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THE COGNITIVE AND SOCIAL SKILLS OF GRADE 6 LEARNERS: BASIS FOR THE DEVELOPMENT OF PROGRAMS, ACTIVITIES AND PROJECTS

LORRAINE DIVINE W. ALADO-ALCOBER
Teacher III, Anakan Central School
Anakan, Gingo-og City
lorrainedivine.alado1995@deped.gov.ph

ABSTRACT

The study determined the cognitive skills and social skills of Grade 6 learners of selected schools in East 2 District in the Division of Gingoog City. The cognitive skills were measured in terms of numerical reasoning and verbal reasoning and social skills in terms of social rules, likeability and social ingenuousness

The study used a quantitative research design using a descriptive-correlational approach. One hundred five respondents were from Anakan Central School and Mimbunga Elementary School. The frequency and mean were used to find the learners' level of cognitive and social skills, and the Pearson Product of correlation was used to determine the relationship between cognitive skills and social skills.

The study revealed that most of the learners have a low mastery level in numerical reasoning, and only a few are moving towards mastery. However, in terms of verbal reasoning, most of the learners are at an average mastery level.

As to social skills, the result shows that learners have the habit of saying thank you. However, they occasionally would not look at others when talking to someone. On the other

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hand, liking others is done only sometimes. Also, speaking softly with others is done most of the time, and playing fairly is hardly ever done. There is a significant relationship between the cognitive skills and social skills of the learners. Based on the findings, Project EULER, which stands for "Exploring the Use of Game-based Activities to Learning and Improving Cognitive and Social Skills through Exercises and practice drills relating to Real-world Connections," is proposed to enhance the learners' social skills time and cognitive abilities.

Based on the findings, conclusions were formulated. The low mastery of cognitive skills could be attributed to the learners' lack of ability to solve routine and non-routine problems, especially involving fractions and mixed numbers, interpret given information, and compare details. Further, learners cannot build upon previous knowledge and ideas to make connections of what they already know. The learners have developed some quality social skills, such as being grateful and considerate of the feelings of others. Also, some learners have not learned the principle of fair play, which means a graceful acceptance of results. Cognitive skills will help the learners understand and perform behavioral responses that will lead to the development of their social skills. Generally, the ability to do numerical and verbal reasoning is needed for cognitive skills, and these will influence the social skills of the learners. In other words, better cognitive skills mean better social skills.

Keywords: *Cognitive skills, numerical reasoning, verbal reasoning, social skills likeability and social ingenuousness*

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INTRODUCTION

Cognitive and social skills are two important aspects of a learner's life as basic networks in their day-to-day undertaking in school. Cognitive skills allow a learner to grasp the lesson discussed by the teacher. It enables the learner to mentally process the lesson well to understand and comprehend it critically and creatively. Social skills can help a learner build a sympathetic rapport with their classmates. It allows one to relate to one another and appreciate each other's strengths and weaknesses.

Cognitive skills, also called cognitive functions, cognitive abilities, or cognitive capacities, are skills of the mind, as opposed to other types of skills, such as motor skills. Some examples of cognitive skills are literacy, self-reflection, logical reasoning, abstract thinking, critical thinking, introspection, and mental arithmetic. Cognitive skills vary in processing complexity and can range from more fundamental processes, such as perception and various memory functions, to more sophisticated methods, such as decision-making, problem-solving, and metacognition (Kiely, 2014).

On the other hand, social skills are the tools that enable people to communicate, learn, ask for help, get their needs met in appropriate ways, get along with others, make friends, develop healthy relationships, protect themselves, and, in general, be able to interact with the society harmoniously (Dowd et al., 2017). Social skills build essential character traits like trustworthiness, respectfulness, responsibility, fairness, caring, and citizenship. These traits help build an internal moral compass, allowing individuals to make good choices in thinking and behavior, resulting in social competence.

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The acquisition of social skills is an essential developmental process by which children from infancy learn to act and respond appropriately in social interactions and to form and maintain healthy relationships with others (Ogden, 2015). As children grow and gradually expand their social environment, school becomes an important arena where children both learn and exercise social skills. At school, children's social skills are challenged and shaped in a variety of ways, both in dyads, small and large groups, and during interactions with peers and teachers. Despite evidenced relations to critical child outcomes and in contrast to academic skills, social skills are seldom systematically promoted in schools (OECD, 2015).

As observed, the cognitive and social skills of the learners were significantly affected during the outbreak of the COVID-19 pandemic. The learners hardly comprehend the lesson well. They have difficulty solving simple mathematical problems. They have shown social withdrawal among their peers, and they are afraid of interacting with their friends and classmates. Most of their reading ability is seriously affected. In fact, during our reading assessment at the beginning of the school year, one-fourth of the school's learners were included in the school's Gold Reading Program.

In this context, the researcher was motivated to conduct this study. The researcher wanted to develop programs, activities, and projects that enhance the cognitive and social skills of Grade 6 learners.

Objectives of the Study

The study aimed to determine the cognitive and social skills of Grade 6 learners of Anakan Central School and Mimbunga Elementary School for S.Y. 2023-2024.

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Specifically, the study has the following objectives:

1. To determine the level of cognitive skills of the learners in terms of numerical reasoning and verbal reasoning;

2. To determine the level of social skills in terms of social rules, likeability and social ingenuousness;

3. To test if there is significant relationship between the level of cognitive skills and the level of social skills of the learners and

4. To design programs, projects, and activities to enhance the learners' cognitive and social skills.

MATERIALS AND METHODS

This study utilized a quantitative research design using a descriptive-correlational approach. In this study, frequency and mean were used to determine the level of cognitive skills and social skills, and the Pearson Product-Moment of Correlation or Pearson r to determine the significant relationship between cognitive skills and social skills of the learners.

The respondents were the Grade 6 learners of Anakan Central School and Mimbunga Elementary School, Gingo-og City. There were 105 grade 6 learners of Anakan Central Elementary School and 27 from Mimbunga Elementary School who complied with the requirement of at least a sample size of 100 for a correlation study. Total enumeration was used for Anakan Central School and one section of Mimbunga Elementary School. The selected section has characteristics similar to those of Anakan Central Elementary School.

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The instrument used to measure the cognitive skills of the learners was adapted from Self-Learning Modules (SLMs). The questions were based on the competencies listed in the Budget of Work (BOW) for the First Quarter S.Y. 2023-2024. The questions were modified and the validity of the instrument was made by Master Teachers. The 30-item instrument was developed to measure learner's cognitive skills in terms of numerical reasoning with 15 questions and verbal reasoning with 15 questions. Each question was given two points, and the total items were 60 points. The assessment results were transformed into Mean Percentage Scores (MPS). Specified below were the mastery/achievement levels and parameter values in the Likert scale with verbal interpretation.

MPS	Descriptive Equivalent
96-100%	Mastered
86 – 95%	Closely Approximating Mastery
66 – 85%	Moving Towards Mastery
35 – 65%	Average Mastery
0- 34%	Low Mastery

In obtaining data on social skills, the researcher used the Assessment of Children's Social Skills by Danielson and Roecker (2003). This 19-item instrument was developed to measure learner's perspectives on their social skills. Principal component analysis revealed three reliable components, namely, social rules, likeability, and social ingenuousness. The items were listed randomly. Some of the items were modified to fit in the local setting. It was then validated by the district supervisors in charge of early childhood education, and its

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reliability was tested using Cronbach alpha. The result showed 0.85 reliability, which means that the instrument is reliable.

The learners were asked to rate their social behavior on a 5-point Likert-type scale (1 = never, 2 = hardly ever, 3 = sometimes, 4 = most of the time, and 5 = always). In interpreting the results, the following parameter scale and verbal interpretations were used:

Mean Score	Verbal Interpretation
4.21 – 5.00	Always
3.41 – 4.20	Most of the Time
2.61 – 3.40	Sometimes
1.81 – 2.60	Hardly ever
1.00 – 1.80	Never

RESULTS AND DISCUSSIONS

The results showed that nobody got an MPS from 86 to 100 and interpreted either in the mastered level or closely approximating mastery level, 15 or 14.29% got MPS of 66-85 and are on nearing mastery level; 25 or 23.81 got MPS of 35-65 and are on low mastery level, 53 or 50.48% got MPS of 15-34 and are on low mastery level; 10 or 9.52% got MPS of 5-14 and are on very low mastery level, and 2 or 1.90% got MPS of 0-4 and are on absolutely no mastery level. These results show that most of the learners have a low level of mastery in numerical reasoning, and only a few are moving towards mastery.

Verbal reasoning is another measure of cognitive skills. Results showed that only 3 out of 105 or 2.86% of the learners have MPS ranging from 96-100% and are considered on

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mastered level, 15 or 14.29% have MPS of 86-95 and are closely approximating mastery level, 35-65 and are on average mastery level, 29 or 27.61% have MPS of 15-34 and are on low mastery level, 5 or 4.76% have MPS of 5-14 and are on very low mastery level, and 3 or 2.86% have MPS of 0-4 and are on absolutely no mastery level. The results show that most of the learners have an average mastery level in verbal reasoning skills.

The social skills of the learners were measured in terms of three components namely: social rules, likeability, and social ingenuousness. The results showed that on "saying thank you when someone does something nice for me" got the highest mean (4.63) with S.D. equal to 0.705, which is interpreted as always being done. The SD indicates that the responses of the learners do not vary very largely. The result shows that the learners have the quality of being grateful. According to Suttie (2019), saying thank you means expressing gratitude and affects not only the grateful person but anyone who witnesses it. She further said that being thankful and expressing it to others is good for health and happiness. It builds trust and closer bonds with the people around, manifesting social skills.

On the other hand, item 1 on "looking at others in the face when they talk" got the lowest mean (3.13) which is interpreted as being done sometimes. This result implies that occasionally the learner would not look at the person often when talking to someone. This could be due to some factors like having problems making eye contact and some never looked at the person they were in conversation with or just being shy. According to Perry, E. (2022), in her article "How Not to be Shy," shyness causes one to keep others at a distance and avoid

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social situations. It can make one feel self-conscious or insecure during social interactions with others.

Generally, the learners practice social rules most of the time, as shown in the overall score of 4.03. Social rules are important in society because they provide order. Social rules guide and direct behavior while also providing predictability for relationships with others.

According to Kirova and Jamison (2018), children learn social skills through interaction with themselves, their teachers, families, peers, and even people whom they have not engaged with on a one-on-one basis. Furthermore, O'Byrne et al. (2018) assert that children should learn social literacy through communication with peers and family from an early age in regular family interaction. Social literacy skills help elementary learners interact with new communities, cultures, and norms that emerge either through technology or the community they live in (Greenthow & Chapman, 2020). Another indicator that is considered for social skills is likeability.

The result showed the statement which states, "when I come over, others ask me to move or give them some more space," is always done. This shows that the learners are considerate when giving space to others. It shows further that the learners are mindful of the consequences and feelings of others. On the other hand, item 16, "others like me," got the lowest mean (2.73), which is interpreted as done sometimes.

This shows that a learner is not like always by their peers. This is normal in a group. A study by Laursen (2023) suggested that during the pre- and early adolescent years, relative influence within friendship tends to be apportioned based on likeability. This would mean that

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there will be others who will dispense their friendship based on one's friendliness or congeniality. Generally, the level of social skills in terms of likeability is rated with a mean of 3.85, which means it is done most of the time. This will show that the learners have qualities that bring about an engaging attitude, but not always.

Another aspect of social skills is social ingenuousness. The indicator with the highest mean is on "talking softly with others (3.89), interpreted as doing most of the time, with an SD of 1.381. A standard deviation of more than one indicates that the data points spread out over a wider range, indicating high variability. On the other hand, the lowest mean is on "I play fairly (2.15)," interpreted as hardly never with an SD of 1.231. This will indicate a high variability and show that there are times when the learners are not consistent in expressing fairness when playing with peers.

The overall mean of 3.16 for social skills in terms of social indigenousness, which is interpreted to be done sometimes, shows that occasionally, the learners express characteristics typical of a child. Children with good social skills have positive attributes like innocence and fun. They will have a low risk of making trouble with their peers and colleagues (Dinisman et al.; A.,2016).

To determine the significant relationship between the level of cognitive skills and the level of social skills of the learners, the null hypothesis of no significant relationship between the level of cognitive skills and the level of social skills was tested at a 5% level of significance using Pearson Product of correlation or Pearson r. With the computed r of 0.412, which is

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greater than the critical r value of 0.193, the null hypothesis is rejected. There is a significant relationship between the learners' cognitive and social skills.

The study of Suman et al. (2023) supports the result of the present study. The authors attempted to study the relationship between social skills and academic achievement of students. Correlation tests were used to analyze the data. Matson's Evaluation of social skills with youngsters and Academic achievement scores obtained by the students in the ninth-class annual exam were considered as academic achievement of the students. The findings showed that a significant and positive relationship exists between social skills and academic achievement of secondary school students. Cognitive ability or skills refers to the human brain's ability to restore memory and process and extract information. It is a key factor that predicts academic achievement.

Based on the foregoing findings, an action plan called Project EULER, or Exploring the Use of Game-based Activities to Learn and Improve Cognitive and Social Skills through Exercises and Practice Drills relating to Real-world Connections, is hereby presented for consideration.

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ACTION PLAN on PROJECT EULER

(**E**xploring the **U**se of game-based activities to **L**earning and improving cognitive and social skills through **E**xercises and practice drills relating to **R**eal-world connections)

S. Y. 2023-2024

Phases of Institutionalization

Phase 1: Pre- Implementation

Objective: To introduce PROJECT EULER

Activities/Strategies:

1. Action Plan Making
2. Presentation of the Action Plan
3. Preparation of Materials and Resources Needed

Person's Involved: School Head, Project Implementer

Resources Needed: Laptop, Bond Paper, Printer

Time Frame: March 2024

Expected Outcome/Success Indicator:

1. Crafted the Action Plan
2. Presented the Action Plan to the School Heads
3. Prepared the materials/ resources needed.

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Phase 2: Implementation Proper

Objective: To advocate PROJECT EULER through different exercises and practice drills.

Activities/Strategies:

1. Math Club - Activate/Revive Math Club in School
2. Games-Based Activities - Math Drill, Math Trail, Scavenger Hunting, Video Modelling, Pass the Ball
3. Numeracy and verbal Integration Across All Curriculum
4. Maximize the Use of Contextualized Instructions and Localized Materials
5. Reward System - Giving non-monetary reward to learners who can answer the problem.
6. A-problem-a-day - The learners will pick one question from the box and will answer it in one minute

Person's Involved: Project Implementer, Learners

Resources Needed: Laptop, Bond Paper, Printer

Time Frame: April 2024

Expected Outcome/Success Indicator:

1. Activated/ revived the Math Club in School
2. Enhanced the cognitive and social skills of the learners

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3. Numerical and verbal reasoning skills were enhanced across all curricula

4. Maximized the used of contextualized instructions and localized materials

5. Positively reinforced and boosted pupils' interests and participation

6. Developed a culture of responsibly solving one's problems.

Phase 3: Post Implementation

Objective: To monitor and evaluate the progress of cognitive and social skills of the learners.

Activities/Strategies:

1. Monitoring and evaluation of the implementation of Project Euler

2. Presenting the effectiveness and efficiency of the project to the School Head

3. Present the project to school head and teachers during SLAC Session

4. Introduce the project to co-teachers for possible adoption

Person's Involved: School Head, Teachers, Project Implementer, Learners

Resources Needed: Laptop, Bond Paper, Printer, TV, Monitoring Sheet Form

Time Frame: May 2024

Expected Outcome/Success Indicator:

1. Monitored and evaluated the implemented project.

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2. Presented the results of the project to School Head\

3. Presented the project to school head and teachers during SLAC Session

4. Introduced the project to co-teachers

Project Owner:

(SGD) LORRAINE DIVINE ALADO-ALCOBAR

APPROVED:

(SGD) NORMA A. TORREON, Ph.D.

School Principal

Prepared by:

(SGD) LORRAINE DIVINE W. ALADO

Project Implementer

Approved:

(SGD) NORMA A. TORREON, PhD

School Principal