

Twenty-First Century Learning Skills Developed among Grade 11 Students in Zone 3, Division of Zambales

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Abstract— This study determined the level of 21st century learning skills developed among Grade 11 students in Zone 3, Division of Zambales. This study used descriptive research design where survey checklist has served as the main instrument in gathering data. Purposive sampling was implemented. There are 129 HUMSS students from 4 public schools in Zone 3, Zambales that served as respondents. The instrument used is adopted and modified by the researchers. It was also validated by experts. The instrument has two parts, includes; (a) Profile of the respondents, (b) level of learning skills. Based from the results, the study concludes that (a) majority of the student-respondents are female in their teenage stage, (b) the academic performance of the respondents is very satisfactory, (c) that they perceived agree with their level of learning in terms of critical thinking, creativity, collaboration, and communication skills, (d) that there was significant difference in the level of learning skills when grouped according to sex profile, and lastly (e) there is no significant relationship between the level of learning skills and academic performance of the respondents.

Keywords— 21st century learning skills, Grade 11 students, HUMSS strand, descriptive research, academic performance

I. BACKGROUND OF THE STUDY

High school graduates often enter college academically unprepared for college-level material. In some cases, academic deficiencies are so severe that colleges opt to expel the students (Bettinger and Long 2009 and Mah and Ifenthaler 2018). According to Harlow (nd), it is necessary to be prepared to enter higher education. Students who did not prepare for college while in high school have a distinct disadvantage from those learners who prepare.

Preparations may include the enhancement of the 21st century skills that the students have. 21st-century skills are classified into three categories: learning skills, literacy skills, and life skills (Pardede, 2019). The learning skills refer to the mental processes required to adapt and improve upon a modern work environment. The literacy skills, sometimes called IMT skills (information literacy, media literacy, and technology literacy), deals with how individuals can discern facts, publishing outlets, and the technology behind them; and the life skills focus on the intangible elements of every

individual's everyday life that include both personal and professional qualities.

According to Ross (2017), 21st century skills not only provide a framework for successful learning in the classroom but ensure students can thrive in a world where change is constant and learning never stops.

Today, the Philippines has taken necessary actions to thrive and survive in the fast-changing industries of the 21st century. One indicator is the shift from the SEC-UbD curriculum to K- 12 curriculum. The new education curriculum was anchored to the 21st century skills to meet the global standards. As stated in D.O. No. 21, s. 2019 entitled Policy Guidelines on the K-12 Basic Education Program, K-12 curriculum will holistically develop individuals equipped with the 21st century skills. These skills will prepare students to become effective in helping to address the needs of the nation, by pursuing higher education, employment, entrepreneurship, or middle-level skills development. For the Philippines to cope with the pressing challenges, there is a need to assess the learners' knowledge and existing 21st-

century learning skills as an indicator that the school is fulfilling its commitment in the field of education and to the country.

The Department of education must continue identifying the necessary skills needed by 21st-century learners for them to survive in the 21st-century environment. For the students to deal with the changes, they need to learn the essential skills that are useful in all subjects and all careers; this is what we call the Four C's of the 21st-century learning skills: critical thinking, communication, collaboration, and creativity.

It is therefore the objective of this research to determine the level of 21st century learning skills developed among Grade 11 students in Zone 3, Division of Zambales.

Statement of the Problem

This study aimed to determine the level of 21st century learning skills developed among Grade 11 students in Zone 3, Division of Zambales. Specifically, this study will answer the following questions:

1. What is the profile of the respondents in terms of:
 - 1.1 Age
 - 1.2 Sex?
2. What is the student's Academic Performance?
3. What is the level of learning skills developed among Grade 11 students in terms of:
 - 3.1 Critical thinking skills
 - 3.2 Creativity skills
 - 3.3. Collaboration skills
 - 3.4. Communication skills?
4. Is there a significant difference on the level of skills developed in terms of the following dimensions when grouped according to profile variables:
 - 4.1 Critical thinking skills
 - 4.2. Creativity skills
 - 4.3. Collaborative skills
 - 4.4. Communication skills?
5. Is there a significant relationship between the level of 21st century learning skills developed and students' academic performance?
6. What plan can be developed to enhance level of 21st century learning skills among Grade 11 students?

II. METHODS AND DESIGN

This study made use of the quantitative- descriptive research design and the questionnaire as the main instrument of gathering data.

Participants and Sampling Technique

The study used purposive sampling technique in selecting the respondents. There a total of 129 HUMSS students served as respondents. They came from 4 public nation high schools from Zone 3, Division of Zambales, namely; Cabangan National High School (Cabangan), Gov. Manuel D. Barretto National High School (San Felipe), La Paz National High School (San Narciso) and San Antonio National High School (San Antonio).

Instruments

The instrument used was an adapted questionnaire from the study of Okan Sarigoz entitled Assessment of the High School Students' Critical Thinking Skills and Christie J. Brungardt entitled College Graduates' Perceptions of Their Use of Teamwork Skills: Soft Skill Development in Fort Hays State University and online quiz from skillsyouneed.com (Creative Thinking Skills Self-Assessment) and mindtools.com (How Good Are Your Communication Skills) and modified by the researcher.

The instrument was pilot tested on Grade 11 HUMSS students of Zambales National High School through Google Forms. Reliability was also tested using Cronbach Alpha. The validated instrument was utilized by the researcher to gather data for this study. It was subdivided into three (3) sections. Sections (I) consist of respondents' profile, (II) academic performance, (III) questionnaires about Critical Thinking Skills, Creativity Skills, Collaboration Skills, Communication Skills.

To interpret the data effectively, the researcher employed the following statistical treatment.

Table 1. Respondents Questionnaire Weighted Value and Qualitative Description

Weighted Value	Qualitative Description
3.25 – 4.0	Strongly Agree That It was Developed
2.50 – 3.24	Agree That It was Developed
1.75 – 2.49	Fairly Agree That It was Developed
1.0 – 1.74	Disagree That It was Developed

Table 2. Scale Used in the Interpretation of Pearson *r* Correlation Value

+/- 0.00 to +/- 0.20	negligible correlation
+/- 0.21 to +/- 0.40	low or slight correlation
+/- 0.41 to +/- 0.70	moderate relationship
+/- 0.71 to +/- 0.90	denotes high relationship
+/- 0.91 to +/- 0.99	very high relationship
+/- 1.00	perfect correlation

III. RESULTS AND DISCUSSION

1. Profile of the Student-respondents

Table 3: Frequency and Percentage Distribution on the Student-respondents' Profile Variables

Profile Variables		Frequency (f)	Percentage (%)
Age (Years) Mean = 18.12 or 18 years old	16-20	126	97.70
	21 & above	3	2.30
	Total	129	100.00
Sex	Male	36	27.90
	Female	93	72.10
	Total	129	100.00

Table 3 shows the frequency, percentage and mean distribution on the student-respondents' profile variables of age and sex.

1.1. Age. Most of the student-respondents with 126 (97.70%) are from the age group 16-20 years old, while 3 (2.30%) are from the age group 21 years and above. The computed mean age of student-respondents was 18.12 or 18 years old.

1.2. Sex. The majority of the student-respondents with 93 (72.10%) are female, while 36 (27.90%) are male.

2. Student's Academic Performance

The student's academic performance is presented in Table 4.

Table 4: Frequency and Percentage Distribution on the Student-respondents' Academic Performance

Descriptive Equivalent	Academic Performance Rating	Frequency	Percentage
Outstanding	90-100	40	31.00
Very Satisfactory	85-89	58	45.00
Satisfactory	80-84	31	24.00
Fairly Satisfactory	75-79	0	0.00
Did Not Meet Expectations	74 and below	0	0.00
Total		129	100.00
Mean= 88.28 (Very Satisfactory)			

The academic performance of 58 (or 45.00%) students ranged from 85-89 indicating "Very Satisfactory" academic performance; 40 (or 31.00%) students whose academic performance ranged from 90-100 described as "Outstanding" academic performance; and 31 (or 24.00%) students whose academic performance ranged from 80-84 described as "Satisfactory". The computed mean academic performance of student-respondents was 88.28 indicating "Very Satisfactory" academic performance.

This is related to the studies of Santos (2019), academic performance of students is very satisfactory with an average of 88.0563, Almerino, Ocampo, Abellana, Almerino, Mamites and Pinili (2020), HUMSS students have average academic performance and Magulod (2018) students have good level of academic performance with a total mean grade of 85.55.

A study in Pakistan emphasized that academic performance is among the several components of academic success (Masud, Mufarrih, Qureshu, Khan, Khan, Khan 2019). Regier (2015) suggested that academic success is vital because it is linked to positive outcomes.

3. Level of Skills of the Student-respondents

3.1 Level of Skills in terms of Critical Thinking Skills of the Student-respondents

The level of skills of student-respondents in terms of Critical Thinking Skills is presented in Table 5.

The student-respondents "Agree" that "4. They can detect the problems in a situation, explain and define them" and "11. When they encounter a situation, they can express their thoughts and defend their opinion" with a rating of 3.16 (tied at rank 1.5) while "19. When they encounter a matter,

they can be more elaborative” had the lowest mean of 2.96 interpreted as “Agree” (rank 20).

Table 5: Assessed Level of Skills in terms of Critical Thinking Skills

Critical Thinking Skills	Mean	DR
1. When I encounter a problem, I consider it without prejudice.	2.98	Agree
2. When I encounter a problem, I analyze whether the subject is from first hand or second hand.	3.12	Agree
3. I deduce regarding an explained issue and I can evaluate the reasons of these deductions.	3.03	Agree
4. I can detect the problems in a situation, explain and define them.	3.16	Agree
5. When I encounter a problem, I can solve it, and make deductions.	3.11	Agree
6. While a situation is explained, I can analyze it by thinking the data regarding that matter.	2.99	Agree
7. By means of my thoughts, I can make hypothesis regarding the situation.	2.98	Agree
8. I can pass an accurate judgment an issue, and I can give a conclusion with my thoughts.	2.97	Agree
9. When I read a matter, I can understand the main idea and intention of the writer.	3.05	Agree
10. By means of my thoughts, I can make comments and can good judgments.	3.00	Agree
11. When I encounter a situation, I can express my thoughts and defend my opinion.	3.16	Agree
12. I can explain my thoughts regarding a matter convincingly and logically.	3.01	Agree
13. By means of explanations regarding a situation, I can predict the unexplained ideas.	2.98	Agree
From the explanations regarding a situation, I can find the contradiction between reason and result.	3.10	Agree
While an issue is explained, I can concentrate on the matter together with my thoughts.	3.07	Agree
By means of explanations, I can establish striking connections regarding the situation.	2.98	Agree
When I encounter a problem, I can think critically, reasonably and analytically.	3.03	Agree
When I encounter a scenario, I can visualize it and can feel as the main character of it.	3.1	Agree
When I encounter a matter, I can be more elaborative.	2.96	Agree
When I encounter a matter or an action, my thoughts do not misguide me.	2.97	Agree
Overall Weighted Mean	3.04	Agree

Overall, the student-respondents “Agree” that their level of skills was developed in terms of critical thinking skills with a mean rating of 3.04. The result implies that the student's level of skills in terms of critical thinking skills was not fully developed since the students just agreed but not strongly agreed that it was developed.

The result of this study is related to the findings of Aktamis and Yenice (2010), students in the Aegean Region have middle-level developed critical-thinking skills. Fadhlullah and Ahmad (2017) also reported that students' critical thinking abilities ranged from low to moderate.

An Indonesian study emphasizes the importance the need of students to develop critical thinking. Pardede (2019) emphasized that critical thinking increases the students'

ability to passionately and responsibly take, apply and control their thinking skills, develop proper principles and standards to evaluate their thinking, and willingly judge, accept, or reject new ideas, concepts, and viewpoints.

3.2 Level of Skills in terms of Creativity Skills of the Student-respondents

The student-respondents “Strongly Agree” that “2. They take up new activities or hobbies on a regular basis” with a rating of 3.35 (rank 1) while “11. They deliberately try to break their routine” had the lowest mean of 2.72 interpreted as “Agree” (rank 18). Overall, the student-respondents “Agree” that their level of skills was developed in terms of creativity skills with a mean rating of 3.14. The result implies that the student's level of skills in terms of creativity was not

fully developed since the students just agreed but not strongly agreed that it was developed. The result of the study is related to the findings of Sugiyanto, et.al (2018), the student's creative thinking skills were relatively in low grade and

according to the study of Meiarti and Ellianawati (2019), the creativity of the students is not optimally developed.

Table 6 shows the level of skills of student-respondents in terms of Creativity Skills.

Table 6: Assessed Level of Skills in terms of Creativity Skills

Creativity Skills	Mean	DR
1. I try out new ways of doing things.	3.30	Strongly Agree
2. I take up new activities or hobbies on a regular basis.	3.35	Strongly Agree
3. I enjoy discussions with people with different viewpoints.	3.16	Agree
4. I enjoy finding out more about things that are new to me.	3.33	Strongly Agree
5. I make an effort to take on new challenges.	3.28	Strongly Agree
6. I am open to new ideas, even those that challenge the way I think.	3.18	Agree
7. I spend time thinking and reflecting on how I learn.	3.21	Agree
8. I like thinking about the connections and similarities between things.	3.19	Agree
9. I like activities that involve patterns, such as crosswords and jigsaw puzzles.	3.14	Agree
10. I do not like to opt for the first solution that I think of to any problem.	3.02	Agree
11. I deliberately try to break my routine.	2.72	Agree
12. I like trying to solve difficult problems, both as puzzles and in life.	3.05	Agree
13. I make an effort to use techniques that help me think differently.	3.21	Agree
14. From the explanations regarding a situation, I can find the contradiction between reason and result.	3.1	Agree
15. While an issue is explained, I can concentrate on the matter together with my thoughts.	3.07	Agree
16. By means of explanations, I can establish striking connections regarding the situation.	2.98	Agree
17. When I encounter a problem, I can think critically, reasonably and analytically.	3.03	Agree
18. When I encounter a scenario, I can visualize it and can feel as the main character of it.	3.1	Agree
19. When I encounter a matter, I can be more elaborative.	2.96	Agree
20. When I encounter a matter or an action, my thoughts do not misguide me.	2.97	Agree
Overall Weighted Mean	3.04	Agree

An Indonesian study also showed that the creative thinking skills of students are not fully developed. Madyani, Yamtinah, Utomo, Saputro and Mahardiani (2020), majority of the respondents showed a low level of creative thinking skills.

Creative thinking of students must be developed because it helps an individual to see new opportunities, to produce new ideas to flexibly adapt to changing situations and apply one's imagination to solve complex problems. To

address the fast-changing industries and to gain competitive advantage individuals must go beyond the playbook, often improvising with limited resources and being capable of inventing the new solution (Puccio 2020).

3.3 Level of Skills in terms of Collaboration Skills of the Student-respondents

The level of skills of student-respondents in terms of Collaboration Skills is shown in Table 7.

Table 7: Assessed Level of Skills in terms of Collaboration Skills

Collaboration Skills	Mean	DR
1. When I work as part of a team, I ensure the instructions are understood by all the team members prior to starting the task.	3.34	Strongly Agree
2. When I work as part of a team, I understand and contribute to the organizational goals.	3.19	Agree
3. When I work as part of a team, I teach other team members.	3.16	Agree
4. When I work as part of a team, I interact cooperatively with other team members.	3.21	Agree
5. When I work as part of a team, I know the process of making a decision.	3.11	Agree
6. When I work as part of a team, I serve as a role model in formal and informal interactions.	3.11	Agree
7. When I work as part of a team, I conduct myself with courtesy.	3.14	Agree
8. When I work as part of a team, I ask for the instructions to be clarified when it appears not all the team members understand the task.	3.22	Agree
9. When I work as part of a team, I help ensure the proper balancing of the workload.	3.16	Agree
10. When I work as part of a team, I know how to weigh the relative importance among different issues.	2.89	Agree
11. When I work as part of a team, I lead when appropriate, mobilizing the group for high performance.	3.07	Agree
12. When I work as part of a team, I respect the thoughts and opinions of others in the team.	3.36	Strongly Agree
13. When I work as part of a team, I can identify potential problems readily.	3.16	Agree
14. When I work as part of a team, I communicate in a manner to ensure mutual understanding.	3.21	Agree
15. When I work as part of a team, I do my part of the organization in a timely manner.	3.15	Agree
16. When I work as part of a team, I prepare sufficiently to make a decision.	3.12	Agree
17. When I work as part of a team, I treat others with courtesy.	3.23	Agree
18. When I work as part of a team, I willingly contribute solutions to resolve problems.	3.29	Strongly Agree
19. When I work as part of a team, I seek and respond to feedback.	3.26	Strongly Agree
20. When I work as part of a team, I track other team members' progress	3.13	Agree
21. When I work as part of a team, I solicit input for decision making from my team members.	3.15	Agree
22. When I work as part of a team, I adapt readily to varying conditions and demands.	3.1	Agree
23. When I work as part of a team, I listen attentively.	3.27	Strongly Agree
24. When I work as part of a team, I am able to change decisions based upon new information.	3.15	Agree
When I work as part of a team, I try to bring out the best in others.	3.29	Strongly Agree
When I work as part of a team, I recognize conflict.	3.08	Agree
When I work as part of a team, I clearly and accurately exchange information.	3.02	Agree
When I work as part of a team, I emphasize the meeting of deadlines.	3.21	Agree
When I work as part of a team, I accept individual differences among members.	3.19	Agree
When I work as part of a team, I identify needs or requirements and develop quality/timely solutions.	3.17	Agree

When I work as part of a team, I pay attention to what others are saying.	3.27	Strongly Agree
When I work as part of a team, I treat all my team members as equals	3.4	Strongly Agree
Overall Weighted Mean	3.18	Agree

The student-respondents “Strongly Agree” that “32. When they work as part of a team, they treat all their team members as equals” with a rating of 3.40 (rank 1) while “10. When they work as part of a team, they know how to weigh the relative importance among different issues” had the lowest mean of 2.89 interpreted as “Agree” (rank 32). Overall, the student-respondents “Agree” that their level of skills was developed in terms of collaboration skills with a mean rating of 3.18. The result implies that the student’s level of skills in terms of collaboration was not fully developed since the students just agreed but not strongly agreed that it was developed.

The result of the study is related to the findings of Othman and Murad (2015), student collaboration was not fully developed because some group members preferred not to share their ideas with the group. Some members were taking group work as relaxation time, some consider group

works a waste of time because other members discuss some unrelated topics and cannot reach an agreement. According to Varona (2020), good collaboration skills yield better results in collaborative learning contexts, it is why the collaboration skills of the students must be developed.

According to Child and Shaw (2016), students’ collaboration skills should be developed to increase students’ social competency and academic self-concept. Students gained more knowledge and learned specific skills and processes when they work in groups. Sulaiman and Shahrill (2015) stated that collaboration helped to improve students’ performance academically as well as to develop the necessary skills of the 21st century.

3.4 Level of Skills in terms of Communication Skills of the Student-respondents

Table 8 presents the level of skills of student-respondents in terms of Communication Skills.

Table 8: Assessed Level of Skills in terms of Communication Skills

Communication Skills	Weighted Mean	Descriptive Equivalent
1. I try to anticipate and predict possible causes of confusion, and I deal with them up front.	3.16	Agree
2. When I write a memo, email, or other document, I give all of the background information and detail I can to make sure that my message is understood.	3.24	Agree
3. If I don't understand something, I ask to clarify it.	3.29	Strongly Agree
4. When people talk to me, I try to see their perspectives.	3.12	Agree
5. When I finish writing a report, memo, or email, I scan it quickly for typos and so forth, and then send it off right away.	3.16	Agree
6. When talking to people, I pay attention to their body language.	3.15	Agree
I use diagrams and charts to help express my ideas.	3.10	Agree
Before I communicate, I think about what the person needs to know, and how best to convey it.	3.17	Agree
When someone's talking to me, I think about what I'm going to say next to make sure I get my point across correctly.	3.30	Strongly Agree
Before I send a message, I think about the best way to communicate it (in person, over the phone, in a newsletter, via memo, and so on).	3.20	Agree

I try to help people understand the underlying concepts behind the point I am discussing. This reduces misconceptions and increases understanding.	3.22	Agree
I consider cultural barriers when planning my communications.	3.19	Agree
Overall Weighted Mean	3.19	Agree

The student-respondents “Strongly Agree” that “9. When someone's talking to them, they think about what they're going to say next to make sure they get their point across correctly” with a rating of 3.30 (rank 1) while “7. They use diagrams and charts to help express their ideas” had the lowest mean of 3.10 interpreted as “Agree” (rank 12). Overall, the student-respondents “Agree” that their level of skills was developed in terms of communication skills with a mean rating of 3.19.

The result implies that the student's level of skills in terms of communication was not fully developed since the students just agreed but not strongly agreed that it was developed.

The result of the study is related to the findings of Iksan, et.al (2011), the communication skills among students are good but some aspects need to be developed, and in the findings of Misdi, Pauzi, Mokhtar, Ali and Hadi (2010), the level of communication among students at learning institutions in Malaysia is not satisfactory.

A local study also revealed that senior high school students' collaboration was not fully developed. Eslit and Bangelisan (2018) reported that the respondents' speaking and listening skills revealed a high significance which can be

Table 9: Analysis of Variance to test difference on the Level of Skills as to Critical Thinking Skills when Grouped According to the student-respondents profile variables

Sources of Variations		SS	df	MS	F	Sig.	Decision / Interpretation
Age	Between Groups	0.519	1	0.519	2.554	0.113	Accept Ho Not Significant
	Within Groups	25.832	127	0.203			
	Total	26.351	128				
Sex	Between Groups	0.981	1	0.981	4.910	0.028	Reject Ho Significant
	Within Groups	25.370	127	0.200			
	Total	26.351	128				

There was a significant difference on the level of skills as to critical thinking skills when student-respondents are grouped according to sex (Sig. = 0.028). The computed significant value (Sig.) is less than ($<$) 0.05 alpha level of significance, therefore null hypothesis is rejected. There is a

deduced that the respondents are not effective communicator are not effective communicators. According to Richards (2021), some of the reasons for not fully developed communication skills may include lack of motivation, little opportunity to practice communicating and personality factors.

A foreign study suggested that communication skills must be developed because it is essential to achieve success in the growing service sector. Penbek, et. al (2009) reported that students in today's era need to master communication skills in different cultural contexts to be globally competitive.

IV. TEST OF DIFFERENCE ON THE LEVEL OF SKILLS WHEN GROUPED ACCORDING TO THE STUDENT-RESPONDENTS PROFILE VARIABLES

4.1 Critical Thinking Skills

The Analysis of Variance to test difference on the Level of Skills as to Critical Thinking Skills when Grouped According to the student-respondents profile variables is presented in Table 9.

significant difference on the level of skills as to critical thinking skills when grouped according to sex

The result of the study is related to the findings of Perdana, Budiyo, Sajidan, and Sukarmin (2019), the significant value obtained in their study was 0.000 which

indicates that there is significant gender difference in terms of critical thinking skills.

On the other hand, the computed significant value (Sig.) for age was (Sig. = 0.113) which indicates that there was no significant difference on the level of skills as to critical thinking skills of student-respondents.

4.2 Creativity Skills

Table 10 shows the Analysis of Variance to test difference on the Level of Skills as to Creativity Skills when

Table 10: Analysis of Variance to test difference on the Level of Skills as to Creativity Skills when Grouped According to the student-respondents profile variables

Sources of Variations		SS	df	MS	F	Sig.	Decision / Interpretation
Age	Between Groups	0.231	1	0.231	1.204	0.275	Accept Ho Not Significant
	Within Groups	24.372	127	0.192			
	Total	24.603	128				
Sex	Between Groups	0.376	1	0.376	1.971	0.163	Accept Ho Not Significant
	Within Groups	24.227	127	0.191			
	Total	24.603	128				

The result for age is related to the study of Tindowen, Bassig, Cagurangan (2017), the significant value obtained in their study for age was 0.233 which indicates that there is no significant age difference in terms of creativity skills. On the other hand, the significant value obtained in their study for sex was 0.032 which indicates that there is a significant sex difference in terms of creativity skills. Their findings stresses that the male learners are more creative than female learners.

4.3 Collaborative Skills

The Analysis of Variance to test difference on the Level of Skills as to Collaborative Skills when Grouped

Grouped According to the student-respondents profile variables.

The computed significant values (Sig.) for age (Sig. = 0.275) and sex (Sig. = 0.163) were all greater than ($>$) 0.05 alpha level of significance. The results indicate that there was no significant difference on the level of skills as to creativity skills of student-respondents. Therefore, the null hypothesis is accepted.

According to the student-respondents profile variables is shown in Table 11.

The computed significant values (Sig.) for age (Sig. = 0.119) and sex (Sig. = 0.062) were all greater than ($>$) 0.05 alpha level of significance. The results indicate that there was no significant difference on the level of skills as to collaborative skills of student-respondents. Therefore, the null hypothesis is accepted.

It is related to the study of Tindowen, et.al (2017), the significant values obtained in their study for age was 0.318 and sex was 0.928 which indicates that there is no significant age and gender differences in terms of collaboration skills.

Table 11: Analysis of Variance to test difference on the Level of Skills as to Collaborative Skills when Grouped According to the student-respondents profile variables

Sources of Variations		SS	df	MS	F	Sig.	Decision / Interpretation
Age	Between Groups	0.516	1	0.516	2.467	0.119	Accept Ho Not Significant
	Within Groups	26.564	127	0.209			
	Total	27.080	128				
Sex	Between Groups	0.736	1	0.736	3.546	0.062	Accept Ho Not Significant
	Within Groups	26.344	127	0.207			
	Total	27.080	128				

4.4 Communication Skills

Table 12 shows the Analysis of Variance to test difference on the Level of Skills as to Communication Skills when Grouped According to the student-respondents profile variables.

The computed significant values (Sig.) for age (Sig. = 0.299) and sex (Sig. = 0.136) were all greater than ($>$) 0.05 alpha level of significance. The results indicate that there was no significant difference in the level of skills as to communication skills of student-respondents. Therefore, the null hypothesis is accepted.

Table 12: Analysis of Variance to test difference on the Level of Skills as to Communication Skills when Grouped According to the student-respondents profile variables

Sources of Variations		SS	df	MS	F	Sig.	Decision / Interpretation
Age	Between Groups	0.247	1	0.247	1.087	0.299	Accept Ho Not Significant
	Within Groups	28.853	127	0.227			
	Total	29.100	128				
Sex	Between Groups	0.506	1	0.506	2.248	0.136	Accept Ho Not Significant
	Within Groups	28.594	127	0.225			
	Total	29.100	128				

It is related to the study of Tindowen, et.al (2017), the significant values obtained in their study for age was 0.847 and sex was 0.129 which indicates that there is no significant age and gender differences in the effects of communication skills.

LEARNING SKILLS AND STUDENTS' ACADEMIC PERFORMANCE

The Pearson Product Moment Coefficient of Correlation to determine Relationship between Level of Skills of the 21st Century Learning Skills and Students' Academic Performance is presented in Table 13.

V. TEST OF RELATIONSHIP BETWEEN THE LEVEL OF SKILLS OF THE 21ST CENTURY

Table 13: Pearson Product Moment Coefficient of Correlation to determine Relationship between Level of Skills of the 21st Century Learning Skills and Students' Academic Performance

Sources of Correlations		Level of Skills	Academic Performance	Decision / Interpretation
Level of Skills	Pearson Correlation	1	-.010	No Relationship Accept Ho
	Sig. (2-tailed)		0.912	
	N	129	129	
Academic Performance	Pearson Correlation	-.010	1	
	Sig. (2-tailed)	0.912		
	N	129	129	

The computed Pearson r value was -0.010 which denotes a very low negative correlation between the level of skills and the academic performance of students. The computed P -value was 0.912 which is greater than ($>$) 0.01 level of significance, therefore the null hypothesis is accepted. The result signifies that there is no significant relationship between the level of skills and the academic performance of students.

This further implies that the level of skills of students does not affect their academic performance. This is related to the study of Varona (2020), the students in St. Michael College of Caraga are proficient in their academics, but the 21st-century skills

in terms of 4C's (critical thinking, communication, collaboration, and creativity) have no significant impact on students' academic performance.

VI. PROPOSED ACTION PLAN TO ENHANCE THE LEVEL OF LEAST DEVELOPED 21ST CENTURY LEARNING SKILL AMONG GRADE 11 LEARNERS

The proposed action plan to enhance the level of least developed 21st Century learning skill among Grade 11 learners is presented in Table 14.

Table 14: Proposed Action Plan to Enhance Least Developed 21st Century Learning Skills among Grade 11 Students

Competency	Area Needing Enhancement	Proposed Action Plan	Persons Involved	Materials Needed	Source of Fund	Budget	Time Frame
Critical thinking skills	Becoming elaborative on different matters	Conduct virtual training to enhance critical thinking skills	Teachers, School Head, Invited Speaker	Laptop/ Mobile Phone and Internet connection	School MOOE	500.00	January 2022
Creativity skills	Flexibility on routines	Conduct of Virtual Symposium to Enhance Creativity Skills	Teachers, School Head, Invited Speaker	Laptop/ Mobile Phone and Internet connection	School MOOE	500.00	February 2022
Collaboration	Knowing how to weigh relative importance among different issues when working as part of a team	Conduct group dynamic activities to enhance team building.	Teacher/ Facilitator, Students	Spaghetti Tower Game *spaghetti noodle, marshmallows Zoom Game] *picture book entitled "Zoom" by Istvan Banyai	School MOOE	500.00	March 2022
Communication	Use of diagrams and charts to help express ideas.	Conduct activities that foster creative thinking (give students the chance to answer questions creatively using their own words).	Teacher, students	Ready- made questionnaire for the activity.	School MOOE	None (School supplies can be utilized)	April 2022

VII. CONCLUSION

Based on the summary of the findings, the researcher concluded that:

1. Majority of the student-respondents are female in their teenage stage.
2. The academic performance of the student-respondents is "Very Satisfactory".
3. The student-respondents "Agree" that their level of skills in terms of critical thinking skills was developed.
 - 3.2 The student-respondents "Agree" that their level of skills in terms of creativity skills was developed.
 - 3.3 The student-respondents "Agree" that their level of skills in terms of collaboration skills was developed.
 - 3.4 The student-respondents "Agree" that their level of skills in terms of communication skills was developed.
4. There was a significant difference on the level of skills as to critical thinking skills when student-respondents are grouped according to sex.
5. There was no significant relationship between the level of skills and academic performance of students.
6. The proposed action plan to enhance the level of least developed 21st Century Learning Skill among Grade 11 learners.

Recommendations

Based on the summary of findings and the conclusions arrived at, the researcher offered the following recommendations:

1. Skills development may be considered to further increase academic performance on the students.
2. Teachers are encouraged to guide students on how they think and use appropriate technique to apply critical thinking during class discussion.
3. Teachers are encouraged to use diverse teaching strategies which stresses on student-centered learning to stimulate students' thinking by encouraging critical and creative thinking.
4. Teachers are encouraged to provide opportunities to be creative within and outside school environment.
5. Proper guidance and counseling maybe considered to weigh relative important issues emotionally or

socially among students to develop their collaboration skills.

6. Teachers are encouraged to guide students develop a way to express their ideas correctly.
7. Future researchers may conduct a follow-up study with in-depth and with a wider in scope so as to validate the findings obtained in the study.

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