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KASAPI: KNOWLEDGE AND SKILLS AMID PANDEMIC INNOVATION: IMPACT ON STUDENTS' LEVEL OF SKILLS AND PERFORMANCE

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KeyWords
Level of Skills, Academic Performance, Innovations

ABSTRACT

This study aimed to investigate and explore the impact of the initiated program called Knowledge and Skills Amid the Pandemic Innovation (KASAPI) on the TLE students' level of skills and academic performance. To facilitate such concern, Descriptive research survey questionnaire and grades of the students was utilized. Frequency, Percentage, Mean, T-test were the statistical tools used in this research. This research utilized stratified sampling in selecting the 400 students as participants in this innovation. The results showed that the students' **level of skills** before implementation of the program or innovation were at Acquired the Needed Skills Level or 37%and after the implementation of the program or innovation, the student's self-evaluation on level of skills were at Acquired Very High Level of Skills or 93%. Meanwhile, students' **academic performance** data on before the implementation of the innovation revealed that students' academic performance were at did not meet expectations or 36% but after the implementation of the program or innovation, the student's academic performance was at outstanding level 97%. **Significant difference** was established on students' level of skills and academic performance on the implementation of the program or innovation. The results further signify the importance of making innovations or remedial activities as it resonated positive feedback and performance from the students.

Introduction

Technical skills are the source of learning of the students which it can acquire through studying and applying. It also refers to talent and expertise which the person possesses to perform a certain job or skill. These skills can now be identified by the teachers and students. Technical skills are also known as hard skills or skills that are more on practice rather than theory (Serpa, 2014).

The Philippines has embarked on adopting the K to 12 Curriculum also known as Enhanced Basic Education Act of 2013 (Republic Act No. 10533). One of the salient features of the curriculum is to integrate Technical Vocational skills, competencies and qualifications in Technology and Livelihood Education (TLE) in Junior High School and Technical Vocational Livelihood (TVL) in Senior High School. This is also to ensure that any Grade 10 completer and all Grade 12 TVL graduates are eligible for Technical Education and Skills Development Authority (TESDA) competency or qualification assessment such as Certificate of Competency (COC), the National Certificate I (NC I) or National Certificate II (NC II). This allows the graduates to be eligible for employment locally and internationally should they choose not to pursue tertiary education (Zabayla, 2018).

In our K to 12 Education Curriculum, those technical skills are graded and can now be assessed by the teachers. Our country now is undergoing this curriculum which helps all the learners to acquire a certain skill. These skills are necessary as part of ASEAN Integration wherein equal opportunity for any citizens of ASEAN member countries to avail or apply for any such job vacancies.

Examples of those skills are more on communication or language, sports, arts, music, and livelihood education. They are all under technical skills but usually it focusses on livelihood education. Livelihood education is one of the key factors being considered in the implementation of the k to 12 curriculum so that as the student completes his/her junior high school and senior high school education he/she can now decide in either continue in tertiary level of education or start working or even making and running his/her own business.

Can these technical skills affect the academic performance of the students? The answer is yes as in livelihood focused subjects like the TLE, performance tasks or skills are given higher percentage compared to the theories expressed in written works. Thus, technical skills and academic performance can affect each other. And the pandemic has gravely affected the students specially in the junior high school level in acquiring such skills as they have been disallowed to come to school.

Academic performance is the measurement of student achievement across various academic subjects. As noted, teachers and education officials typically measure achievement using student activities like performance task, written works, portfolio, and results from standardized tests. In other subject areas, performance tasks are given higher percentage compared to written works (Oco, 2022).

As academic performance can be affected if technical skills is not fully mastered by the students it is therefore a great challenge to the teachers handling the subject like TLE to make sure that concepts and even the real-life applications are mastered if not practiced by the students in preparation to higher level of learning and livelihood skills.

With all these challenges, the TLE teachers of Alubijid National Comprehensive High School (ANCHS) came up with an innovation to address it and improve the level of learning of the students in terms of skills and academic performance. The Innovation is entitled: KASAPI. KASAPI stands for Knowledge And Skills Amid the Pandemic Initiated by the TLE Teachers.

This innovation provides limited face to face classes, remedial classes and technical skills performance being brought by the teachers in some key areas of the thirteen (13) barangays of the municipality of Alubijid here in the province of Misamis Oriental. Aside from identified learners from grade 7 to grade 10 with low performance in academics and skills, interested students were also welcomed to participate and observed if they and their parents were fully vaccinated and that the parents voluntarily allowed their students to join and participate the conduct of the innovation program that lasted for a quarter.

Teachers are called to master the profession they are into. Currently labeled as facilitators of learning, they are tasked to emerge as excellent front liners in fulfilling their daily tasks with their respective students. Their competencies speak of who and what they are when they deliver their duties and responsibilities. Nessipayeva (cited by Adelantar, 2018) upholds that the competencies of the teacher for realization of educational activity represent the content and function of its professional obligations. In determining the competencies of teachers, it must be well based on laws, what they do, what are their skills and talents and most importantly the general landscape of the institution where they are in.

The government efforts and concern about vocational education programs in the country are evident in Republic Act No. 3377, otherwise known as the Vocational Act of 1927, and in Article XIV, Section 5, of the 1935 Philippine Constitution, also provides for the development of vocational efficiency.

Most recently, the offering of Technology and Livelihood Education (TLE) as one of the subjects offered in all the curriculum levels under the K to 12 programs is another proof that the government recognizes the importance of technical and vocational education in national development. TLE covers the basic skills and concepts of Home Economics, Entrepreneurship, Information and Communication Technology (ICT), and Agricultural Arts as well as Industrial Art, taken as a unified course. As one fundamental school subject, TLE is concerned with providing experiences in the various fields of work, and in the development of everyone's skill, knowledge, appreciation, and values formation necessary for effective daily living (Agdan as cited by Agluba, 2012).

In such premise, the researcher was motivated to conduct the current study to assess the impact of the KASAPI Innovation on the level of skills and academic performance of students in Alubijid East and West Districts, Division of Misamis Oriental for the School Year 2021 – 2022. In this study, the researcher focuses on the objectives, activities, benefits in the implementation of the innovation called KASAPI Program.

Review of Related Literatures

This part of the research includes literatures that enrich the understanding of this study. The materials were taken primarily from local and foreign studies, books, journals, and internet websites from which the framework of this study was based.

Technical skills are known as a specific skill which the person may possess through learning and practice. You may acquire technical skills through experience or pursuing it as specialization. In the case of junior high school level, technical skills are being introduced in as early as grade 7 level. Students then become more aware as to which of the skills offered by the TLE teachers they will pursue and concentrate on. And as they reach the grade 12 level they can now avail for a possible certification via accreditation if they passed the accreditation in both written, oral, and performance exams. But how these skills affect the academic performance of the student?

Academic performance serves as standard to determine the result of student achievement. There are some factors of which affect the student performance. Mushtaq as cited by Vacalares (2022) mention that there are factors affecting student achievement like learning facilities, student test results, communication proper guidance and family stress. But there are some variables which affects the performance of the students.

Technical skills can be acquired through technology education. Pal (2013) defined technology education as those educational or learning activities dealing with the development of technical skills, knowledge and attitudes relative to production or service occupations for effective citizenships or preparing people for employment in technical occupations; or upgrading persons who are actually employed or engaged in technical occupations.

It is supported with R.A. 7796- An Act creating the Technical Education and Skills Development Authority, providing for it proves, structure and for other purposes. The Act states its goals and objectives that it strengthens technical skills, to develop those skills and the moral character, work ethics and nationalism (Jesuitas, 2021).

To develop more the academic achievement of the students and to unleashed more the technical skills that they possess. The DepEd Order No. 31 s. 2012 K to 12 curriculum has been implemented already for the high school. The program aims to focus not only on the academic field of the learners but also to the technical and livelihood skills they have. That is why modules for exploratory courses and specialization are created to develop simultaneously the technical skills and academic standard of the student (Agluba, 2021).

However, technical skill is still important in our education. Palipis as cited by Oco (2022) stated in his book that in 1987 Philippine Constitution under Article XIV Sec. 3 paragraph 5. That the State must provide adult citizens, the disabled, the out-of-school youth with training in civics, vocational efficiency and other skills which means that our government also must emphasize on both academic and technical skill of the learners.

According to the study of Delos Santos (2015) there are factors which affect the academic performance of TLE students. Profile of the students, in terms of age, gender, occupation of parents and their educational attainment are variables that contribute to the performance of the students. Other variables are attitude of the students, parental support to the students and their performance of students in TLE. However, this was contradicted by the results on the study of Morales (2021) having opposite results.

However, Garduque (2018) in his study stated that learning theories were not enough we need to have skills to do things. Those skills are technical skills and livelihood programs which may help the students and graduates to become skilled workers of the future. In fact the study of Along (2019) revealed that students appeal for more activities that involve actual performance to master their chosen skill as they believed that teaching-learning practices of teachers are pillars for better student learning outcomes.

The study of Kumazhege (2014) concluded that there are some factors which affect the academic and technical skill of the learner according to the perception of their technical teachers in Adamawa state, Nigeria. They suggest that their government must give their students adequate facilities and laboratories and develop the teacher training program of the technical teachers.

The study of Tan (2021) revealed that remedial activities can enhanced the performance and skills of the students. He further stressed that teachers should make remedial activities specially to the learners that are having troubles or difficulties in their studies so that they can catch up and would not feel discouraged.

Vacalares (2022) revealed that helping learners can promote positive impact on students' motivation and academic performance at school as they became more interested and inspired knowing that they are not alone in their struggles and that they can have someone to ask for assistance, guidance and clarifications. These findings were also evident in the study of Oco (2022) who further stressed that remedial activities can be done in ways according to the availability of resources from the students and the community.

Apostol (2019) stressed that use of technology and gadgets can also become a good source of providing any form of help or assistance from the teachers towards the learners. This was also observable in the studies of Oco (2022) which stated that despite the pandemic learners can still acquire knowledge and skills with the aid of the teachers using various types of modality that is found in the locality or community.

On the other hand, Acut (2019) conclude in their study that strong academic achievement, technical skill, certainty of occupational choice, college readiness promote degree and job attainment in careers of interest and job satisfaction helps high school

graduates to enter college. It means that academic and technical skills are still essential. Moreover, Abe-abe (2013) revealed that consistent engagement between teachers and students can improve motivation and performance of the students.

Although this research may have some similarities to the studies mentioned in this part of the research, still there are variables here that are not utilized in previous studies. This work is the first made in Alubijid east and west districts District, Misamis Oriental. Under such conditions this will provide us with reasons, ideas and perspective on influences on one's take towards technical skills and academic performance.

Methodology

The researcher utilized the descriptive method of research to the respondents. The data gathered were used to answer the research problems in this study. The researcher conducted a pilot study of the Questionnaires in one of the junior high schools in Alubijid East District in Misamis Oriental. After conducting the pilot test, the data gathered were subjected to Cronbach's Alpha test to determine the reliability of the questionnaires. The result was an alpha of 0.958 for Level of skills questionnaire which means that the questionnaire has consistency and is a reliable instrument. For the academic performance, grades of students from third and fourth grading period were utilized and analyzed.

The respondents of this study were the selected grade 10 students from Alubijid National Comprehensive High School, Lourdes Alubijid National High School, and Sungay Integrated School. A total of 400 students from grade 7 to grade 10. Stratified sampling was made by the researcher by identifying students with only passing or failed marks based on pretest scores. The following are the basis on grouping the learners' scores:

Scoring Basis:

Academic Performance (Based on DepEd Order No. 36 s. 2016)

Scale	Range	Grade Range	Interpretation
5	4.20 – 5.00	90-100	Outstanding
4	3.40 – 4.19	85-89	Very Satisfactory
3	2.60 – 3.39	80-84	Satisfactory
2	1.80 – 2.59	75-79	Fairly Satisfactory
1	1.00 – 1.79	Below 75	Did not meet Expectations (Poor)

Level of Learning

Scale	Range	Interpretation
5	4.20 – 5.00	Acquired Very High Level of Skills
4	3.40 – 4.19	Acquired High Level of Skills
3	2.60 – 3.39	Acquired the Needed Skills
2	1.80 – 2.59	Acquired Low Level of Skills
1	1.00 – 1.79	Acquired Very Low Level of Skills

Due to the existing presence of Covid 19 pandemic, strict and measures and guidelines about health and safety protocols was observed and implemented.

Through a written request, the researcher asked permission from the school district supervisor sand school principals in conducting the research study or innovation and in gathering the data. Upon getting and organizing the data the researcher then proceeded with the unstructured interview among the selected students and parents for data confirmations and insights.

The participants of this study were asked to join voluntarily and that they were informed about the whole content of the research as well as the purpose and contents of the study. The researcher assured the participants that data gathered, and details taken from them were held with utmost confidentiality for privacy, safety and ethics concerns.

Results and Discussions

Specifically, it sought to answer the following questions:

Problem 1. What is the level of skills (before and after) of students as exposed to the KASAPI Innovation?

Table 1 Comparative Students Level of Skills

Rating		Before		After	
Descriptors	Range	F	%	F	%
Acquired Very High Level of Skills	4.20-5.00	0	0%	372	93%
Acquired High Level Skills	3.40-4.19	48	12%	28	7%
Acquired the Needed Skills	2.60-3.39	148	37%	0	0%
Acquired Low Level of Skills	1.80-2.59	124	31%	0	0%
Acquired Very Low Level of Skills	1.00-1.79	80	20%	0	0%
	Total	400	100%	400	100%

Table 1 presents the comparative students' **level of skills** data on before and after the implementation of the innovation. It revealed that before the implementation of the program or innovation students' self-evaluation on level of skills were at acquired the needed skills level with 148 out of 400 or 37%, Acquired Low Level of Skills with 124 out of 400 or 31% and Acquired Very Low Level of Skills with 80 out of 400 or 20%. After the implementation of the program or innovation, the student's self-evaluation on level of skills were at Acquired Very High Level of Skills with 372 out of 400 or 93% and Acquired High Level Skills with 67out of 400 or 7%.

These data imply that before the implementation of the program or innovation, level of skills of the students were at Acquired the Needed Skills only while others. Meanwhile, after the implementation of the innovation most of the students were at Acquired Very High Level of Skills. Thus, the impact of the implementation of the program towards students' level of skills was very high.

Vacalares (2022) revealed that helping learners can promote positive impact on students' motivation and academic performance at school as they became more interested and inspired knowing that they are not alone in their struggles and that they can have someone to ask for assistance, guidance, and clarifications.

These findings were also evident in the study of Oco (2022) who further stressed that remedial activities can be done in ways according to the availability of resources from the students and the community. Thus, making programs or innovations will surely have positive impact towards students' performance and skills.

Problem 2. What is the level of Academic Performance (before and after) of students as exposed to the KASAPI Innovation?

Table 2 Comparative Students Academic Performance

Rating		Before		After	
Descriptors	Scale	F	%	F	%
Outstanding	90-100	0	0%	388	97%
Very Satisfactory	85-89	44	11%	12	3%
Satisfactory	80-84	124	31%	0	0%
Fairly Satisfactory	75-79	88	22%	0	0%
Did not Meet Expectations	74 and below	144	36%	0	0%
	Total	400	100%	400	100%

Table 2 presents the comparative students' **academic performance** data on before and after results on the implementation of the program or innovation. It revealed that before the implementation of the program or innovation students' academic performance were at did not meet expectations level with 144 out of 400 or 36%, satisfactory level with 124 out of 400 or 31% and fairly satisfactory level with 88 out of 400 or 20%. After the implementation of the program or innovation, the student's academic performance was at outstanding level with 388 out of 400 or 97% and very satisfactory level with 12 out of 400 or 3%.

These data imply that before the implementation of the program, academic performance of the students was at did not meet expectations level. Meanwhile, posttest after the implementation or the program or innovation of most of the students' academic performance were at outstanding and very satisfactory levels. Thus, the impact of the implementation of the program or innovation towards students' academic performance was very high and effective.

The study of Tan (2021) revealed that remedial activities can enhanced the performance and skills of the students. He further stressed that teachers should make remedial activities specially to the learners that are having troubles or difficulties in their studies so that they can catch up and would not feel discouraged.

On the other hand, Acut (2019) conclude in their study that strong academic achievement, technical skill, certainty of occupational choice, college readiness promote degree and job attainment in careers of interest and job satisfaction helps high school graduates to enter college. It means that academic and technical skills are still essential. Moreover, Abe-abe (2013) revealed that consistent engagement between teachers and students can improve motivation and performance of the students.

Problem 3. Is there a significant difference on student's level of skills and academic performance as exposed to KASAPI Innovation?

Table 3 presents the **test significance** on data for **level of skills and academic performance** before and after the implementation of the program or innovation. The computed t-value for level of skills of 4.402 with p-value of 0.000 and the computed t-value for academic performance of 3.791 with p-value of 0.001 registered significant at 0.05 level of significance as both of its computed p-value is lower than 0.05. Thus, the null hypothesis is rejected.

Table 3 Test Significance on Level of Skills and Academic Performance

Variables	Before		After		Computed t	P-value	Decision
	Mean	SD	Mean	SD			
Level of Skills	3.28	0.79	4.88	0.74	4.402	0.000	Significant
Academic Performance	82.50	0.88	91.00	0.84	3.791	0.001	Significant

These data imply that significant difference was established on students' level of skills and academic performance on the implementation of the program or innovation. The results further signify the importance of making innovations or remedial activities as it resonated positive feedback and performance from the students. Thus, teacher's efforts in making mathematics more interesting and valuable to daily living is essential and oftentimes rewarding.

According to the study of Delos Santos (2015) there are factors which affect the academic performance of TLE students. Profile of the students, in terms of age, gender, occupation of parents and their educational attainment are variables that contribute to the performance of the students. Other variables are attitude of the students, parental support to the students and their performance of students in TLE. However, this was contradicted by the results on the study of Morales (2021) having opposite results.

However, Garduque (2012) in his study stated that learning theories were not enough we need to have skills to do things. Those skills are technical skills and livelihood programs which may help the students and graduates to become skilled workers of the future. In fact, the study of Along (2019) revealed that students appeal for more activities that involve actual performance to master their chosen skill as they believed that teaching-learning practices of teachers are pillars for better student learning outcomes.

References

[1] Abe Abe, L. (2013). Access, attitude, and interest: Their influence on engagement and performance in technology and livelihood education (T.L.E.) (Unpublished Master's thesis). Central Philippine University, Jaro, Iloilo City.

[2] Acut, O. (2019) Impact of strong academic achievement, technical skill, certainty of occupational choice, college readiness on job attainment in careers of interest and job satisfaction. Misamis Oriental, Philippines.

[3] Adelantar, R. (2018). Skills and Performance of Technology and Livelihood Education Students. Cagayan de Oro City, Philippines

[4] Agluba, C. (2021). Technical skills and the academic performance of grade 9 TLE students. Basis for placement plan. International Journal of Arts, Sciences and Education. Volume 1, Issue 3 Pages 56-76. https://ijase.org

[5] Aguilana, L. (2021). The Moderating Effect of Choice of Course on the Relationship between Motivation and TLE Performance of Students. International Journal of Research and Review Vol.8; Issue: 2 Page 323-334. https://www.ijrrjournal.com/

[6] Along, T. (2019). Facilitating Learning and Academic Performance of Students in TLE under K to 12 Curriculums. International Journal of Innovative Science and Research Technology. Volume 4, Issue 11 page 381-400. https://ijisrt.com/

[7] Apostol, P. (2019). Effectiveness of Technology and Livelihood Education (Tle) Learning Area as Perceived By the Grade 9 Students of Lumbangan National High School. Vol. 3 No. 2B (2019): Ascendens Asia Journal of Multidisciplinary Research

[8] Delos Santos, M. (2015). Factors that Affect the Performance of Technology and Livelihood Education Students. Cagayan de Oro City Philippines.

[9] DepEd Order No. 31 s. 2012 Https://www.ceap.org.ph/upload/download/201210/1714521500_1.pdf

[10] Garduque, N. (2018). Teachers' performance in TLE and TVE as perceived by the students. Cagayan de Oro City, Philippines

[11] Jesuitas, M. (2021). RA 7796: TESDA ACT OF 1994. https://www.slideshare.net/MaryFranceJesuitas/ra-7796-tesda-act-of-1994

[12] Kumazhege, E. (2014). Technical Teachers' Perception of Factors Affecting Practical Skill Acquisition among Technical College Graduates in Adamawa State Nigeria" www.erint.savap.org.pk/PDF/Vol.3(3)/ERInt.2014(3.3-11).pdf

[13] Morales, M. (2021). Acquisition and Practice of Technical Skills Among Grade 10 TLE Students. *Southeast Asian Journal of Science and Technology*, Volume *6*, Issue 1, pages: 1-13. Retrieved from https://sajst.org/online/index.php/sajst/article/view/159

[14] Oco, R. (2022). Student's Exposure on Synchronous-Asynchronous-Tutorial Aided Distance Learning: Impact on Academic Performance in Mathematics. Global Scientific Journal, volume 10, issue 1 page 1816-1827. Retrieved from www.globalscientificjournal.com
[15] Oco, R. (2022). Impact of F-A-T Strategies on Level of Problem-Solving Skills among STE and RBEC Students: A Comparative Study. International European Extended Enablement in Science, Engineering & Management (IEEE-SEM), Volume 10, Issue 2 page 29-37. Retrieved from http://www.ieeesem.com
[16] Pal, K. (2013). Educational technology. LAXMI Publications, Lovely Professional University, New Delhi, India
[17] Serpa, A. (2014). Technical skills and the academic performance of the selected high school students. Cagayan de Oro City, Philippines
[17] Tan, M. C. (2021). Technology and Livelihood Education (TLE) Instruction in the Secondary Schools in Northern Samar Division, Eastern Philippines. *Asian Journal of Advanced Research and Reports*, *15*(2), 75-84. https://doi.org/10.9734/ajarr/2021/v15i230369
[18] Vacalares, I. (2022). The effects of asynchronous class sessions on students' academic achievement and levels of satisfaction. Misamis Oriental, Philippines
[19] Zabayla, B. (2018). Competencies and Performance of Technology and Livelihood Education Teachers. Cagayan de Oro City, Philippines