

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 67 out 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](http://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

© GSJ