulate any variables but only observes and measures them. Congruent to McCombes' statement, Gay and Airasian (2020) said that descriptive research is usually defined as quantitative research, though qualitative research can also be used for descriptive purposes.

The research design should be carefully developed to ensure reliable results. The descriptive method is used to investigate various educational problems and issues. Typical descriptive studies are concerned with the assessment of attitudes, opinion preferences, demographics, practices, and procedures.

### 2.2 Respondents of the Study

The Division of Laguna consists of 24 municipalities. All central schools are the main focus of the study. The population is the collection of all possible observations of particular characteristics of interest (Garcia, 2017). The study used purposive sampling. In the study, as shown in table 1, the population refers to one hundred twenty (120) grade five teachers in the Division of Laguna.

Table 1. List of Central Schools in the Division of Laguna

| <i>Central School</i> | <i>Sample</i> |
|-----------------------|---------------|
| 1. Alaminos           | 5             |
| 2. Bay                | 5             |
| 3. Calauan            | 5             |
| 4. Cavinti            | 5             |
| 5. Famy               | 5             |
| 6. Mabitac            | 5             |
| 7. Liliw              | 5             |
| 8. Los Banos          | 5             |
| 9. Luisiana           | 5             |
| 10. Lumban            | 5             |
| 11. Kalayaan          | 5             |
| 12. Magdalena         | 5             |
| 13. Majayjay          | 5             |

|                 |            |
|-----------------|------------|
| 14. Nagcarlan   | 5          |
| 15. Rizal       | 5          |
| 16. Paete       | 5          |
| 17. Pagsanjan   | 5          |
| 18. Pakil       | 5          |
| 19. Pangil      | 5          |
| 20. Pila        | 5          |
| 21. Santa Cruz  | 5          |
| 22. Santa Maria | 5          |
| 23. Siniloan    | 5          |
| 24. Victoria    | 5          |
| <b>TOTAL</b>    | <b>120</b> |

Five teachers were selected from each central school in the Division of Laguna namely Santa Maria, Siniloan, Panguil, Pakil, Paete, Kalayaan, Lumban, Pagsanjan, Santa Cruz, Pila, Victoria, Calauan, Bay, Nagcarlan, Liliw, Majayjay, Los Banos, Luisiana, Alaminos, Cavinti, Mabitac, Rizal, Magdalena, and lastly Famy.

### 2.3 Research Instrument

The questionnaires via google forms were used to gather the needed data and information for the study. The set of questionnaires was distributed to the grade five teachers. It consists of eighty (80) questions in which the technological skills comprises 30 items to be answered, word processing skills, spreadsheet skills, and electronic presentation with ten (10) items to wit, thirty (30) question to be answered in guidance skills, learning skills with twenty (20) items to be answered communication, and creativity with (10) questions each. The questionnaire in the form of a checklist used a Likert scale. Each item was given possible answers for five options and its corresponding points.

### 2.4 Statistical Treatment

The following statistical tools stated based on the order in the problem statement were used to analyze and interpret the gathered data.

The professional skills of grade five teachers were computed through mean and standard deviation as the statistical tool employed. Mean refers to the average of a set of distribution of scores. The mean is the reference point, and the standard deviation describes individual scores around the point (Calingasan et al., 2015).

The relationship between the professional skills of grade five teachers in industrial revolution 4.0 and the school performance was treated with the use of Pearson product-moment of correlation to predict the relationship of the independent variables to the dependent variables.

## 3. Results and discussion

This chapter presents the gathered information about the school performance and school-based management of central schools in the Division of Laguna during the School Year 2020-2021 and its relationship to the professional skills of grade five teachers.

### Industrial Revolution 4.0 Professional Skills of Grade Five Teachers as to level of Technological Skills

Word processing is a computer application that allows text to be entered and stored in a computer file and changed and formatted in various ways, thus facilitating the writing process.

Teachers may implement word processing systems by demonstrating how to use them for personal and collective writing and implementing their functionality.

Table 2 shows the level of Professional Skills of Grade Five Teachers Industrial Revolution 4.0 as to Technological Skills in terms of Word Processing Skills.

Among the statements, “*The teacher can navigate document’s page*” yielded the highest mean score ( $M=4.96$ ,  $SD=0.20$ ) and was remarked as Strongly Agree. This is followed by “*The teacher can insert images and bookmarks*” with a mean score ( $M=4.95$ ,  $SD=0.22$ ) and was also remarked as Strongly Agree. On the other hand, the statement “*The teacher can type documents using Microsoft*” received the lowest mean score of responses with ( $M=4.87$ ,  $SD=0.34$ ) yet was also remarked Strongly Agree.

The level of Professional Skills as to Technological Skills of Grade Five Teachers in Industrial Revolution 4.0 in terms of Word Processing Skills attained a mean score of 4.92 and a standard deviation of 0.27 and was Extremely Evident among the respondents.

Table 2. Grade Five Teachers' Level of Industrial Revolution 4.0 Professional Skills in terms of Technological Skills as to Word Processing Skills

| <i>The teacher can...</i>                           | <i>Mean</i> | <i>SD</i>           | <i>Remarks</i>                |
|-----------------------------------------------------|-------------|---------------------|-------------------------------|
| ...create word documents.                           | 4.90        | 0.30                | Strongly Agree                |
| ...save documents.                                  | 4.91        | 0.29                | Strongly Agree                |
| ...format text documents.                           | 4.93        | 0.25                | Strongly Agree                |
| ...insert images and bookmarks.                     | 4.95        | 0.22                | Strongly Agree                |
| ...create, modify, and fill tables.                 | 4.88        | 0.32                | Strongly Agree                |
| ...navigate the document's page.                    | 4.96        | 0.20                | Strongly Agree Strongly Agree |
| ... develop graphs and charts,                      | 4.93        | 0.25                | Strongly Agree                |
| ...check grammar.                                   | 4.94        | 0.24                | Strongly Agree                |
| ...setup up printing formats.                       | 4.89        | 0.31                | Strongly Agree                |
| ...type documents using Microsoft Word application. | 4.87        | 0.34                |                               |
| Overall Mean                                        | 4.92        | 0.27                | Extremely Evident             |
| Legend                                              |             |                     |                               |
| Scale                                               | Range       | Adjectival Analysis |                               |
| 5                                                   | 4.29 – 5.00 | Extremely Evident   |                               |
| 4                                                   | 3.40 – 4.19 | Highly Evident      |                               |
| 3                                                   | 2.60 – 3.39 | Slightly Evident    |                               |
| 2                                                   | 1.80 – 2.59 | Evident             |                               |
| 1                                                   | 1.00 – 1.79 | Not Evident         |                               |

It can be seen from Table 2 remarked that the teachers have “Extremely Evident” exhibited technological skills in terms of word processing, as shown by the general weighted mean of 4.92. The standard deviation of 0.27 reveals that the technological skills in word processing are in the same range or homogenous.

Teachers need to choose software that is appropriate for both the style of writing and the needs of each student. Bhandkoli (2020) said that Microsoft Word is a critical educational tool. It is critical to converting raw data into useful information. Microsoft Word assists teachers and students in developing new and creative learning and teaching approaches.

Table 3. Grade Five Teachers' Level of Industrial Revolution 4.0 Professional Skills in terms of Technological Skills as to Spreadsheets Skills

| <i>The teacher can...</i>                                                               | <i>Mean</i> | <i>SD</i> | <i>Remarks</i>    |
|-----------------------------------------------------------------------------------------|-------------|-----------|-------------------|
| ...format cells.                                                                        | 4.86        | 0.35      | Strongly Agree    |
| ...sort data.                                                                           | 4.61        | 0.68      | Strongly Agree    |
| ...can create charts.                                                                   | 4.87        | 0.34      | Strongly Agree    |
| ...use the shortcut key                                                                 | 4.87        | 0.34      | Strongly Agree    |
| ...save and open an Excel workbook                                                      | 4.64        | 0.63      | Strongly Agree    |
| ...locate a keyboard shortcut.                                                          | 4.62        | 0.60      | Strongly Agree    |
| ...print data from a worksheet.                                                         | 4.78        | 0.42      | Strongly Agree    |
| ...insert row and column in a worksheet.                                                | 4.68        | 0.47      | Strongly Agree    |
| ...perform calculations using the Basic Excel Function                                  | 4.73        | 0.61      | Strongly Agree    |
| ...insert a new worksheet simply by clicking on the plus button below the spread sheet. | 4.77        | 0.50      | Strongly Agree    |
| Overall Mean                                                                            | 4.74        | 0.49      | Extremely Evident |

Table 3 shows the level of Grade Five Teachers' Level of Industrial Revolution 4.0 Professional Skills in terms of Technological Skills as to Spread Sheets Skills.

Among the statements, “*The teacher can create charts and use the shortcut key*” yielded the highest mean score ( $M=4.87$ ,  $SD=0.34$ ) and was remarked as Strongly Agree. This is followed by “*The teacher can format cells*” with a mean score ( $M=4.86$ ,  $SD=0.35$ ) and was also remarked as Strongly Agree. On the other hand, the statement “*The teacher can sort data*” received the lowest mean score of responses with ( $M=4.61$ ,  $SD=0.68$ ) yet was also remarked Strongly Agree.

The level of Professional Skills to Technological Skills as to of Grade Five Teachers in Industrial Revolution 4.0 in Spread Sheets Skills attained a mean score of 4.74 and a standard deviation of 0.49 and was Extremely Evident among the respondents.

The educator respondents also reported that teachers' technological skills in spreadsheet-like formatting cells, sorting data, saving and opening an Excel workbook, locating a keyboard shortcut, printing data from a worksheet, inserting rows and columns in a worksheet, performing calculations using the Basic Excel Function and inserting a new worksheet simply by click on the plus button below the spreadsheet are a vital factor in the teaching and learning process.

It means that educators are aware of the challenges they will face in the future as a result of technological advancements that shape educational trends. In addition, they are aware of the looming changes occurring around the world in general and in Philippine education in particular. 587

Lee et al. (2018) stated that many academic studies and industry reports have stressed the need for workers to be proficient in spreadsheets. As spreadsheets have hundreds of functions and features, it is useful to know which particular spreadsheet skills are important. Unfortunately, few studies determine the relative importance of specific spreadsheet skills, in general as well as in specific, the importance of spreadsheet skills for accountants. It also determines the knowledge new accountants have regarding detailed spreadsheet skills. They also said valuable knowledge for accountants, employers, and educators in aiding their communication regarding spreadsheets proficiency.

Qualitative information is often presented in formats that necessitate additional work to make them helpful to educators. Spreadsheets (such as Google Sheets or Microsoft Excel) are the most important method for dealing with quantitative data in the classroom. Data literate educators have a collection of spreadsheet strategies that enable them to analyze better and present data.

Table 4. Grade Five Teachers' Level of Industrial Revolution 4.0 Professional Skills in terms of Technological Skills as to Electronic Presentation Skills

| <b>The teacher can</b>                                             | <b>Mean</b> | <b>SD</b> | <b>Remarks</b>    |
|--------------------------------------------------------------------|-------------|-----------|-------------------|
| ...add and record audio to the presentation.                       | 4.97        | 0.18      | Strongly Agree    |
| ...insert clip arts, animated clip arts, and music to time slides. | 4.97        | 0.18      | Strongly Agree    |
| ...insert pictures into the presentation.                          | 4.97        | 0.18      | Strongly Agree    |
| ...insert graphs and diagrams.                                     | 5.00        | 0.00      | Strongly Agree    |
| ...insert video files from the computer.                           | 4.97        | 0.18      | Strongly Agree    |
| ...inserting a video from YouTube and other sites.                 | 4.98        | 0.16      | Strongly Agree    |
| ...use a template to design slides.                                | 4.97        | 0.18      | Strongly Agree    |
| ...add notes to the presentation.                                  | 5.00        | 0.00      | Strongly Agree    |
| ...use Slide Sorter view to reorder slides.                        | 4.75        | 0.43      | Strongly Agree    |
| ...import word documents.                                          | 5.00        | 0.00      | Strongly Agree    |
| Overall Mean                                                       | 4.96        | 0.15      | Extremely Evident |

Table 4 shows the level of Grade Five Teachers' Level of Industrial Revolution 4.0 Professional Skills in terms of Technological Skills as to Electronic Presentation Skills.

Among the statements, "*The teacher can navigate insert graphs and diagrams, add notes to the presentation and import word documents*" yielded the highest mean score ( $M=5.00$ ,  $SD=0.00$ ) and was remarked as Strongly Agree. This is followed by "*The teacher can insert a video from YouTube and other sites*" with a mean score ( $M=4.98$ ,  $SD=0.16$ ) and was also remarked as Strongly Agree. On the other hand, the statement "*The teacher can use Slide Sorter view to reorder slides*" received the lowest mean score of responses with ( $M=4.75$ ,  $SD=0.43$ ) yet was also remarked Strongly Agree.

The level of Professional Skills as to Technological Skills of Grade Five Teachers in Industrial Revolution 4.0 in Electronic Presentation Skills attained a mean score of 4.96 and a standard deviation of 0.15 and was Extremely Evident among the respondents.

The teachers' perception is homogenous. However, it shows that educators possess extremely evident skills in electronic presentation and that the teacher's ability in electronic presentation skills is good enough to make better instructional materials for the learners.

According to Prasad (2020), it is to make one's presentations more effective in conveying your message to your audience. Technology can help you improve your presentation skills, but it cannot replace essential skills like delivering content and controlling an audience, which requires planning and practice. A good speaker with mediocre slides will be received better than a poor speaker with cutting-edge technology.

The learning process in the digital era requires the need for and importance of the role of electronic teaching materials in blended learning. Electronic teaching materials are developed with seven stages of development research ranging from requirements analysis to trials and product revisions. Students as users feel that learning with electronic teaching materials oriented by metacognitive are more directed and comfortable in online or offline learning. Students learn how to speak in front of a group through giving presentations, which is an excellent career ability. They know how to prepare public presentation materials and develop their speaking skills via practice (particularly with evaluation). This result shows that electronic teaching materials can optimize the implementation of blended learning (Rini, Akbar, and Twinisari 2019).

### Grade Five Teachers' Level of Industrial Revolution 4.0 Professional Skills in terms of Guidance Skills

According to Wallenstein (2018), understanding Conflict Resolution is a comprehensive introduction to the study of peace and conflict studies. It explores both the historical roots of the study of conflict management and the contemporary settings and tools available to states, regional and global organizations where these core ideas apply.



Table 5. Grade Five Teachers' Level of Industrial Revolution 4.0 Professional Skills in terms of Guidance Skills as to Conflict Resolution

| <i>The teacher...</i>                                                                                                                | <i>Mean</i> | <i>SD</i> | <i>Remarks</i>    |
|--------------------------------------------------------------------------------------------------------------------------------------|-------------|-----------|-------------------|
| <i>...works together to get the job done.</i>                                                                                        | 5.00        | 0.00      | Strongly Agree    |
| <i>...has a robust set of values and beliefs that guide their actions.</i>                                                           | 4.99        | 0.09      | Strongly Agree    |
| <i>...has a concern for measures of success in school.</i>                                                                           | 5.00        | 0.00      | Strongly Agree    |
| <i>...cares for one another.</i>                                                                                                     | 4.98        | 0.16      | Strongly Agree    |
| <i>...accepts specific and challenging goals.</i>                                                                                    | 5.00        | 0.00      | Strongly Agree    |
| <i>...seeks constant improvement.</i>                                                                                                | 4.99        | 0.09      | Strongly Agree    |
| <i>...understands the significant differences in abilities and needs of every individual.</i>                                        | 4.98        | 0.13      | Strongly Agree    |
| <i>...operates with a deep belief that all children can achieve regardless of race, perceived ability, and socio-economic status</i> | 5.00        | 0.00      | Strongly Agree    |
| <i>...assumes that quality is one necessary aspect of any goal.</i>                                                                  | 5.00        | 0.00      | Strongly Agree    |
| <i>...works together as a team, even across the time.</i>                                                                            | 5.00        | 0.00      | Strongly Agree    |
| Overall Mean                                                                                                                         | 4.99        | 0.05      | Extremely Evident |

Table 5 shows the level of Grade Five Teachers' Level of Industrial Revolution 4.0 Professional Skills in terms of Guidance Skills as to Conflict Resolution.

Among the statements, "*The teacher works together to get the job done, has a concern for measures of success in school, accepts specific and difficult goals, operates with a deep belief that all children can achieve regardless of race, perceived ability and socio-economic status, assumes that quality is one necessary aspect of any goal and works together as a team, even across the time*" yielded the highest mean score ( $M=5.00$ ,  $SD=0.00$ ) and was remarked as Strongly Agree. This is followed by "*The teacher has a strong set of values and beliefs that guide their actions*" with a mean score ( $M=4.99$ ,  $SD=0.09$ ) and was also remarked as Strongly Agree. On the other hand, the statement "*The teacher understands the great differences in abilities and needs of every individual*" received the lowest mean score of responses with ( $M=4.98$ ,  $SD=0.13$ ) yet was also remarked Strongly Agree.

The level of Professional Skills as to Guidance Skills of Grade Five Teachers in Industrial Revolution 4.0 in terms of Conflict Resolution attained a mean score of 4.99 and a standard deviation of 0.05 and was Extremely Evident among the respondents.

This finding means that the educators believe guidance skills in a school environment are essential for the school's success and learners. Regarding conflict and resolution, teachers are well aware of how they handle the situation.

Working for the genesis of something new, both inside and outside of the learner, is what creative teaching skills are all about. For various purposes, it's important to teach innovatively: The motivational classroom revolves around creativity. It gives students and teachers the freedom to share their thoughts and views in their own specific ways. Person with strong conflict resolution skills can lessen the friction that can harm their working relationships. They are able to interact better with coworkers and develop stronger work connections by resolving issues in a more professional and respectful manner. Disruptions are eliminated.

Pugliese (2019) stated that there are always tricky challenges in teaching, and I believe that innovative teachers are best prepared to deal with them with greater trust. To better understand and navigate the diversity of their classroom, creative teachers should continually reinvent themselves and change their teaching styles and strategies.

Rodrigues (2021) discussed conflict resolution styles in two dimensions and named these as "relation" and "purpose". As the result of the interaction of these two dimensions, five conflict resolution styles emerged; forcing, avoiding, accommodating, compromising, and collaboration. The conflict resolution styles used by the individual, determine whether the relationship is constructive or destructive.

#### **Grade Five Teachers' Level of Industrial Revolution 4.0 Professional Skills 4.0 in terms of Guidance Skills as to Positive Language Usage**

Since teachers are professionals, they know how to talk with manners and use appropriate language when conversing with other people. Finding showed that it is extremely evident, which implies that teachers can effectively motivate the students in terms of doing their school activities.

Among the statements, "*The teacher uses encouraging words in helping the learners, guide learners with motivating words in teaching the lesson and encourage the learners to comply with the teachers given tasks*" yielded the highest mean

score ( $M=5.00$ ,  $SD=0.00$ ) and was remarked as Strongly Agree. This is followed by “The teacher uses appropriate words while giving instruction” with a mean score ( $M=4.99$ ,  $SD=0.09$ ) and was also remarked as Strongly Agree.

Table 6. Grade Five Teachers' Level of Industrial Revolution 4.0 Professional Skills 4.0 in terms of Guidance Skills as to Positive Language Usage

| <i>The teacher...</i>                                                                                       | <b>Mean</b> | <b>SD</b>   | <b>Remarks</b>           |
|-------------------------------------------------------------------------------------------------------------|-------------|-------------|--------------------------|
| ...uses encouraging words to help the learners.                                                             | 5.00        | 0.00        | Strongly Agree           |
| ...sets positive mood while talking to the learners.                                                        | 4.98        | 0.13        | Strongly Agree           |
| ...uses appropriate words while giving instructions.                                                        | 4.99        | 0.09        | Strongly Agree           |
| ...guides learners with motivating words in teaching the lesson                                             | 5.00        | 0.00        | Strongly Agree           |
| ...motivates the learners to accomplish their tasks using positive words.                                   | 4.98        | 0.16        | Strongly Agree           |
| ...lets the learners open up and advise them with encouraging words to respond immediately.                 | 4.99        | 0.09        | Strongly Agree           |
| ...gives positive advice to learners who seek it.                                                           | 4.98        | 0.13        | Strongly Agree           |
| ...encourages the learners to comply with the teachers' given tasks                                         | 5.00        | 0.00        | Strongly Agree           |
| ... advises the group mates to cooperate with the other learners in doing their projects                    | 4.98        | 0.16        | Strongly Agree           |
| ...comforts the learners with problems to lighten for them to focus their minds on doing school activities. | 4.97        | 0.18        | Strongly Agree           |
| <b>Overall Mean</b>                                                                                         | <b>4.99</b> | <b>0.09</b> | <b>Extremely Evident</b> |

Table 6 shows the level of Grade Five Teachers' Level of Industrial Revolution 4.0 Professional Skills in terms of Guidance Skills as to Positive Language Usage.

On the other hand, the statement “The teacher comforts the learners with problems to lighten for them to focus their minds in doing school activities” received the lowest mean score of responses with ( $M=4.97$ ,  $SD=0.18$ ) yet was also remarked Strongly Agree.

The level of Professional Skills of Grade Five Teachers in Industrial Revolution 4.0 in terms of Guidance Skills as to Positive Language Usage attained a mean score of 4.99 and a standard deviation of 0.09 and was Extremely Evident among the respondents.

Leeuwen and Janssen (2019) Students' interest improved when teachers gave compliments and guidance to groups of students. As a result, there is empirical proof that group interaction is related to how teachers guide these classes.

According to Sardar (2018), teachers' activities are critical to a nation's success. Similarly, they are attempting to expand the student's basement. A qualified instructor is the foundation of a student's education, whether at a school, college, or university. Even a teacher who teaches skills or specialized courses has societal duties. As a result, a teacher is responsible for developing tomorrow's leaders. At the same time, if a teacher fails to see a student's eternal power, the student will fail throughout his life. A teacher is the best mentor for a student's life. The role of teachers is critical in transforming the globalizing environment and improving long-term education.

Teachers should always know how to give other choices to the students and give them additional opportunities to learn within the context. It can help the learners become wiser in making decisions and let them learn with their own choices and actions.

### Grade Five Teachers' Level of Industrial Revolution 4.0 Professional Skills in terms of Guidance Skills as to Offering Choices

Yuen supported it (2020) and stated that guidance work is proactive and developmental, while therapy is more supportive and remedial. In offering advice and counseling, the national trend appears to have shifted from a casework and remedial approach to a preventive, consultative process.

Table 7. Grade Five Teachers' Level of Industrial Revolution 4.0 Professional Skills in terms of Guidance Skills as to Offering Choices

| <i>The teacher...</i>                                                           | <b>Mean</b> | <b>SD</b> | <b>Remarks</b> |
|---------------------------------------------------------------------------------|-------------|-----------|----------------|
| ...gives choices to the learners to choose between different options.           | 5.00        | 0.00      | Strongly Agree |
| ...offers multiple options for presenting ideas through support options.        | 5.00        | 0.00      | Strongly Agree |
| ...offers choices for presenting concepts through resources                     | 5.00        | 0.00      | Strongly Agree |
| ... can formulate good questions when interacting with learners                 | 5.00        | 0.00      | Strongly Agree |
| ...provides a variety of options for presenting ideas utilizing support options | 5.00        | 0.00      | Strongly Agree |
| ...should be able to ask good questions and let them choose                     | 5.00        | 0.00      | Strongly Agree |
| ...allows the students to select from a variety of options on their own         | 5.00        | 0.00      | Strongly Agree |
| ...lets the learners decide what choices are good for them.                     | 5.00        | 0.00      | Strongly Agree |
| ...encourages children to set goals for the common good.                        | 5.00        | 0.00      | Strongly Agree |



|                                                                                      |      |      |                   |
|--------------------------------------------------------------------------------------|------|------|-------------------|
| ...lets the learners choose between options that can make them good decision-makers. | 5.00 | 0.00 | Strongly Agree    |
| Overall Mean                                                                         | 5.00 | 0.00 | Extremely Evident |

Table 7 shows the level of Grade Five Teachers' Level of Industrial Revolution 4.0 Professional Skills in terms of Guidance Skills as to Offering Choices. All statements yielded the highest mean score ( $M=5.00$ ,  $SD=0.00$ ) and were remarked as Strongly Agree. The level of Professional Skills of Grade Five Teachers in Industrial Revolution 4.0 in terms of Guidance Skills as to Offering Choices attained a mean score of 5.00 and a standard deviation of 0.00 and was Extremely Evident among the respondents.

Offering choice in the classroom is one way to increase student motivation by appealing to students' needs for autonomy and competence. In the fields of marketing, economics and social psychology, decision-making research is examined as a way to shape consumers' preferences.

These results are congruent with the statements of Usher (2019) that giving students a choice empowers them to take ownership of their learning while also producing a product that feels authentic to them. They work on something they're good at creating or experiment with something they'd like to get better at.

### Grade Five Teachers' Level of Industrial Revolution 4.0 Professional Skills in terms of Learning Skills as to Communication

Table 8 shows the level of Grade Five Teachers' Level of Industrial Revolution 4.0 Professional Skills in terms of Learning Skills as to Communication. Among the statements, "*The teacher uses appropriate choice of words that suits the learner's ability, feels that everyone is entitled to his/her own view as to the purpose of the mission of the organization and acts as community feedback to show the school and community s should be unified to achieve the mission-vision of the organization*" yielded the highest mean score ( $M=5.00$ ,  $SD=0.00$ ) and was remarked as Strongly Agree.

This is followed by "*The teacher uses correct competency of learning materials, use interactive strategies such as serious games and simulations to motivate learners, encourage social interaction between learners and use appropriate non-verbal communication when interacting with the learners using two-way video and text*" with a mean score ( $M=4.99$ ,  $SD=0.09$ ) and was also remarked as Strongly Agree.

Table 8. Grade Five Teachers' Level of Industrial Revolution 4.0 Professional Skills in terms of Learning Skills as to Communication

| The teacher...                                                                                                                       | Mean | SD   | Remarks           |
|--------------------------------------------------------------------------------------------------------------------------------------|------|------|-------------------|
| ...uses the appropriate choice of words that suits the learner's ability.                                                            | 5.00 | 0.00 | Strongly Agree    |
| ...uses correct competency of learning materials                                                                                     | 4.99 | 0.09 | Strongly Agree    |
| ...uses appropriate learning theories to develop learning strategies to maximize learning.                                           | 4.98 | 0.13 | Strongly Agree    |
| ...uses interactive strategies such as serious games and simulations to motivate learners                                            | 4.99 | 0.09 | Strongly Agree    |
| ...acts as a coach for learners.                                                                                                     | 4.98 | 0.16 | Strongly Agree    |
| ...encourage social interaction between learners.                                                                                    | 4.99 | 0.09 | Strongly Agree    |
| ...uses appropriate non-verbal communication when interacting with the learners using two-way video and text                         | 4.99 | 0.09 | Strongly Agree    |
| ...model good digital citizenship when using social media to communicate with learners and peers.                                    | 4.98 | 0.13 | Strongly Agree    |
| ...feels that everyone is entitled to their view of the purpose of the organization's mission.                                       | 5.00 | 0.00 | Strongly Agree    |
| ...acts as community feedback to show the school and community s should be unified to achieve the mission-vision of the organization | 5.00 | 0.00 | Strongly Agree    |
| Overall Mean                                                                                                                         | 4.99 | 0.08 | Extremely Evident |

On the other hand, the statement "*The teacher I use appropriate learning theories to develop learning strategies to maximize learning, act as a coach for learners and model good digital citizenship when using social media to communicate with learners and peers*" received the lowest mean score of responses with ( $M=4.98$ ,  $SD=0.13$ ,  $0.16$ ) yet was also remarked Strongly Agree.

The level of Professional Skills of Learning Skills of Grade Five Teachers in Industrial Revolution 4.0 in terms of Communication attained a mean score of 4.99 and a standard deviation of 0.08 and was Extremely Evident among the respondents.

The above findings showed that educators can easily access the information store and engage others to achieve their goals if they can interact in the modern age.

Yuen supported it (2020) and stated that guidance work is proactive and developmental, while therapy is more supportive and remedial. In offering advice and counseling, the national trend appears to have shifted from a casework and remedial approach to a preventive, consultative process.

According to Salamondra (2021), schools are complex, dynamic systems that require effective communication to meet the diverse needs of their stakeholders. In addition, communication is essential to maintain healthy relationships between the students, faculty, and parents.

Communication skills are essential for teaching and learning. Not only does communication send messages, but it also motivates effort, changes attitudes, and stimulates thought. Without it, prejudices emerge, messages are distorted, and learning stagnates. Communication is a crucial channel of language since it allows people to understand and share information. Planning, problem-solving, self-talk, and certain others are indeed examples of intrapersonal or internal communication. It's a continuous process that prepares the speaker to communicate clearly and concisely. The purpose of verbal relationships is to transmit relevant and objective messages. Establishing effective communication practices in a school requires understanding communication characteristics, including the benefits and common barriers. The three critical components of effective communication -- trust, transparency, and active listening -- build the relationship necessary to engage in challenging conversations.

Table 9. Grade Five Teachers' Level of Industrial Revolution 4.0 Professional Skills in terms of Learning Skills as to Creativity

| <i>The teacher...</i>                                                                                | <i>Mean</i> | <i>SD</i> | <i>Remarks</i>    |
|------------------------------------------------------------------------------------------------------|-------------|-----------|-------------------|
| <i>...selects appropriate digital learning resources to maximize learning.</i>                       | 4.98        | 0.13      | Strongly Agree    |
| <i>...access appropriate open education resources to integrate into the curriculum.</i>              | 4.98        | 0.13      | Strongly Agree    |
| <i>...modifies the learning resources to align with the learning outcome</i>                         | 4.99        | 0.09      | Strongly Agree    |
| <i>...uses different educational resources to meet the needs of individual learners.</i>             | 4.98        | 0.16      | Strongly Agree    |
| <i>...uses the different applications in teacher for better understanding of the lesson</i>          | 4.99        | 0.09      | Strongly Agree    |
| <i>...lets the learners utilize some applications using internet to gather important information</i> | 4.97        | 0.18      | Strongly Agree    |
| <i>...allows the learners to make their documents or reports using the computer application.</i>     | 4.98        | 0.13      | Strongly Agree    |
| <i>...uses different digital learning resources to be used in teaching</i>                           | 4.98        | 0.16      | Strongly Agree    |
| <i>...applies interactive strategies when teaching.</i>                                              | 4.98        | 0.16      | Strongly Agree    |
| <i>...lets the imagination of the learners work on their task to form sound output.</i>              | 4.97        | 0.18      | Strongly Agree    |
| <i>Overall Mean</i>                                                                                  | 4.98        | 0.14      | Extremely Evident |

Table 9 shows the level of Grade Five Teachers' Level of Industrial Revolution 4.0 Professional Skills in terms of Learning Skills as to Creativity.

Among the statements, "*The teacher modifies the learning resources to align with the learning outcome and use the different applications in teacher for better understanding of the lesson*" yielded the highest mean score ( $M=4.99$ ,  $SD=0.09$ ) and was remarked as Strongly Agree. This is followed by "*The teacher select appropriate digital learning resource to maximize learning, access appropriate open education resources to integrate into the curriculum, use different educational resources to meet the needs of individual learners, allows the learners to make their documents or reports using the computer application, use different digital learning resources to be used in teaching and apply interactive strategies when teaching*" with a mean score ( $M=4.98$ ,  $SD=0.13$ ,  $0.16$ ) and was also remarked as Strongly Agree. On the other hand, the statement "*The teacher let the learners utilize some application using the internet to gather important information and let the imagination of the learners work on their task to form good output*" received the lowest mean score of responses with ( $M=4.97$ ,  $SD=0.18$ ) yet was also remarked Strongly Agree.

The level of Professional Skills of Learning Skills of Grade Five Teachers in Industrial Revolution 4.0 in terms of Creativity attained a mean score of 4.98 and a standard deviation of 0.14 and was Extremely Evident among the respondents.

Educators must be creative in their teaching-learning style and apply different strategies to cope with the changing world and be globally competitive. In the classroom, innovative process changes the way students approach a problem. It enables educators to think outside the box, explore, and come up with novel solutions to various challenges. Improves communication skills. Teachers who practice creativity in learning are much more likely than their counterparts who do not practice this to say their students often take responsibility for their own learning; feel confident about their ability to master difficult material; are willing to take risks; and display a strong desire to learn more about the subjects taught in school.

Educators' communication abilities improve in a classroom that encourages creativity. It involves all of the senses and creates new knowledge that didn't exist before. Students of all ages need to learn by creating - it helps synthesize information and brings joy and meaning to their educational experience. This also enhances social problem solving and shared learning, giving students a sense of belonging. The finding showed that teachers can be creative and use various digital learning resources that can help them in teaching.

Kumar et al. (2017) said that higher education is critical in terms of social, economic, cultural, and political development. In both scientific and political terms. Education enables people to progress from being human to possessing

human qualities. Creative teaching in classrooms can bring benefits such as developing children's imagination and increase the probability for major discoveries and economic development for the future. Also, creativity is considered as an important component of personal well-being and in a classroom context may develop curiosity, openness, and communicational abilities. Great higher education is required to foster creativity, talent, and innovation in today's globalized world. Adaptability and a research attitude are two qualities that stand out. It is critical to guarantee that the educational outcomes are fully utilized, and that education meets the bare minimum criteria to suit the world's ever-changing needs.

### Extent of School Performance of Central Schools in the Division of Laguna

The Graduation rate twenty-one (21) or 87.50% of the Central Schools received the highest rate of 98% to 100%. And there are only three (3) or 12.50% of the Central Schools received a rate of 95% to 97%.

For the Completion rate, twenty-two (22) or 91.70% of the Central Schools received the highest rate of 98% to 100%. And there are only two (2) or 8.30% of the Central Schools received a rate of 95% to 97%.

And for the Awards / Recognition, sixteen (16) or 66.70% of the Central Schools received from *Division Level*. Followed by *Regional Level* with five (5) or 20.80%. And only one (1) or 4.20% of the Central Schools received from *District Level*.

While for the Drop-out rate, twenty-three (23) or 95.80% of the Central Schools received the lowest rate of 0.00% to 0.90%. And there are only one (1) or 4.20% of the Central Schools received a rate of 1.01% to 1.09%.

And for the Accreditation Level, seventeen (17) or 70.80% of the Central Schools are in *Level 3*. And there are only seven (7) or 29.20% of the Central Schools are in *Level 2*.

This data reflects that different performance indicator affects the level of school performance. Performance indicators have big roles in an institution for it denotes its success. Performance indicators can tell if an institution is performing or not.

Table 10. Extent of School Performance of Central Schools in the Division of Laguna

| Performance Indicator      | Frequency (n) | Percentage (%) |
|----------------------------|---------------|----------------|
| <b>Graduation Rate</b>     |               |                |
| • 98% - 100%               | 21            | 87.5           |
| • 95% - 97%                | 3             | 12.5           |
| • 92% - 94%                | 0             | 0              |
| <b>Completion Rate</b>     |               |                |
| • 98% - 100%               | 22            | 91.7           |
| • 95% - 97%                | 2             | 8.3            |
| • 92% - 94%                | 0             | 0              |
| <b>Awards/Recognition</b>  |               |                |
| • District                 | 1             | 4.2            |
| • Division                 | 16            | 66.7           |
| • Regional                 | 5             | 20.8           |
| • National                 | 2             | 8.3            |
| <b>Drop-out Rate</b>       |               |                |
| • 0.00% - 0.90%            | 23            | 95.8           |
| • 1.01% - 1.09%            | 1             | 4.2            |
| • 2.01% - 2.09%            | 0             | 0              |
| • 3.01% - 3.09%            | 0             | 0              |
| • 4.01% - 5.00%            | 0             | 0              |
| <b>Accreditation Level</b> |               |                |
| • Level 1                  | 0             | 0              |
| • Level 2                  | 7             | 29.2           |
| • Level 3                  | 17            | 70.8           |
| • Level 4                  | 0             | 0              |
| • Level 5                  | 0             | 0              |

Table 10 presents the extent of school performance of central schools in the division of Laguna with regards to graduation rate, completion rate, Awards/recognition, drop-out rate, and accreditation level as performance indicators.

**Level of School-Based Management of Central Schools in the Division of Laguna**

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Table 11. Level of School-Based Management of Central Schools as to Leadership and Governance

| <i>The school head...</i>                                                                                                   | <b>Mean</b> | <b>SD</b> | <b>Remarks</b>           |
|-----------------------------------------------------------------------------------------------------------------------------|-------------|-----------|--------------------------|
| <i>...shares mission, vision, and goal in making responsive and relevant to the context of a diverse environment.</i>       | 4.99        | 0.09      | Strongly Agree           |
| <i>...sets clear and precise plans for further development of the programs and projects.</i>                                | 4.95        | 0.22      | Strongly Agree           |
| <i>...uses data and information from the school planning team to improve and modify programs, projects, and activities.</i> | 4.92        | 0.28      | Strongly Agree           |
| <i>...conducts regular meetings to disseminate strategic plans.</i>                                                         | 4.97        | 0.18      | Strongly Agree           |
| <i>...encourages teachers and stakeholders to participate in planning.</i>                                                  | 5.00        | 0.00      | Strongly Agree           |
| <i>...identifies priorities and potential solutions for the school improvement plan.</i>                                    | 4.96        | 0.20      | Strongly Agree           |
| <i>...defines the project's desired outcomes.</i>                                                                           | 4.98        | 0.13      | Strongly Agree           |
|                                                                                                                             | 4.98        | 0.13      | Strongly Agree           |
|                                                                                                                             | 4.94        | 0.24      | Strongly Agree           |
| <i>...establishes the project planning team</i>                                                                             | 4.93        | 0.25      | Strongly Agree           |
| <b>Overall Mean</b>                                                                                                         | 4.96        | 0.17      | <b>Extremely Evident</b> |

Table 11 shows the level of level of school-based management of central schools as to leadership and governance.

Among the statements, “*The school head encouraged teachers and stakeholders to participate in planning*” yielded the highest mean score ( $M=5.00$ ,  $SD=0.00$ ) and was remarked as Strongly Agree. This is followed by “*The school head shares mission and vision and goal in making responsive and relevant to the context of the diverse environment*” with a mean score ( $M=4.99$ ,  $SD=0.09$ ) and was also remarked as Strongly Agree. On the other hand, the statement “*The school head uses data and information from the school planning team to improve and modify programs, projects and activities*” received the lowest mean score of responses with ( $M=4.92$ ,  $SD=0.28$ ) yet was also remarked Strongly Agree.

The mean level of school-based management of central schools in the Division of Laguna regarding Leadership and Governance attained a mean score of 4.96 and a standard deviation of 0.17 and was Extremely Evident among the respondents.

Though every school head has their strategies for controlling their school, the results proved that they could be capable of showing good leadership and governance in handling the school management system.

Amanchukwu, Stanley, and Ololube (2015) stated that no nation grows further than the quality of its educational leaders. He said his theoretical debate aims to examine the broader context of leadership and its effectiveness in improving school management. The academic evaluation examines recent theoretical developments in the study of educational leadership in school management. They conclude that success is inevitable if the application of the leadership styles, principles, and methods is properly and fully applied in school management because quality educational leadership tradition offers a great opportunity to further refine educational leadership and management policies and practices by accepting and utilizing the basic principles and styles of educational leadership.

**Level of School-Based Management of Central Schools as to Accountability**

Among the statements, “*The school head holds a general assembly of teachers and parents for the student's welfare and school performance*” yielded the highest mean score ( $M=5.00$ ,  $SD=0.00$ ) and was remarked as Strongly Agree. This is followed by “*The school head creates monitoring team of the projects and programs and analyzes the external environment as its effect in the organization*” with a mean score ( $M=4.99$ ,  $SD=0.09$ ) and was also remarked as Strongly Agree.

Table 12. Level of School-Based Management of Central Schools as to Accountability

| <i>The school head...</i>                                                                                    | <b>Mean</b> | <b>SD</b> | <b>Remarks</b>           |
|--------------------------------------------------------------------------------------------------------------|-------------|-----------|--------------------------|
| <i>...formulates programs, policies, and procedures of the organization.</i>                                 | 4.98        | 0.13      | Strongly Agree           |
| <i>...assembles materials, resources, and facilities</i>                                                     | 4.98        | 0.13      | Strongly Agree           |
| <i>...sets the organization's mission-vision, goals, and objectives.</i>                                     | 4.98        | 0.16      | Strongly Agree           |
| <i>...gives the subordinates a chance to contribute to the school improvement plan formulation.</i>          | 4.98        | 0.13      | Strongly Agree           |
| <i>...creates monitoring team of the projects and programs</i>                                               | 4.99        | 0.09      | Strongly Agree           |
| <i>...analyzes the external environment as its effect on the organization</i>                                | 4.99        | 0.09      | Strongly Agree           |
| <i>...develops strategies and sets policy guidelines.</i>                                                    | 4.98        | 0.13      | Strongly Agree           |
| <i>...leads the improvement of the school plan.</i>                                                          | 4.97        | 0.18      | Strongly Agree           |
| <i>...takes an active part in seeking solutions for the development plan.</i>                                | 4.97        | 0.18      | Strongly Agree           |
| <i>...holds a general assembly of teachers and parents for the student's welfare and school performance.</i> | 5.00        | 0.00      | Strongly Agree           |
| <b>Overall Mean</b>                                                                                          | 4.98        | 0.12      | <b>Extremely Evident</b> |

Table 12 shows the level of school-based management of central schools as to accountability. On the other hand, the statement “*The school head leads the improvement of the school plan and takes an active part in seeking solutions for the development plan*” received the lowest mean score of responses with ( $M=4.97$ ,  $SD=0.18$ ) yet was also remarked Strongly Agree. 594

The mean level of school-based management of central schools in the Division of Laguna with regards to Accountability attained a mean score of 4.98 and a standard deviation of 0.12 and was Extremely Evident among the respondents.

It shows the perception of educators with regards to their school heads’ extremely evident well-organized school-based management in terms of accountability. Considering their overall responses, the educators viewed the school-based management of the school heads as extremely evident regarding responsibility. School heads with desirable work values are likely to be devoted to the teaching profession and remain in the institution as a whole; thus, giving the best to their work result in efficient utilization of time and resources.

According to O’Neill (2019), systems of accountability are second-order ways of using evidence of the standard to which first-order tasks are carried out for various purposes. However, more accountability is not always better, and processes of holding to account can impose high costs without securing substantial benefits. At their worst, they may damage the performance of the first-order tasks for which they supposedly improve accountability. This may happen in education if the assessment tail wags the education dog. Teachers and learners, like others, need to be held to account, but this requires intelligent systems of accountability that do not distort primary activities. Intelligent accountability in education, as elsewhere, also needs to communicate, not merely disseminate, relevant evidence that can be assessed by those to whom professionals and institutions are accountable.

Table 13. Level of School-Based Management of Schools as to Human Resources

| <i>The school head...</i>                                                                                                                                                  | <b>Mean</b> | <b>SD</b> | <b>Remarks</b>    |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------|-----------|-------------------|
| <i>...prepares procedural guidelines for designated teachers in performing tasks.</i>                                                                                      | 4.94        | 0.24      | Strongly Agree    |
| <i>...assigns teacher that has formal/ informal training on performing the tasks.</i>                                                                                      | 4.94        | 0.24      | Strongly Agree    |
| <i>...encourages two-way communication where subordinates participate in organizing and give ideas and suggestions to make the organization better and more efficient.</i> | 4.96        | 0.20      | Strongly Agree    |
| <i>...ensures quality instructional staff</i>                                                                                                                              | 4.95        | 0.22      | Strongly Agree    |
| <i>...provides effective organizing on training aspects for teachers’ skills and knowledge to perform their job.</i>                                                       | 4.98        | 0.16      | Strongly Agree    |
| <i>...organizes the budget and work plan.</i>                                                                                                                              | 4.93        | 0.26      | Strongly Agree    |
| <i>...coordinates teachers, parents, and local government officials about school activities, projects, and programs.</i>                                                   | 4.97        | 0.18      | Strongly Agree    |
| <i>...builds relationships among teachers and learners based on the common goal, support, and mutual accountability.</i>                                                   | 4.98        | 0.16      | Strongly Agree    |
| <i>...takes charge of all school activities.</i>                                                                                                                           | 4.97        | 0.18      | Strongly Agree    |
| <i>...clarifies the role and duties of every member of the school team.</i>                                                                                                | 5.00        | 0.00      | Strongly Agree    |
| Overall Mean                                                                                                                                                               | 4.96        | 0.18      | Extremely Evident |

Table 13 shows the Level of School-Based Management of Schools as to Human Resources.

Among the statements, “*The school head clarifies the role and duties of every member of the school team*” yielded the highest mean score ( $M=5.00$ ,  $SD=0.00$ ) and was remarked as Strongly Agree. This is followed by “*The school head provides effective organizing on training aspects for teachers’ skills and knowledge to perform their job and builds relationship among teachers and learners based on the common goal, supports and mutual accountability*” with a mean score ( $M=4.98$ ,  $SD=0.16$ ) and was also remarked as Strongly Agree. On the other hand, the statement “*The school head organizes the budget and work plan*” received the lowest mean score of responses with ( $M=4.93$ ,  $SD=0.26$ ) yet was also remarked Strongly Agree.

The mean level of school-based management of central schools in the Division of Laguna regarding Leadership and Governance attained a mean score of 4.96 and a standard deviation of 0.18 and was Extremely Evident among the respondents.

Considering their overall ratings, the educators viewed the school heads’ school-based management as highly evident regarding human resources. It performs numerous critical functions to ensure that school administration works efficiently. Teachers, employees, and other interested stakeholders can effortlessly collaborate through a consolidated platform. In addition, school heads often encourage and motivates the workforce’s presence in professional meeting, training, workshops, and seminars for efficient accomplishments of tasks. Human resources team takes care of your other employees, working to create a productive environment where people feel valued and motivated to stay at the company and give their best work.

Since an efficient workforce is vital for the development of any organization, the skills mentioned are very much required. Although the educators and their school heads own relevant skills in human resources, they evaluated their principals and gave an extremely evident rating on this skill.



### Level of School-Based Management of Central Schools as to Curriculum Development

According to Alsubaie (2016), For curriculum development to be effective and schools to be successful, teachers must be involved in the development process

Table 14. Level of School-Based Management of Central Schools as to Curriculum Development

| <i>The school head...</i>                                                                                                      | <b>Mean</b> | <b>SD</b>   | <b>Remarks</b>           |
|--------------------------------------------------------------------------------------------------------------------------------|-------------|-------------|--------------------------|
| <i>...has proper control to ensure conformity of the implementation of the curriculum.</i>                                     | 4.99        | 0.09        | Strongly Agree           |
| <i>...communicates effectively to the subordinates and stakeholders.</i>                                                       | 4.99        | 0.09        | Strongly Agree           |
| <i>...overviews the projects, activities, and programs of the organization.</i>                                                | 5.00        | 0.00        | Strongly Agree           |
| <i>...conducts regular meetings with the teachers to discuss actions under the strategy.</i>                                   | 4.99        | 0.09        | Strongly Agree           |
| <i>...monitors from time to time the task development.</i>                                                                     | 4.93        | 0.26        | Strongly Agree           |
| <i>...gives a memorandum concerning the designation for implementation and compliance.</i>                                     | 5.00        | 0.00        | Strongly Agree           |
| <i>...encourages the designated teacher to formulate and implement plans for project development,</i>                          | 4.99        | 0.09        | Strongly Agree           |
| <i>...spends time in school observing teachers and pupils and the effects of their leadership effort.</i>                      | 4.98        | 0.16        | Strongly Agree           |
| <i>...builds relationship with teachers, pupils, and parents based on the common goal, supports and mutual accountability.</i> | 4.98        | 0.16        | Strongly Agree           |
| <i>...shows transparency and accountability.</i>                                                                               | 4.96        | 0.20        | Strongly Agree           |
| <b>Overall Mean</b>                                                                                                            | <b>4.98</b> | <b>0.11</b> | <b>Extremely Evident</b> |

Table 14 shows the Level of School-Based Management of Central Schools as to Curriculum Development.

Among the statements, “The school head overviews the projects, activities and programs of the organization and gives memorandum concerning the designation for implementation and compliance” yielded the highest mean score ( $M=5.00$ ,  $SD=0.00$ ) and was remarked as Strongly Agree. This is followed by “The school head has a proper control to ensure conformity of the implementation of the curriculum, communicates effectively to the subordinates and stakeholders, conducts regular meetings with the teachers to discuss actions under the strategy, and encourages the designated teacher to formulate and implement plans for project development” with a mean score ( $M=4.99$ ,  $SD=0.09$ ) and was remarked as Strongly Agree. On the other hand, the statement “The school head monitors from time to time the task development” received the lowest mean score of responses with ( $M=4.93$ ,  $SD=0.26$ ) yet was also remarked Strongly Agree.

The mean level of school-based management of central schools in the Division of Laguna with regards to Curriculum and Development attained a mean score of 4.96 and a standard deviation of 0.17 and was Extremely Evident among the respondents.

An effective curriculum should reflect a specific educational program's philosophy, goals, objectives, learning experiences, instructional resources, and assessments. It can be subject-specific or a generalized overview of expectations. It must be a useful tool to assist teachers in developing individualized strategies and the methods and materials necessary to succeed. An effective curriculum provides teachers, students, administrators and community stakeholders with a measurable plan and structure for delivering a quality education. The curriculum identifies the learning outcomes, standards and core competencies that students must demonstrate before advancing to the next level.

The finding showed that school head ensures that their school seeks continuous development and improvement of curriculum and implementation in their school. These actions will benefit both teachers and learners because development feedback can contribute to a more efficient way of learning.

In today's world, there are multiple factors affecting and challenging institutions of higher education such as shifting resources; internal influences, including changing faculty and student demographics and institutional mission and governance; and external forces, such as health care reform, change of focus from national health to global health, changing societal demographics, market and employment, discipline and professional associations, and accrediting bodies.

Creative, innovative curriculum delivery methods are being used to provide cost-effective, quality programming to an increasingly diverse population of students. Flexible curricula are being developed that allow universities to offer programs that quickly respond to the needs of the local, regional, and national constituencies (Dillard and Skitberg, 2019).



## Relationship between Grade Five Teachers' Level of Industrial Revolution 4.0 Professional Skills and the School Performance as to Profile of Central Schools

The data reflects that school-based management of school principals and teachers' professional skills like technological, guidance, and learning skills have a significant relationship.

This is consistent with the study of the following researchers: Maldonado (2016) states that technological skills not usually act as a catalyst for school change by themselves but can be a trigger for vigorous educational innovations planned" (Venezky and Davis, 2012). Internet is currently used technological competence in teaching to connect to global knowledge (Raposo et al., 2016; González and Vidaud, 2009).

Table 15. Significant Relationship between Grade Five Teachers' Level of Industrial Revolution 4.0 Professional Skills and the School Performance of Central Schools

| Professional Skills  |                                | School-Based Management                 |                                        |                                       |                                        |
|----------------------|--------------------------------|-----------------------------------------|----------------------------------------|---------------------------------------|----------------------------------------|
|                      |                                | Leadership/<br>Governance               | Accountability                         | Human<br>Resources                    | Curriculum<br>Development              |
| Technological Skills |                                |                                         |                                        |                                       |                                        |
| •                    | Word Processing Skills         | $r=-0.008ns$<br>$p=0.931$<br>Very Small | $r=0.011ns$<br>$p=0.905$<br>Very Small | $r=0.189*$<br>$p=0.038$<br>Very Small | $r=-0.199*$<br>$p=0.029$<br>Very Small |
| •                    | Spread Sheet Skills            | $r=0.066ns$<br>$p=0.474$<br>Very Small  | $r=0.018ns$<br>$p=0.845$<br>Very Small | $r=0.036s$<br>$p=0.697$<br>Very Small | $r=0.047ns$<br>$p=0.613$<br>Very Small |
| •                    | Electronic Presentation Skills | $r=-0.019ns$<br>$p=0.841$<br>Very Small | $r=0.224*$<br>$p=0.014$<br>Small       | $r=0.150s$<br>$p=0.103$<br>Very Small | $r=-0.234*$<br>$p=0.013$<br>Small      |
| Guidance Skills      |                                |                                         |                                        |                                       |                                        |
| •                    | Conflict Resolution            | $r=-0.438*$<br>$p=0.000$<br>Moderate    | $r=0.265*$<br>$p=0.004$<br>Small       | $r=0.167s$<br>$p=0.268$<br>Very Small | $r=-0.218*$<br>$p=0.016$<br>Small      |
| •                    | Positive Language Usage        | $r=0.455*$<br>$p=0.000$<br>Moderate     | $r=-0.247*$<br>$p=0.013$<br>Small      | $r=0.215*$<br>$p=0.018$<br>Small      | $r=0.305*$<br>$p=0.005$<br>Small       |
| •                    | Offering Choices               | All values in column are identical      | All values in column are identical     | All values in column are identical    | All values in column are identical     |
| Learning Skills      |                                |                                         |                                        |                                       |                                        |
| •                    | Communication                  | $r=0.044ns$<br>$p=0.636$<br>Very Small  | $r=0.074ns$<br>$p=0.424$<br>Very Small | $r=0.463*$<br>$p=0.000$<br>Moderate   | $r=-0.451*$<br>$p=0.000$<br>Moderate   |
| •                    | Creativity                     | $r=0.417*$<br>$p=0.002$<br>Moderate     | $r=0.072ns$<br>$p=0.434$<br>Very Small | $r=0.029s$<br>$p=0.750$<br>Very Small | $r=0.000ns$<br>$p=1.000$<br>Very Small |

Table 15 reflects the Significant Relationship between Grade Five Teachers' Level of Industrial Revolution 4.0 Professional Skills and the School Performance of Central Schools.

This is proven by the coefficient of correlation or r-value of 0.189 at 0.038 probability level; curriculum development also had a significant relationship to professional skills in terms of technical skills with an r-value of 0.199 at 0.029 probability level.

Table 15 shows that school-based management in terms of human resources had a significant relationship with professional technical skills, It particularly word processing skills.also shows that school-based management in terms of accountability had a significant relationship since its p-value to professional skills in electronic presentation is lower than 0.05. The table presents an r-value of 0.224 at a 0.014 probability level. The p-value for professional skills in electronic presentation is less than 0.05, showing that school-based management had a significant relationship with curriculum development. The table has an r-value of 0.234 at the 0.013 probability level.

Table 15 reveals that in terms of leadership and governance, school-based management is significantly associated with professional capabilities regarding guidance skills, particularly in conflict resolution. Guidance skills also had a significant association with professional abilities in terms of leadership and governance, with an R-value of 0.438 at the 0.00 probability level. Accountability as a part of School-based Management had a significant relationship to Conflict Resolution with the r-value of 0.265 at a 0.004 level of probability. Curriculum Development is also a vital factor of School-based Management with a significant relationship to Conflict Resolution with a probability level of 0.016 and an r-value of -0.218.

Table 15 manifests that school-based management in terms of leadership and governance had a significant relationship to professional skills in terms of guidance, particularly in positive language usage. This is supported by the coefficient of correlation or r-value of 0.445 at 0.00 probability level; accountability also had a significant relationship to professional skills in terms of guidance skills with an r-value of -0.247 at 0.013 probability level; there is also a significant relationship between human resources and professional skills in terms of guidance skills with an r-value of 0.215 at 0.018 probability level; a meaningful relationship can also be seen from curriculum development and professional skills under guidance skills with an R-value of 0.305 and a probability level of 0.005. It can also be seen from the same table that SBM of the principal under-offering choices that all the respondents' answers have the same answers, while the other figures are insignificant because their values are more than the 0.05 level of probability.

The teacher is a determining factor in the transmission of technological competence and must be updated constantly; the student becomes the center of the teaching-learning process and must receive the teacher's full support.

Technological advancement in the world today compels educational institutions to implement activities promoting digital literacy Yunus, Thambirajah, Said & Singh, (2019). Digital learning tools applied well in the classroom can encourage student engagement, assist teachers in improving lesson planning, and facilitate personalized learning. It also assists pupils in developing critical 21st-century abilities. Technology drive globalization and digital transformation, teachers can help students acquire the necessary skills to succeed in the careers of the future.

The above are the skills deemed crucial in enhancing teaching and learning in the present situation. Therefore, they will be examined in the light of learning theories that support the pedagogical practices implemented at the tertiary level.

### Relationship between Grade Five Teachers' Level of Industrial Revolution 4.0 Professional Skills and School-based Management of Central Schools

Saidin et al. (2017) In recent decades, school-based management (SBM) has become a prominent part of educational systems. Increased involvement of parents, students, teachers, officials, principals, and community and local organization benefit groups may strengthen the school's independence, responsibility, and accountability.

As reflected in Table 16, graduation rate under school performance has a significant relationship with guidance skills in terms of conflict resolution with an r-value of 0.182 at 0.046 probability level, completion rate under same professional skills also has a significant relationship with each other for it got the r-value of 0.187 at 0.045 level of probability. In contrast, awards/ recognition under school performance had a significant relationship to guidance skills in terms of positive language usage with the r-value of 0.273 at a 0.003 level of probability. Other variables were found not significant.

Table 16 also shows that awards/ recognition with ( $r=-0.224$   $p=0.014$ ) and accreditation= $(-0.275, p=0.012)$  have a significant relationship to the professional skills of teachers in terms of learning skills. However, this denotes that teachers' guidance and learning skills are still essential and related to school performance. As the teachers have professional skills in teaching, they can improve the quality of teaching and learning and the school performance.

Table 16. Significant Relationship between Grade Five Teachers' Level of Industrial Revolution 4.0 Professional Skills and School-based Management of Central Schools

| Professional Skills              | School Performance                                      |                                                         |                                                     |                                        |                                        |
|----------------------------------|---------------------------------------------------------|---------------------------------------------------------|-----------------------------------------------------|----------------------------------------|----------------------------------------|
|                                  | Graduation Rate                                         | Completion Rate                                         | Awards/ Recognition                                 | Drop-out Rate                          | Accreditation                          |
| <b>Technological Skills</b>      |                                                         |                                                         |                                                     |                                        |                                        |
| • Word Processing Skills         | $r=0.112s$<br>$p=0.223$<br>Very Small                   | $r=0.027ns$<br>$p=0.771$<br>Very Small                  | $r=0.131ns$<br>$p=0.155$<br>Very Small              | $r=0.132ns$<br>$p=0.152$<br>Very Small | $r=0.009ns$<br>$p=0.924$<br>Very Small |
| • Spread Sheet Skills            | $r=0.079s$<br>$p=0.392$<br>Very Small                   | $r=0.008ns$<br>$p=0.935$<br>Very Small                  | $r=-0.008ns$<br>$p=0.932$<br>Very Small             | $r=0.027ns$<br>$p=0.768$<br>Very Small | $r=0.071ns$<br>$p=0.440$<br>Very Small |
| • Electronic Presentation Skills | $r=0.026s$<br>$p=0.779$<br>Very Small                   | $r=0.036ns$<br>$p=0.693$<br>Very Small                  | $r=-0.184*$<br>$p=0.044$<br>Very Small              | $r=0.049ns$<br>$p=0.599$<br>Very Small | $r=0.070ns$<br>$p=0.446$<br>Very Small |
| <b>Guidance Skills</b>           |                                                         |                                                         |                                                     |                                        |                                        |
| • Conflict Resolution            | $r=0.182*$<br><b><math>p=0.046</math></b><br>Very Small | $r=0.187*$<br><b><math>p=0.045</math></b><br>Very Small | $r=0.017ns$<br>$p=0.852$<br>Very Small              | $r=0.126ns$<br>$p=0.170$<br>Very Small | $r=0.049ns$<br>$p=0.596$<br>Very Small |
| • Positive Language Usage        | $r=0.118s$<br>$p=0.198$<br>Very Small                   | $r=0.125ns$<br>$p=0.175$<br>Very Small                  | $r=-0.273*$<br><b><math>p=0.003</math></b><br>Small | $r=0.041ns$<br>$p=0.657$<br>Very Small | $r=0.176ns$<br>$p=0.054$<br>Very Small |
| • Offering Choices               | $r=0.118s$<br>$p=0.198$<br>Very Small                   | $r=0.125ns$<br>$p=0.175$<br>Very Small                  | $r=-0.273*$<br><b><math>p=0.003</math></b><br>Small | $r=0.041ns$<br>$p=0.657$<br>Very Small | $r=0.176ns$<br>$p=0.054$<br>Very Small |
|                                  | All values in the column are identical                  | All values in the column are identical                  | All values in the column are identical              | All values in the column are identical | All values in the column are identical |

**Learning Skills**

|                 |                                         |                                          |                                                     |                                        |                                                     |
|-----------------|-----------------------------------------|------------------------------------------|-----------------------------------------------------|----------------------------------------|-----------------------------------------------------|
| • Communication | $r=0.096s$<br>$p=0.298$<br>Small        | $r=0.101ns$<br>$p=0.273$<br>Small        | $r=-0.224*$<br><b><math>p=0.014</math></b><br>Small | $r=0.066ns$<br>$p=0.472$<br>Very Small | $r=0.133ns$<br>$p=0.149$<br>Very Small              |
| • Creativity    | $r=-0.006ns$<br>$p=0.951$<br>Very Small | $r=-0.019ns$<br>$p=0.8383$<br>Very Small | $r=0.118ns$<br>$p=0.199$<br>Very Small              | $r=0.090ns$<br>$p=0.330$<br>Very Small | $r=-0.275*$<br><b><math>p=0.012</math></b><br>Small |

Table 16 shows the Significant relationship between Grade Five Teachers' Level of Industrial Revolution 4.0 Professional Skills and School-based Management of Central Schools.

This result confirms the claims of Leeuwen and Janssen (2019). Furthermore, students' interest improved when teachers gave compliments and guidance to groups of students. As a result, there is empirical proof that group interaction is related to how teachers guide these classes.

School-based management is one of the main movements in developed and underdeveloped countries worldwide, which calls for increased participation of principals, teachers, staff, and students and parental involvement in school development and management to achieve high school performance. SBM is based on assumptions that such a method would increase students' success through organizing (Morphy, 2017).

As a result, a key characteristic of SBM can be expected to improve student academic achievement and other school outcomes, as these local communities claim closer monitoring of school staff, better student appraisal, and a closer match between the school's requirements and policies, and more efficient resource use.

#### 4. Conclusion and recommendation

On the basis of the foregoing findings, the following conclusions were drawn:

Since more indicators in the professional skills were found significant compared to others that were found insignificant, the null hypothesis "There is no significant relationship between the industrial revolution (4.0) professional skills of grade five teachers and the school performance of central schools in the division of Laguna" is rejected.

On the other hand, the hypothesis "There is no significant relationship between the industrial revolution (4.0) professional skills of grade five teachers and the school-based management of central schools in the division of Laguna is accepted since more indicators were found not significant.

Based on the preceding findings and conclusions, the following recommendations are respectfully endorsed:

1. Educators are encouraged to be more technologically capable in order to meet the demands of the Fourth Industrial Revolution.
2. It is recommended that teachers must be open to upscaling their guidance skills to handle more complex circumstances dealing with complex learners. It means that they are not only physically and mentally competent, but they are educators with a "heart".
3. Teachers may be provided with more enhanced seminars and workshops without bias or discrimination by inviting resource speakers who are well-versed in the Fourth Industrial Revolution's impact on the educational system and may provide ways and means of teaching teachers to meet the demands of the era.
4. Administrators, teachers and other stakeholders are encouraged to work collaboratively in making instructional delivery mechanisms more effective in order to achieve the goals and objectives of the school leading to the advanced school-based management practice.
5. School heads are encouraged to enhance themselves in terms of leadership and management skills. The signs of times require the wholistic capabilities of a leader, hence it is a challenge for them to continue if not maintain the outstanding and excellent performance of the institution under his or her care.

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**-John Fitzgerald Kennedy**

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