

# Teachers' Pedagogies in Teaching Technical Research Writing in Relation to Grade 12 Senior High School Students' Academic Performance

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## ABSTRACT

This philosophical paper discussed the different Pedagogies used in Teaching Technical Research Writing among Teachers this explores the existing pedagogies on the different pedagogies used by teachers to enable to teach research writing concepts along with philosophical belief that children learn best through direct experience and hands-on activity. A concept that children learn best by engaging in activities and experiences that are meaningful and relevant to their lives. Also emphasized the importance of reflection and self-directed learning, suggesting that children learn by reflecting on their experiences and making connections to their own

lives. Focusing on the needs, experiences, interests, and abilities of students. hand and hand on the basis of other philosophies on curricular points of Essentialism which encourage the cultivation of basic skills that contribute to mastery and literacy. Thus, also the indigenization of context on K to 12 program has certain standards that are taught from the simplest concepts to more complicated concepts through spiral progression.

**Keywords:** *Pedagogies in Teaching, Technical Research, Senior High School Students, Academic Performance*

## INTRODUCTION

A research paper is basically a type of academic writing that should have theoretical and significant data that has gone through proper in-depth research. Take the five-paragraph expository essays of your high school days and imagine them on a more detailed—more epic—scale! They may also contain arguments based on a thesis with vital evidence from various helpful and reliable sources. Though writing a research paper may seem painstaking and difficult at first, it really isn't all too complicated once you know what proper steps you can follow to make it easier. It may be challenging because of the intensive research that it needs, but it doesn't have to be frustrating for anyone. Before starting the steps, be sure you have enough note paper, various colors of highlighters (for your research markings) and index

cards. Also take note, that reading the checklist regarding research ethics could also be of big help for you and writing your research paper.

Wishing to know more about the world its people, things, places and more-is one of the aspects of your life that you want to realize through and through. We strive to know more about a lot of things because you are aware that knowledge is power.

Imagine having knowledge in all areas of knowledge from A to Z. Architecture, Biology, Commerce, Education, Law, Medicine and so on. You will have enough knowledge to be successful in many aspects of your life. Apart from this, you will also be influential, powerful, rich, and capable of uplifting the living condition of the people around you. How can you be this kind of people? The answer is research (Baraceros, 2016).

Problems may connote the ugly side of life, but these are part and parcel of human life that you have to deal with. In order to succeed solving your problems, you must first discover how to overcome them, and at the same time know how to become a better thinker as you go through the process of solving them.

Research is a delightful way to discover valuable learning and skills. It is one of the subjects offered to Senior High School students which help develop their abilities in establishing connections, listening, observing which are the primary elements needed in the research process. The students will find out how to conduct practical research which they can apply in their specific track. Often times, when the students find out that they are going to research, they exhibited worry and skepticism in their faces. Teachers' goal is to replace that worry with excitement, and that skepticism with confidence. Students, therefore, discover how much fun it to do research as they eagerly learn new things and develop a new and better perspective about research.

The 1987 Philippine Constitution mandates the right to education of every Filipino. Article XIV, Section 1 states that:

*The state shall promote and protect the right of every Filipino to quality, culture-based and complete basic education at all levels and shall take appropriate steps to make such education accessible to all.*

A major change in our country's educational landscape took place during the Aquino administration where the Department of Education (DepEd) launched the K to 12 Curriculum otherwise known as RA 10533. The goal of K to 12 Curriculum Program is to create a purposeful basic education system that will "produce productive, responsible citizens equipped with the essential competencies and skills for both life-long learning and employment".

Preamble of the Code of Ethics for Professional Teachers Under Republic Act No. 7836. The Preamble states that:

*Teachers are duly license professionals who possess dignity and reputation with high moral values as well as technical and professional competence in the practice of their noble profession, and they strictly adhere to observe and practice this set of ethical and moral principles, standards and values.*

Teachers play a vital role in the development of the community and of a nation as a whole. Thus, Republic Act No. 7784 is an act that will strengthen teachers' education in the Philippines by establishing centers of excellence, creating a teacher education council for the purpose, appropriating funds therefore, and other purposes. This provides education and trainings of the teachers with unquestionable integrity and competence paving the way for professional growth, obligations to help the students and grow as a responsible individuals and citizens of the country. Furthermore, this will equip teachers to be competitive in delivering quality instruction among students.

The SDGs or Sustaining development Goals (2015, otherwise known as the Global Goals, build on the Millennium development Goals (MDGs), they were eight anti-poverty targets that the world committed to achieve by 2015. The new Global Goals, and the broader sustainability agenda, go much further than the MDGs, addressing the root causes of poverty and the universal need for the development that will work for all people. Ambitions for education are essentially captured in Sustainable Development Goal 4 which aims to “ensure inclusive and equitable quality education and promote lifelong learning opportunities for all”. The Global Education 2030 new expand scope are: reaches from early childhood learning to youth and adult education and training; emphasizes the acquisition of skills for work; underlines the importance of citizenship education in plural and independent world; focuses on inclusion, equity and gender equality; and aims to ensure quality learning outcome for all throughout their lives.

Education Secretary Leonor Magtolis Briones (2016) laid out the 10-Point Agenda of the Department of Education which introduced greater leadership supervision on finances, targeted construction of school buildings, established Integrated Financial Management System, implemented the comprehensive drug testing, initiative massive feeding programs, suggested excellent education credentials for teachers, emphasized the importance of Philippines' rich historical experiences, expanded the welfare of academic and non-academic employee, spearheaded an active, transparent, consultative, collaborative and corrupt-free department, maintained partnership with the private sector.

This agenda strengthened the education sector in the Philippines. In addition, having this agenda, it provided more opportunities for programs of the department to be felt and experienced even by the smallest concerned citizen. Existing programs such as senior high schools will be highlighted as the department continues to be supportive and optimistic in attaining quality education in our country.

Furthermore, the Philippine Regulation Commission has initiated the Continuing Professional Development (CPD), under Republic Act 8981, otherwise known as PRC Modernization Act of 2000. CPD is the term used to describe the learning activities where professional engage in to develop and enhance their abilities. It enables learning to become conscious and proactive, rather than passive and

reactive. CPD combines different methodologies to learning, such as training workshop, conferences and events, e-learning programs, best practice techniques and ideas sharing, all focused for an individual to improve and have effective professional development.

Aligned with such growth is the acceptance that academic qualifications must offer more vocational and skills-based or ‘practical’ learning. A structured and practical and methodical approach to learning helps employers across industries to keep key staff, and develop the skills and knowledge in their organization to maintain a sustainable and competitive advantage.

Engaging in Continuing Professional Development ensures that both academic and practical qualifications do not become outdated or obsolete; allowing individuals to continually ‘up skill’ or ‘re-skill’ themselves, regardless of occupation, age or educational level.

Continuing Professional Development helps individuals to regularly focus on how they can become a more competent and effective professional. Training and learning increases confidence and overall capability and compliments career aspirations.

CPD enables individuals to adapt positively changes in work/industry requirements. Planning CPD helps to be more efficient with time, and recording CPD properly provides evidence of professional development (can be used for supervision and appraisal).

CPD shows clear commitment to self-development and professionalism. It also gives an individual an opportunity to identify knowledge gaps and to resolve these in a recognizable approach to improvement.

Students are the focus of our educational system, thus Republic Act No. 9155 known as “Governance of Basic Education Act of 2001” protects and promote the right of all citizens to quality basic education and to make such education accessible to all by providing all Filipino children a free and compulsory education in primary and secondary education. Such education also includes alternative learning systems for out-of-school youth and adult learners. It shall be the goal of the basic education to provide them with skills. Knowledge and values they need to become caring, self-reliant, productive and patriotic citizens.

But in the quest to provide a quality performance in our society, Education for All (EFA) was mandated. EFA provide a vision and a holistic program of reforms aimed to improve the quality of Basic Education for every Filipino by 2015. It aims to attain the desired quality education, attain zero non-reader, illiterate, non-repeater, and negative performance among the students.

To provide students with the necessary knowledge needed to become globally competitive, the national government has to invest to quality teaching performance. Therefore, Republic Act No. 4670 also known as Magna Carta for Public School Teachers was enacted. Its goals are to promote and improve social and economic status of public-school teachers, their living and working conditions,

their terms of employment and career prospects. This will give them equal opportunities, attract and retain teaching profession and significantly, leading to economic growth of the nation. Magna Carta for Teachers entails that for a teacher to be an effective provider of a quality instruction, they must be provided with social and economic security.

In order to provide quality instruction and global competitiveness among Filipino children, the Department of Education (DepEd) initiated the latest curriculum under R.A 10533 otherwise known as the K to 12 Curriculum. But before going to higher level of study, every student must undergo the Junior High School Education.

The K to 12 Curriculum speaks about hope and change for the country. As our culture puts great value of education, it is about time that our national government supports this fully. The K to 12 Program honors every Filipino child's right for better as it is designed to develop a learner who possess a sound body and mind, has solid moral and spiritual grounding, has essential knowledge for life-long learning and self-actualization, engages in critical thinking creative problem solving, contribute to the development of a progressive, just-humane society; is proud to be a Filipino and appreciates the beauty around him/her and cares for the environment for sustainable future. Indeed, K to 12 is every Filipino child's future.

The impetus for meaningful educational reform is clear: the realities of the modern world require a different kind of Filipino. The Filipino who is a lifelong learner, holistically developed, globally-oriented and locally-grown. This is the goal of K to 12 known as R.A 10533, "Enhanced Basic Education Act of 2013". An act enhancing the Philippine Basic Education system by strengthening its curriculum and increasing the number of years for Basic Education, appropriating funds and other purposes. With this, teachers will be given sufficient in-service training on the contents and pedagogies to implement this program.

However, after the assessment of the status of the Philippine education, it is sad to note that the results revealed to annoying. According to the study conducted by the Civil Society Network for Education Reform (E-Net Philippines), to deal with the situation the Department of Education (DepEd) launched the Education for All (EFA) 2015 Plan to provide a vision and a holistic program to reform aimed to improve the quality of basic education for every Filipino by 2015. The serious restructuring of every component of the educational system is a functional and realistic action to attain the desired quality education. This aims to attain the zero non-reader, illiterate, non-repeater, and negative performance.

To address the individual imperfection of the educational systematic change became indispensable. This paved the way for the Basic Education Reform Agenda (BESRA). It is a package of policy reform aimed to improve the Five-Key Reform Thrusts (KRT's) of every school. These are: KRT 1 is on the Continuous School Improvement of the Stakeholders through the School-Based Management (SBM) framework standard; KRT 2 aims for a better learning outcomes by improving teacher standard making use of National Competency-Based Standards for Teachers (NC-BTS); KRT 3 is the strengthening the multi-sector and coordination and quality assurance operation; KRT 4

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improves the impact on outcomes in collaboration with a change of institutional culture of the Department to better support the Key Reform Thrusts.

Culture of Research in Quezon is highlighted to develop classroom plain teacher to being teacher-researchers. There are teachers in Tagkwayan District who had already presented research both national and international. DepEd Quezon is moving towards a research-based instruction and school management. This is another milestone on the fulfilment of the dream of every Quezonian. With the advent of the new educational system, the learners, the teachers and the administrators of each school must be prepared enough to face all the challenges of the K to 12 Basic Education Program. To address such needs and problems, research may be helpful enough to achieve the dream of the government guided by the DepEd vision, mission and core values, Aquino, T. G. (2015)

As articulated in the journal of Educational Psychology (2013), entitled Professional Competence of Teachers: Effects on Quality and Student Development. This study investigated the teachers' pedagogical content knowledge, professional belief, work related motivation, and self-regulation as aspects of their professional competence. Specifically, it examined how these aspects impact instruction and, in turn, student outcome.

Through research, you can acquire knowledge and ideas from varied sources of information and you can also hone students higher-order thinking strategies (HOTS), such as interpreting, criticizing, synthesizing, and creating, as students go through the stages of research in finding answers to research questions or life problems.

### **Purpose**

This philosophical paper argued that the different pedagogies used by teachers in teaching technical research writing where being affected by their philosophy and values which creates dynamic effects on the strengths and weaknesses as an implementer of the technical research writing. This discusses the pros and cons of research pedagogies among SHS students; strengths in their philosophical beliefs and values; approaches in teaching research; and their teaching philosophy as a research writer.

### **The Process**

These are the writing stages made in pursuit of the arguments in this philosophical paper regarding the teaching technical research writing, teachers' skills in writing and their teaching pedagogies.

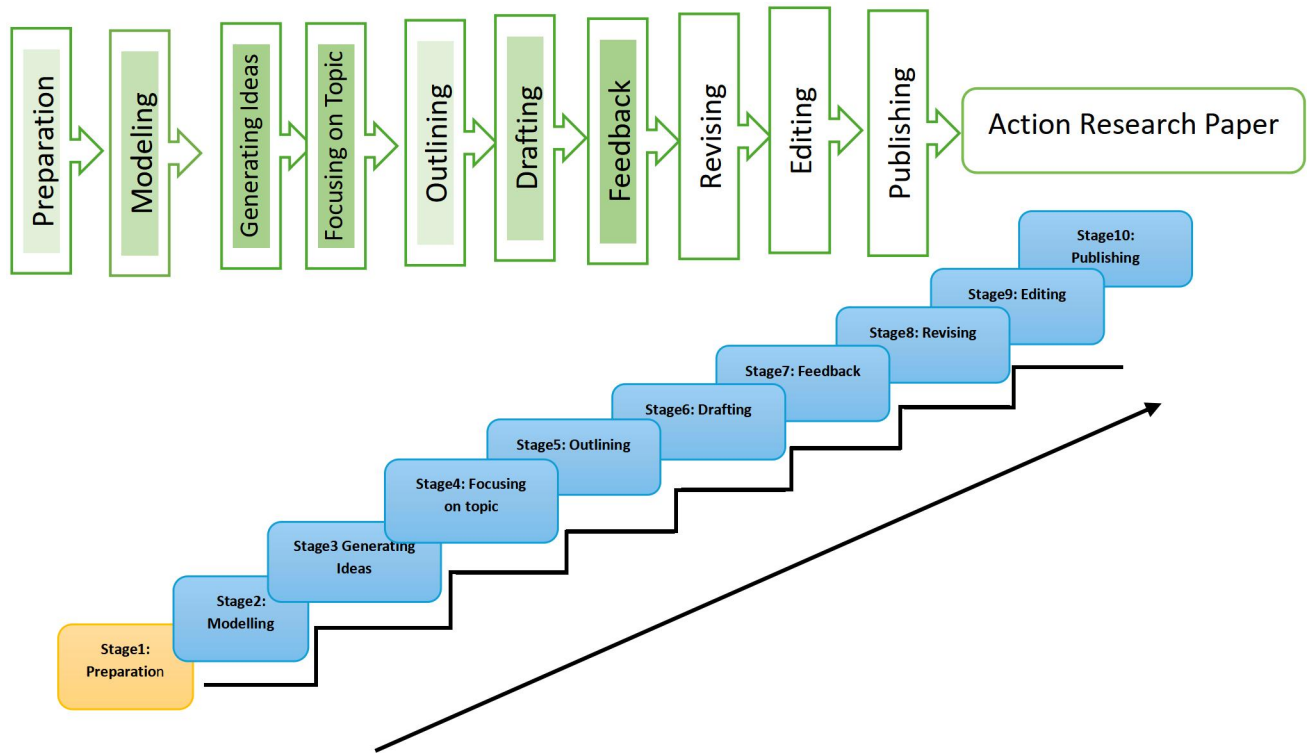


Figure 1 *Stages in the writing process focusing into the pedagogical aspects in technical research writing.*

## METHODS

A. Data gathering procedure Stage 1. Searching for the reliable and aligned articles or journals that will bridge the gap of Pedagogies in Teaching Technical Research Writing Among SHS Students. After, the making of a letter request address to the District Supervisor of the Tagkawayan II, in Quezon thru the School Head of Mapulot NHS to facilitate the gathering of data relevant to the teaching of teaching of technical research writing. Stage 2. Based from the initial observation, the crafting of necessary steps how can the philosophical paper align some rudiments in crossing the lines of classroom management and teaching methodologies – to help better the teacher and understand where they coming from when they are teaching. Phase 3. Initiated workshop to teach newly hired science teachers how to make a lesson plan integrating the 5 indicators of scientific literacy aligned to what is expected from them. Phase 4. Crafting of philosophical paper. This paper looked into the strengths and weaknesses on the values in teaching science how it is related to scientific literacy, also investigate their existing values how they are able to teach science-based concepts and integrate Progressivist philosophy center their curricula on the needs, experiences, interests, and abilities of

students. Hand and hand on the basis of other philosophies on curricular points of Essentialism which encourage the cultivation of basic skills that contribute to mastery and literacy. Thus, also the indigenization of context on K to 12 program has certain standards that are taught from the simplest concepts to more complicated concepts through grade levels in spiral progression. B. Content Analysis Development of Lessons on Scientific Literacy. This section describes the different lessons used to enhance the scientific literacy ability of the students. The author had looked into several instruments that may be used as reference of constructing lessons. In this philosophical paper to be used in the integration of the scientific literacy. Some considerations that the author thinks in framing the developed lessons by the science teachers are time, appropriateness of the items and length of the lessons. A reasonable time to complete the lessons for the respondents was preferred to minimize the possibility of boredom. Items that suit the present study are chosen from other instruments to keep the lessons on a reasonable length and the integration of the 5 domains of scientific literacy in the lesson plan. The prepared lesson plans allow the author to look closely the connections of objectives and assessments and how philosophical factors twined the interest of both parties (students and teachers) in the conduct of the study. Values development. This part appears on the standards and essentials of the developed lessons in science. This was measured by significant experiences of the grade 7 students and their journals and formative and summative assessment that they have answered every after the discussion is done. This also a very important consideration in the craftsmanship of this philosophical paper since this argue the perspective, ideas, values, and beliefs of the students and the one who implements the lesson through module integration – the teachers

## CONCLUSIONS

1. The problems encountered by teachers teaching Technical Research Writing are all moderately evident.
2. There is a significant agreement on the rank orders of the problems encountered by the teachers in teaching Technical Research Writing in Tagkawayan District.
3. A training design was introduced the improved practical research performance among the students and further improve professional competence of teachers.
4. The strengths and weaknesses of research teachers and teaching methods were of affected because of many ancillary tasks given to teachers.

## REFERENCES

- Balls, J. D., Eury, A. D., & King, J. C. (2011). *Rethink, rebuild, rebound: A framework for shared responsibility and accountability in education* (2nd ed.). Boston, MA: Pearson Learning Solutions.
- Borromeo, R. T. (2004). *Strategies for effective school management*. Quezon City: Phoenix Publishing House Inc.
- Brewer, M. (2000). Research design and issues of validity. In H. Reis & C. Judd (Eds.), *Handbook of research methods in social and personality psychology*. Cambridge: Cambridge University Press.
- Calmorin, L., & Calmorin, M. A. (2000). *Methods of research and thesis writing*.
- Capin, B. (2011, June 6). Students return to schools lacking chairs, reading outdated books. GMA News Online. Retrieved from <http://www.gmanetwork.com/news/story/222695/news/nation/students-return-schools-lackingchairs-reading-outdated-books>
- Consemينو, E. (2011). Influence of human relation practices of school managers on the work attitude of teachers: A proposed intervention program. Doctor of Education, Eulogio Amang Rodriguez Institute of Science and Technology, Manila.
- Creswell, J. W. (2002). *Educational research: Planning, conduction and evaluation quantitative and qualitative research*. University of Nebraska: Merrill Prentice Hall.
- Department of Education. (n.d.). Basic education sector reform agenda – Teacher (BERA).
- Department of Education, Training and Employment. (2001). South Australian.
- Durrheim, K. (2004). Quantitative analysis. In N. Terre Blanche & K. Durrheim (Eds.), *Practical research: Applied method for social sciences*. Cape Town: University of Cape Town Press Ltd.
- Education and Development. (2010). *Instructional supervision standard, procedures and tools*.
- Espadero, E. S. (2011). Job satisfaction and organizational commitment: Their relationship to work performance of teachers. Master of Arts in Education, Notre Dame of Tacurong College, Tacurong City, Sultan Kudarat.
- Fraenkel, J. R., & Wallen, N. E. (2006). *How to design and evaluate research in education* (6th ed.). Boston: McGraw Hill.
- Gay, L. R., & Airasian, P. (2003). *Educational research: Competencies for analysis and application* (7th ed.). New Jersey: Merrill Prentice Hall.
- Jensen, K. B. (2002). The qualitative research process. In *A handbook of media and communication research: Qualitative and quantitative methodologies*. London: Routledge.
- Johnson, B., & Christensen, L. (2008). *Educational research: Qualitative, quantitative and mixed approaches*. Thousand Oaks, CA: Sage Publications.
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- Kotelnokov, V. (2009). Synergy. Retrieved from <http://www.1000ventures.com>
- Lane, D. M. (2013). e-Statistics education: A multimedia course study. Retrieved from <http://onlinestatbook.com>
- Mercado, L. A. (2011). Profile and leadership style of school administrators: Relationship with the secondary school performance and job satisfaction of teachers in District of Pila, Division of Laguna, SY 2009–2010. Master of Arts in Educational Management, Laguna State Polytechnic University, Sta. Cruz, Laguna.
- Mohante, J. (2003). Teacher education. New Delhi: Deep and Deep Publication Pvt. Ltd.
- Mombay, N. S. (2011). School heads motivation: Its influence on teachers' performance. M.A., University of Iloilo, Iloilo City.
- Ong, R. C. (2009). General education reviewer. Manila, Philippines: PNU Press.
- Orstein, A., & Oliva, P. (2006). Educational philosophies. Retrieved from [http://ctle.hccs.edu/facultyportal/tp/seminars/tl1071SupportiveResources/comparison\\_edu\\_philo](http://ctle.hccs.edu/facultyportal/tp/seminars/tl1071SupportiveResources/comparison_edu_philo)
- Owen, L. (2017). Seven tips to make teachers collaboration time productive. Teaching Community Where Teacher Met and Learn. Retrieved from <http://www.teaching.monster.com>
- Picciano, A. G. (2004). Educational research primer. London: Continuum.
- Raneses, M. M. (2012). Intervention programs of selected schools in Region IV-A CALABARON in increasing the performance of pupils in NAT. Unpublished dissertation, Southern Luzon State University, Lucban, Quezon.
- Research Design. (n.d.). Descriptive research. Retrieved from [http://ori.hhs.gov/educationproducts/sdsu/res\\_desl.htm](http://ori.hhs.gov/educationproducts/sdsu/res_desl.htm)
- Sanchez, A. (2008). Classroom management approaches: Basis for an intervention program. Southern Luzon State University, Lucban, Quezon.
- Shuttleworth, M. (2008). Descriptive research design. Retrieved from <http://explorable.com/descriptive-research-design>
- Suarez, D. C. (2013). State of the province address 2013. Speech delivered at the Convention, Lucena City, Quezon.
- Tan, M. N. L. (2011). Teachers' competence and work values: Effects on the secondary school performance in the District of Pila, SY 2009–2010. Master of Arts in Education, Laguna State Polytechnic University, Sta. Cruz, Laguna.