INSTABRIGHT e-GAZETTE
ISSN: 2704-3010
Volume VII, Issue III
February 2026
Available online at https://www.instabrightgazette.com

****

SCIENTIFIC ATTITUDE AND ACADEMIC PERFORMANCE IN SCIENCE OF ALTERNATIVE LEARNING SYSTEM SENIOR HIGH SCHOOL LEARNERS: BASIS FOR REMEDIAL DEVELOPMENT PROGRAM

KHAREN JOY O. RAMOS
TEACHER II
Dingle National High School
kharenJoyRamos100584@gmail.com

ABSTRACT

The study was conducted to determine the relationship between the scientific attitude and academic performance in science of Grade 11 Alternative Learning System learners in Dingle National High School during the first semester of school year 2022-2023 as basis for remedial development program. The respondents of this study were thirty-five (35) Grade 11 Alternative Learning System - senior high school learners, selected through purposive sampling technique. Results revealed that the level of learners' scientific attitude in terms of rationality, open-mindedness, confidence in scientific method and curiosity when taken as a whole group was favorable while the level of learners' scientific attitude classified as to aversion to superstition when taken as a whole group was somewhat favorable. The level of learners' academic performance when taken as whole group was satisfactory. Generally, there was no significant relationship between the learners' scientific attitude and academic performance. This means that when learners' scientific attitude level is very favorable, it does not lead to an outstanding academic performance.

Keywords: *Scientific Attitude, Academic Performance, Alternative Learning System, Remedial Development Program*

****

****

INSTABRIGHT e-GAZETTE
ISSN: 2704-3010
Volume VII, Issue III
February 2026
Available online at https://www.instabrightgazette.com

INTRODUCTION

Many learners are unable to pursue formal education because of personal, economic, or societal challenges (Albert et al., 2025). In response to this challenge, the Department of Education established the Alternative Learning System (ALS) through Republic Act 9155, also referred to as the Basic Education Act of 2001 (DepEd, 2016).

This ALS program offers out of school youth and adult learners the opportunity to complete basic education through flexible learning options (DepEd, 2016).

Dingle National High School was selected as one of the pilot implementers of Alternative Learning System-Senior High School (ALS-SHS) program in the Schools Division of Iloilo. Through this program, learners with disadvantaged backgrounds from the Municipality of Dingle and nearby communities were given access to complete secondary education.

However, despite these opportunities, many ALS learners continue to struggle in school, especially in Science subject (Arzadon & Nato, 2015; Igarashi, 2018). As a Science teacher, I had observed that ALS learners show willingness and interest to learn, however, due to learning gaps, they had difficulty comprehending Science concepts. This classroom observation reflects a wider concern about the performance of Filipino learners in science (Ornedo, 2020).

Science education is important and should be taught to everyone, as it helps them understand the world and the human logical way of thinking (Bybee, 2013; OECD, 2019). Science also plays a significant role to national development and its identity (Sanchez, 2022). The 1987 Philippine Constitution under Article XIV, Section 10, provides and confirms that

INSTABRIGHT e-GAZETTE
ISSN: 2704-3010
Volume VII, Issue III
February 2026
Available online at https://www.instabrightgazette.com

Science and Technology are critical towards the growth and development of the country. For this reason, the government continues to support and prioritize science education. Schools, therefore, play a vital role in helping learners not only understand scientific concepts but also apply them in real-life situations (DepEd, 2013; SEI-DOST & UP NISMED, 2011).

One important aspect of effective Science teaching, is the development of scientific attitudes among learners (Osborne et al., 2003). According to the Science Curriculum Framework, a good citizen and a lifelong learner must have scientific attitudes such as curiosity, open-mindedness, critical thinking, and objectivity (SEI-DOST & UP NISMED, 2011). These attitudes encourage students to think logically and engage in inquiry-based learning, which are strongly linked to better academic performance (Prachagool, 2021).

As has been reported many times, Filipino learners continue to perform poorly in science. According to the Department of Education (2019), the Philippines lagged behind other nations in reading, mathematics, and science, as evidenced by the country's poor outcomes in the 2018 Programme for International Student Assessment (PISA). These findings highlight the need to determine what effective science instruction should be utilized as well as to address the learning gaps, particularly among ALS learners.

To help overcome academic challenges, remedial development programs have been developed and implemented to to assist learners in reinforcing basic skills and acquiring new competencies (Hernando-Malipot, 2025). According to the Department of Education Order No. 27, series 2005, high schools in the country should provide additional services to ensure that learners meet the standards of the basic education. These intervention programs are designed

INSTABRIGHT e-GAZETTE
ISSN: 2704-3010
Volume VII, Issue III
February 2026
Available online at https://www.instabrightgazette.com

to assist the learners in performing better at school while promoting creativity and critical thinking.

The study was undertaken in response to the observed difficulties in science among ALS learners, particularly within Dingle National High School. As a Science teacher in the ALS-SHS, the researcher recognized the need to better understand these challenges. This study aims to explore how students' scientific attitudes are related to their academic performance in Science among ALS senior high school learners. The findings are expected to serve as a basis for developing intervention program to support struggling learners. Additionally, this research seeks to provide useful insights for teachers, ALS implementers, and policymakers, especially since there are limited local studies focusing on the scientific attitudes and science performance of ALS learners.

MATERIALS AND METHODS

Research Methodology

This section outlines the methodology employed in the study, covering the research design, the participants involved, the sampling technique, and the instruments used for data collection. It also details the procedures for gathering data, the methods of analysis, and the specific statistical tools applied to the results. The purpose of the study was to determine the relationship between the scientific attitude and academic performance in science of Grade 11 Alternative Learning System learners in Dingle National High School during the first semester of school year 2022-2023 as basis for remedial development program.

INSTABRIGHT e-GAZETTE
ISSN: 2704-3010
Volume VII, Issue III
February 2026
Available online at https://www.instabrightgazette.com

Research Method

Descriptive research method was utilized in the study. In this type of research, the researcher does not manipulate or control the variables; instead, the focus is on collecting and describing gathered data as they naturally occur (Sandra, 2020). This approach is suitable for the research as it aims to depict the existing circumstances of ALS students within their learning environment. By utilizing this method, the potential connection between the scientific attitudes and the science grades of Alternative Learning System Senior High School students can be analyzed without the need for experimental manipulation or direct intervention.

Research Design

This research employed a descriptive-correlational approach to identify the link between scientific attitudes and the science grades of Senior High School students within the Alternative Learning System. As noted by Best and Kahn (2006), a descriptive design utilizes quantitative techniques to portray existing conditions by recording, analyzing, and explaining data as it naturally occurs. This specific framework enables the examination of information without the need for external control or experimental manipulation.

Furthermore, a correlational method was integrated to assess the intensity and trajectory of the connection between two or more factors. Bhandari (2021) maintains that correlation analysis identifies whether a relationship is positive or negative and measures the degree to which the variables are connected. By using this dual approach, the study was able to evaluate how students' scientific mindsets related to their academic success in Science without implementing any active interventions.

INSTABRIGHT e-GAZETTE
ISSN: 2704-3010
Volume VII, Issue III
February 2026
Available online at https://www.instabrightgazette.com

This methodology was appropriate for the research's main goal: exploring the association between scientific attitude and classroom performance among ALS Senior High School learners at Dingle National High School in Licu-an, Dingle, Iloilo, during the initial semester of the 2022–2023 academic year. The findings from this analysis provided the foundation for developing a remedial program designed to improve both the students' scientific perspectives and their academic outcomes.

Participants of the Study

The participants in this research included thirty-five (35) Grade 11 Alternative Learning System (ALS) Senior High School students attending Dingle National High School in Licu-an, Dingle, Iloilo, for the 2022–2023 school year.

Every respondent was at least 18 years old. Among them, thirty-three (33) students gained entry via the ALS Junior High School Portfolio Assessment, while two (2) were graduates of the formal Junior High School system. These learners were all specialized in Agricultural Crops Production NC II under the Agri-Fishery Arts Strand of the Technical-Vocational-Livelihood (TVL) Track.

The respondents were categorized for analysis according to specific profile variables: age, employment status, and distance of school from home. Age was classified into: 18 to 22 years, 23 to 27 years, and 28 years and above. Based on their employment situation, they were classified as either employed or unemployed. The distance of school from home was categorized into 1to 5 kilometers, 6 to 10 kilometers, and more than 10 kilometers.

INSTABRIGHT e-GAZETTE
ISSN: 2704-3010
Volume VII, Issue III
February 2026
Available online at https://www.instabrightgazette.com

Sampling Design

The researcher utilized purposive sampling, also referred to as judgment sampling, to select the participants for this study. This approach involves handpicking individuals who meet specific requirements essential to the research objectives. As noted by Bernard (Etikan, 2016), purposive sampling is a non-probability method where respondents are chosen specifically for their ability to provide significant and pertinent information based on their unique backgrounds or personal experiences. By using this methodology, the researcher determines the requisite data type and selects persons who are both appropriate and amenable to participating in the study.

Research Instrument

Scientific Attitude Scale

The Scientific Attitude Scale developend by Khan and Siddiqui (2020) is the primary instrument used. Prior to the administration of the instrument, the researcher formally requested and received permission from the authors through email to utilize the scale for the study's implementation.

The Scientific Attitude Scale is composed of 39 items divided into five distinct dimensions: rationality, open-mindedness, confidence in the scientific method, curiosity, and aversion to superstition. Specifically, the tool includes 7 items for rationality, 10 for open-mindedness, 9 for confidence in the scientific method, 6 for curiosity, and 7 for aversion to superstition. Following Rao's (1989) framework, the assessment uses a five-point Likert scale, enabling participants to specify their level of agreement with each item.

INSTABRIGHT e-GAZETTE
ISSN: 2704-3010
Volume VII, Issue III
February 2026
Available online at https://www.instabrightgazette.com

Respondents were asked to select from the following choices: Strongly Agree (SA), Agree (A), Undecided (U), Disagree (D), and Strongly Disagree (SD). Each selection was assigned a numerical value to facilitate analysis, with SA valued at 5, A at 4, U at 3, D at 2, and SD at 1.

Learners' scientific attitude was assessed through their replies to all 39 items on the measure. The mean score for each learner was calculated by dividing the total score by the number of things responded to. The calculated mean scores were utilized to characterize the learners' scientific attitude levels through the following descriptive ratings: extremely favorable, favorable, moderately favorable, unfavorable, and very unfavorable. The mean scores were interpreted based on a scale adapted from Guilford (1954).

The interval for each descriptive category was determined by subtracting the lowest possible score (1) from the highest possible score (5), yielding a range of 4.0. The value was segmented into five descriptive groups, resulting in an interval width of 0.80 for each level.

The average score ranges obtained from the Scientific Attitude Scale were analyzed as follows:

Mean Description

4.21 – 5.00 - Highly advantageous
3.41 – 4.20 - Beneficial
2.61 – 3.40 - Moderately favorable
1.81 – 2.60 - Detrimental
1.00 – 1.80 - Extremely Adverse

INSTABRIGHT e-GAZETTE
ISSN: 2704-3010
Volume VII, Issue III
February 2026
Available online at https://www.instabrightgazette.com

Validity of the Research Instrument

The study used a standardized Scientific Attitude Scale, which was designed and verified by the authors prior to this study, ensuring the items accurately represented the construct being measured.

To ascertain the instrument's appropriateness for the current study, further content validation was performed. To ensure the instrument's quality, experts in science education and research reviewed the questionnaire for its relevance, clarity, and appropriateness for Alternative Learning System (ALS) Senior High School students. These evaluators analyzed how accurately the items reflected the various components of scientific attitude and checked if the language was easily understood by the target participants. This validation process confirmed that the tool was both suitable and capable of producing reliable data for measuring the scientific attitudes of the ALS student population.

Reliability of the Research Instrument

The study utilized a standardized Scientific Attitude Scale, which had undergone reliability testing throughout its construction, ensuring its capacity to yield stable and consistent results.

Data Gathering Procedures

Prior to the conduct of the study, the researcher developed a Matrix of Activities to facilitate the systematic conduct of the study, which served as the foundation for the organized implementation of all research tasks.

INSTABRIGHT e-GAZETTE
ISSN: 2704-3010
Volume VII, Issue III
February 2026
Available online at https://www.instabrightgazette.com

Before the data collection phase, formal authorization was secured from the original authors to utilize the standardized Scientific Attitude Scale as the principal research instrument. Furthermore, authorization to perform the study at Dingle National High School were obtained from the Public Schools District Supervisor, School Principal, Senior High School Coordinator and ALS Coordinator. The data collecting procedure occurred from January 9 to February 3, 2023. The Scientific Attitude Scale was administered to the participants on January 9, 2023. Data concerning the learners' academic performance in Science were acquired on February 3, 2023, corresponding with the end of the first semester.

Subsequent to the data collection process, the information was encoded, organized, and subjected to suitable statistical analysis. The results were subsequently evaluated and interpreted to fulfill the study's objectives.

Data Analyses

The quantity of research instruments was prepared to match the total number of participants in the study.

The information collected was systematically arranged, coded, and analyzed using the Statistical Package for the Social Sciences (SPSS). Following this, the data were structured and interpreted through appropriate statistical techniques to address the specific goals of the research.

The mean score for every item on the Scientific Attitude Scale was determined. These average values were then evaluated using a descriptive rating system developed by the researcher, modeled after a Likert-type scale. The overall scientific attitude of the Alternative

INSTABRIGHT e-GAZETTE
ISSN: 2704-3010
Volume VII, Issue III
February 2026
Available online at https://www.instabrightgazette.com

Learning System (ALS) Senior High School students was measured according to this scale and its corresponding descriptive labels.

Mean Range	Description
4.21 – 5.00	Very Favorable
3.41 – 4.20	Favorable
2.61 – 3.40	Somewhat Favorable
1.81 – 2.60	Unfavorable
1.00 – 1.80	Very Unfavorable

The grading scale established by the Department of Education was employed to assess the academic achievement in Science of ALS - Senior High School learners. The learners' grades were categorized and analyzed according to the following scale:

Grade Range	Description
90 – 100	Outstanding
85 – 89	Very Satisfactory
80 – 84	Satisfactory
75 – 79	Fairly Satisfactory
Below 75	Did Not Meet Expectations

The outcomes derived from these statistical analyses were the foundation for understanding the learners' scientific attitude and academic achievement in Science, as well as for devising a suitable remedial development program (DepEd, 2015).

INSTABRIGHT e-GAZETTE
ISSN: 2704-3010
Volume VII, Issue III
February 2026
Available online at https://www.instabrightgazette.com

****

RESULTS AND DISCUSSIONS

The research was designed to evaluate the scientific attitudes and academic achievement in science of Alternative Learning System (ALS) senior high school students. These findings were intended to inform the creation of a remedial development program at Dingle National High School for the first semester of the 2022-2023 academic year.

The study's participants consisted of thirty (35) Grade 11 ALS students from Dingle National High School in Licu-an, Dingle, Iloilo. Using a purposive sampling method, these respondents were categorized by age, employment status, and the distance between their residence and the school. The researcher implemented a descriptive-correlational research framework for this investigation.

The primary data collection tool was the standardized Scientific Attitude Scale created by Moheeta Khan and Mohd Abid Siddiqui (2020), used with the original authors' formal consent. This assessment was conducted on January 9, 2023, within the Grade 11 ALS classroom. To measure academic performance, the students' final first-semester grades in Earth and Life Science were collected on February 3, 2023.

The investigation yielded the following results:

The level of learners' scientific attitude in terms of rationality, open-mindedness, confidence in scientific method and curiosity when taken as a whole group was favorable.

The level of learners' scientific attitude classified as to aversion to superstition when taken as a whole group was somewhat favorable.

****

****

INSTABRIGHT e-GAZETTE
ISSN: 2704-3010
Volume VII, Issue III
February 2026
Available online at https://www.instabrightgazette.com

The level of learners' scientific attitude in terms of rationality was determined by working status while level of learners' scientific attitude in terms of open-mindedness, confidence in scientific method, curiosity and aversion to superstition were not determined by working status.

The level of learners' scientific attitude in terms of rationality, open-mindedness, confidence in scientific method, curiosity and aversion to superstition were not determined by age.

The level of learners' scientific attitude in terms of rationality was determined by the distance of school from home. However, the level of learners' scientific attitude in terms of open-mindedness, confidence in scientific method, curiosity and aversion to superstition were not determined by distance of school from home.

The learners' academic performance in Earth and Life Science was satisfactory.

The learners' academic performance in Earth and Life Science was determined by working status but were not determined by age and distance of school from home.

Learners' scientific attitude in terms of rationality, open-mindedness, confidence in scientific method, curiosity and aversion to superstition and academic performance do not significantly relate to each other.

Drawing from the results of the study, the following conclusions were established:

Employment status appears to influence the degree of rationality within the students' scientific attitudes; however, it does not significantly impact their open-mindedness, confidence in the scientific method, curiosity, or aversion to superstition.

INSTABRIGHT e-GAZETTE
ISSN: 2704-3010
Volume VII, Issue III
February 2026
Available online at https://www.instabrightgazette.com

Age was not found to be a determining factor for any significant variation in the learners' levels of rationality, open-mindedness, confidence in the scientific method, curiosity, or aversion to superstition.

The distance between the school and a student's home may play a role in the variation of their rationality, but it does not lead to significant differences in their levels of open-mindedness, confidence in the scientific method, curiosity, or aversion to superstition.

A learner's job can have a big effect on how well they do in school. But the age of the learners and how far away their school was from home did not make a big impact in how well they did in school.

It was drawn that a very favorable scientific attitude among learners does not necessarily result in outstanding academic performance.

CONCLUSION

In light of the results and conclusions derived from this study, the following recommendations are proposed:

To improve their scientific attitude, ALS learners should be given more chances to do things that assist them comprehend science and clear up any misunderstandings they may have about natural events. They should be encouraged to ask questions during class discussions and participate actively in science-related activities. Additionally, they should be guided in managing their time wisely, especially those who are working, to balance their academic and personal responsibilities.

INSTABRIGHT e-GAZETTE
ISSN: 2704-3010
Volume VII, Issue III
February 2026
Available online at https://www.instabrightgazette.com

To improve academic performance, ALS learners should develop discipline, persistence and a good study habit, such as focusing during face to face classes in school, submitting outputs on time, reviewing notes during modular class and seeking help from teachers and classmates especially if there is difficulty understanding scientific concepts.

Teachers are urged to employ varied teaching strategies that are learner centered and interactive. These strategies focus on the learner, promote engagement and critical thinking and can improve both their scientific attitude and their grades in Science. Providing enrichment activities may also help the learners.

Science teachers can improve their teaching methods and classroom practices by attending seminars, trainings, and Learning Action Cell (LAC) sessions and also mentoring sessions from colleagues.

To make sure that teachers are meeting the needs of their learners and enhancing the quality of their lessons, school administrators may offer ongoing support, supervision, and monitoring.

Parents of Alternative Learning System learners are encouraged to provide consistent emotional support, encouragement and understanding to ALS learners to help sustain their motivation to finish secondary education despite many difficulties in their studies. They should also collaborate with teachers to monitor the academic progress of their children. Parents are also encouraged to provide support at home by creating an environment suited for learning. They may also ask assistance from people in the community who have more education for support, so that their children can better understand what they are learning.

INSTABRIGHT e-GAZETTE
ISSN: 2704-3010
Volume VII, Issue III
February 2026
Available online at https://www.instabrightgazette.com

Curriculum planners are encouraged to use the findings of this study as a guide when developing extra or remedial programs to address the unique needs of ALS learners. Since ALS learners cannot attend regular classes and needs to balance studies and work or other personal responsibilities, curriculum planners should create a curriculum exclusive for ALS learners. The curriculum should be flexible allowing them for self-paced learning. Additionally, curriculum planners may develop other learning strategies which could improve ALS learners' motivation to finish education.

Future researchers are encouraged to conduct related studies taking into account the relationship between scientific attitude and academic performance of ALS learners, with a larger sample of learners or in various geographical regions to come up with a more comprehensive information.

The other variables which could affect scientific attitude and achievement of learners that may be studied by the researchers include teaching methods, family support, the learner motivation, or even the socio-economic status of the learners. The incorporation of the qualitative approach, like interviews or focus group discussions, might give more information about the experience and challenges experienced by learners in the ALS program.

Further, a research could be carried out in the future that will examine the efficacy of remedial or enrichment programs that are formulated specifically to enhance scientific attitude and academic achievement. This may assist in determining the best strategies that are most effective to ALS learners and help in enhancing the teaching of Science in other learning environment.

INSTABRIGHT e-GAZETTE
ISSN: 2704-3010
Volume VII, Issue III
February 2026
Available online at https://www.instabrightgazette.com

References

Airlanda, G. S. (2018). *The analysis of scientific attitude with environmental knowledge through the role of teacher and parents (A case study of an eco-friendly school in Salatiga)*. [Master's thesis/Conference Paper].

Arrieta, G. S., Dancel, J. C., & Agbisit, M. J. P. (2020). Teaching science in the new normal: Understanding the experiences of Junior High School science teachers. *Journal of Science and Technology*, 21(2).

Arzadon, M., & Nato, R. J. (2015). The Philippine alternative learning system: Expanding the educational future of the deprived, depressed, and underserved. In *The 9th International Conference on Researching Work and Learning (RWL9)* (pp. 9–12).

Bhandari, P. (2022, August 19). *Correlational research | When & how to use*. Scribbr. https://www.scribbr.com/methodology/correlational-research/

Black, P., & Wiliam, D. (1998). Assessment and classroom learning. *Assessment in Education*, 5(1), 7–74.

Borela, V. T. (n.d.). *ALS curriculum implementation for juvenile delinquents in urban and rural areas in the Philippines: A comparative analysis*.

Bransford, J. D., Brown, A. L., & Cocking, R. R. (2000). *How people learn: Brain, mind, experience, and school*. National Academy Press.

Bybee, R. W. (2013). *The case for STEM education*. NSTA Press.

Cabañero, M. V., Cabañero, J. M., Ignacio, N. C., & Bautista, R. G. (2022). Project SIKAP upscales students' scientific attitude. *American Journal of Educational Research*, 10(7),

INSTABRIGHT e-GAZETTE
ISSN: 2704-3010
Volume VII, Issue III
February 2026
Available online at https://www.instabrightgazette.com

469–475. https://www.google.com/search?q=https://doi.org/10.12691/education-10-7-6

Dela Fuente, J. A. (2019). Driving forces of students' choice in specializing science: A science education context in the Philippines perspective. *International Journal of Science and Management*, 13(2).

Department of Education. (n.d.). *About the Alternative Learning System*. https://www.deped.gov.ph/k-to-12/inclusive-education/about-alternative-learning-system/

Department of Education. (2015). *Policy guidelines on classroom assessment for the K to 12 Basic Education Program* (DepEd Order No. 8, s. 2015).

Department of Education. (2020). *ALS 2.0 program*. https://www.deped.gov.ph/about-als/

Education Summary. (2022, September 5). *Jean Piaget learning theory of constructivism in education*. https://www.google.com/search?q=https://educationsummary.com/jean-piaget-learning-theory-of-constructivism-in-education/

Fraser, B. J. (2012). *Classroom learning environments*. Routledge.

Furberg, A., & Silseth, K. (2022). Invoking student resources in whole-class conversations in science education: A sociocultural perspective. *Journal of the Learning Sciences*, 31(2), 278–316. https://www.google.com/search?q=https://doi.org/10.1080/10508406.2021.1954521

Igarashi, T. (2018). *A second chance to develop the human capital of out-of-school youth and adults: The Philippines Alternative Learning System*. The World Bank.

INSTABRIGHT e-GAZETTE
ISSN: 2704-3010
Volume VII, Issue III
February 2026
Available online at https://www.instabrightgazette.com

Khan, M., & Siddiqui, M. A. (2020). Examining scientific attitude scales in India: Development and validation of new scale. *Interdisciplinary Journal of Environmental and Science Education*, 16(4), e2223.

Legal Research PH. (2021, October 2). *Republic Act 11510 or the Alternative Learning System Act: A promise to a better future*. https://legalresearchph.com/2021/10/02/republic-act-11510-or-the-alternative-learning-system-act-a-promise-to-a-better-future/

Montebon, D. R. T. (n.d.). *K12 science program in the Philippines: Student perception on its implementation*. Philippine Normal University.

National Economic and Development Authority (NEDA). (2019). *Alternative Learning System*. https://sdg.neda.gov.ph/alternative-learning-system/

National Research Council. (2012). *A framework for K-12 science education*. National Academies Press.

OECD. (2019). *PISA 2018 results (Volume I): What students know and can do*. OECD Publishing.

Onyema, E. M., Eucheria, N. C., Obafemi, F. A., Sen, S., Atonye, F. G., Sharma, A., & Alsayed, A. O. (2020). Impact of coronavirus pandemic on education. *Journal of Education and Practice*, 11(13).

Osborne, J., Simon, S., & Collins, S. (2003). Attitudes towards science: A review. *International Journal of Science Education*, 25(9), 1049–1079.

INSTABRIGHT e-GAZETTE
ISSN: 2704-3010
Volume VII, Issue III
February 2026
Available online at https://www.instabrightgazette.com

Parentela, G., & Vargas, D. (2021). *Pandemic era (COVID-19) and higher education in the Philippines against the world perspective: A literature survey analysis*. SSRN. https://www.google.com/search?q=https://dx.doi.org/10.2139/ssrn.3554301

Rao, D. B. (1989). *Scientific attitude*. Discovery Publishing House.

TeacherPH. (n.d.). *DepEd K to 12 grading system steps for computing grades*. https://www.teacherph.com/deped-grading-system/

Tindowen, D. J. C., Bassig, J. M., & Cagurangan, J.-A. (2017). Twenty-first-century skills of Alternative Learning System learners. *SAGE Open*, 7(3). https://www.google.com/search?q=https://doi.org/10.1177/2158244017726115

UNESCO. (2015). *Rethinking education: Towards a global common good?*

UNESCO. (2020). *Education in a post-COVID world*.

UNESCO. (2021). *Learning losses due to COVID-19*.

Walag, A. M. P., & Fajardo, M. T. M. (n.d.). *Rapid assessment of the perceived impacts of an adult education science competency-based enhancement training on Alternative Learning System mobile teachers and volunteer teachers in Cagayan de Oro City, Philippines*.

World Bank. (2020). *The COVID-19 pandemic: Shocks to education*.