



Republic of the Philippines
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REGION IV-A CALABARZON
CITY SCHOOLS DIVISION OF BIÑAN CITY

**3T'S IN TECHNICAL EDUCATION: A CLASS-WIDE REWARD SYSTEM IN
AUTOMOTIVE SERVICING NC I**



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ABSTRACT

The Technical-Vocational and Livelihood strand is set to upskill learners in their chosen course. Backed-up by Technical Education and Skills Development Authority (TESDA) Certifications, employment after graduation are expected to be close at hand. With real world scenarios and real-time, hands-on experiences, learners are exposed to a more concrete and practical trainings and instructions.

However, upskilling of learners is not the sole objective of the course: development of desirable attitude towards work, acquisition of various contextualized literacies, and communication skills in the field of Automotive Servicing are expected from the learners as set in the Training Regulation established by TESDA.

This paper sought to identify if the use of class-wide reward system, an adaptation from Chazin & Ledford (2016), in *Evidence-based instructional practices for young children with autism and other disabilities* would greatly increase learner's motivation intrinsically and extrinsically, attitude towards work, and augment their inclination to their chosen skill, specifically, through the contextualized use of Laboratory Money.

This action research utilized quasi-experimental research design in evaluating the benefit of the class-wide reward system in the improvement of the academic performance and level of attitude towards work and schooling of the respondents under the course Automotive Servicing NC I. Then, a T-test of correlated means was applied. To identify the academic achievement and the level of attitude towards work/ school, the proponent employed the Likert Scale questionnaire and analyzed the data with descriptive statistics.



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The findings revealed that through the provision of reinforcements: target reinforcement, token reinforcement, and terminal reinforcement, learners were encouraged to improved their attitude towards work and schooling through the use of reward system – laboratory money. Additionally, the reinforcement helped the respondents acquire various contextualized literacies such as financial, numerical, cultural, and health. Moreover, an improvement in their communication skills through collaboration and participation was evident.

Keywords: *Technical-Vocational Education, Reward System, Positive Reinforcement, Skills, Attitude*

INTRODUCTION

The Technical-Vocational and Livelihood strand is set to upskill learners in their chosen course. Backed-up by Technical Education and Skills Development Authority (TESDA) Certifications, employment after graduation are expected to be close at hand. With real world scenarios and real-time, hands-on experiences, learners are exposed to a more concrete and practical trainings and instructions.

However, upskilling of learners is not the sole objective of the course: development of desirable attitude towards work, acquisition of various contextualized literacies, and communication skills in the field of Automotive Servicing are expected from the learners as set in the Training Regulation established by TESDA. In relation to this, learners are still left with insufficient level of awareness on these factors therefore leaving them with preconceived judgments that the course is only about repair of automobiles.

Furthermore, the stigma of technical-vocational education being regarded as second class education, made specifically for less fortunate and less intelligent learners (Tilak, 2010 as cited by UNESCO, 2022), creates an impression to them that they are not being given equal opportunity similar to those who are in the academic track. Moreover, statements such as them having a plan already where they would work after graduation with it not being aligned with their chosen strand or track in addition to the first two former reason are seen as contributory factors in decreasing the level of learner's motivation and changes in attitude, hence, their behavior towards schooling.

Class-wide reward system, as defined by Chazin & Ledford (2016), is a system of self-management toward intra- and/or interpersonal reinforcement. It has three levels, namely: 1) target behaviors, 2) token reinforcement, and 3) terminal reinforcement. Generally, this practice is applied and studied among young children with autism and other disabilities. Simultaneously, the researcher, a senior high school teacher, is practicing a reward system through the use of laboratory money – a form of token in the form of fake money that is given when a student or a group performed a favorable behavior during classes, (e.g. reciting correct answers during oral recitation, performed their best during group presentations). This laboratory money comes in varying points that is given corresponding to the gravity of the answers provided during participations or the appropriateness of their performances.

METHODOLOGY

This action research utilized quasi-experimental research design in evaluating the benefit of the class-wide reward system in the improvement of the academic performance and level of attitude towards work and schooling of the respondents under the course Automotive Servicing NC I. Then, a T-test of correlated means was applied. To identify the academic achievement and the level of attitude towards work/ school, the proponent employed the Likert Scale questionnaire and analyzed the data with descriptive statistics.



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The procedure for data collection were summarized below:

Phase I. Preparation Stage. The proponent conducted and prepared for a consultative meeting with his mentors on their feedback with the use of laboratory money in class. The proponent also visited the Training Regulation set by TESDA for the course Automotive Servicing NC I and have the instruments validated and checked by the TESDA representative. Thereafter is the crafting of all different tools and instruments to be utilized in the study. Checking and validation of the instruments followed to seek for feedback and suggestions.

Phase II. Data Gathering Stage. The proponent utilized purposive sampling technique in selecting the respondents of the study. Following is the administration of validated pre-test and survey questionnaire. Analysis of the scores were done and identified the least mastered competencies. Thereafter is the implementation of the intervention. Lastly, post-test was administered.

Phase III. Data Analysis Stage. All data are retrieved from the respondents. The quantitative data was tabulated and subjected to the following statistical tools: weighted mean and rank were used to determine the level of attitude of respondents towards work/ school and T-Test to identify if there is a significant difference between the mean scores of the pre-test and the post-test.

Phase IV. Summary and Interpretation Stage. During this stage, the proponent examined multiple studies supporting the findings of the study. He then concluded the statements and crafted the summary and interpretation of the study.

Phase V. Reporting. The proponent crafted the final copy of the action research and submitted to the Division Office.

RESULTS

The findings of the study provided that there was a significant difference between the Pre-Test and Post-Test results and in the

survey questionnaire. The mean difference, a variance of mean difference, and t-computed value were figured.

The T-computed values: -4.2133, 1.0377 and the T-Tabular Value, 1.701, indicates that the result of the Post-Test are higher than of the Pre-Test. Therefore, there was a significant difference between the Pre-Test and Post-Test strengthening that the use of Class-wide reward system – Laboratory Money was effective.

During the pre-implementation of the intervention, the respondents achieved below average of achievement in Automotive Servicing NC I. The findings revealed that there is a need to revisit how learners are being intrinsically and extrinsically motivated to perform better in school and improve their attitude towards work and/or school.

Through the provision of reinforcement: target reinforcement, token reinforcement; and terminal reinforcement, learners are provided with an improved attitude towards work and schooling through positive reinforcement using reward system – laboratory money. Helped respondents acquire various contextualized literacies such as financial, health, information, cultural, and numerical in addition to their improved communication skills.

DISCUSSION

Though positive reinforcements may sound desirable to both learners and teachers alike, some studies still posit undesirable effects when used improperly or without fully mapping how it will be implemented in the teaching and learning process. Additionally, studies found that though there are various ways to implement positive reinforcements or, let alone, reinforcements, there are lacking awareness and knowledge, with factors affecting these such as the age of the practitioner, its experience, and gender, on the theories of positive reinforcements and in the awareness on the concepts of reinforcements.



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Having a clear concept such as demonstrated in this paper: setting the Target Reinforcement, Token Reinforcement, and Terminal Reinforcement, provides a clear path on how these will be useful to both the learners, teachers, and further, school administrators. It is evident that during the practice of using this reward system, it is considerably observable how the learners change their attitude and behavior in class, in addition, their excitement when being handed laboratory money, especially those that has higher point value, creates unsolicited challenge among others to answer better and/ or perform better as well.

Moreover, classroom management became easier to handle, particularly, while doing recitations, performances, and role assigning. The practice of reinforcements was further strengthened by B.F Skinner through his Operant Conditioning. Many studies have been done already and many findings has been concluded. In this case, the contextualized application of the reward system in the automotive servicing course from the practice of Chazin and Ledford among learners with special needs also enable inclusivity among all learners with various needs in the classroom.

Additionally, literacies such as, financial, numeracy, information, health, and cultural, are also being targeted in the implementation. This can be seen beneficial to the learners as these literacies are useful in life outside school. With this, it can be said that the intervention has reached its goal of improving the academic performance and attitude towards schooling/ work of the respondents. I will continue practicing the use of this reward system but now bearing in mind the sustainable way of practice.

The practice of this reward system are still being done by the researcher in the following school year among grade 11 learners but now in an applied subject. It only shows the adaptability of the contextualized reward system is not only limited to technical vocational subjects. During classes, excitement and better classroom management are still observable among

learners. Furthermore, learners are seen to be having the initiative to study ahead of time in exchange for better point value during classes.

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REFERENCES

- Gunaretnam, Vivetha. (2021). A Study on Increasing Positive Behaviors Using Positive Reinforcement Techniques. International Journal of research and Innovation in Social Sciences. Retrieved from: <https://www.rsisinternational.org/ISSN2454-6186>
- Rumfola, Lindsey. (2017). Positive Reinforcement Positively Helps Students in the Classroom. Education and Human Development Master's Theses. Retrieved at: <http://neerigenbrookps.wa.edu.au/wp-content/uploads/2022/01/Positive->



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Chazin, K.T. & Ledford, J.R. (2016). Class-wide reward systems. In Evidence-based instructional practices for young children with autism and other disabilities. Retrieved from <http://ebip.vkcsites.org/class-wide-reward-systems>

David, U.E. & Ernest, T. U. (2019). Safety Equipments and Student's Effective Learning in Technical School Laboratories. King-UK International Journal of Academic Anthology. Retrieved from: <https://www.globalacademicstar.com/download/article/safety-equipments-and-students-effective-learning-in-technical-school-laboratories-51370.pdf>

Diedrich, Jennifer L. (2010). Motivating Students Using Positive Reinforcement. Education and Human Development Master's Theses. Retrieved from: <https://citeseerx.ist.psu.edu/document?repid=rep1&type=pdf&doi=8ebe15b1b23350a033985318bd64b9b2e9c9cca9>

Ninghsih, Dw Ayu Putri Ari. (2022). Developing Student's Positive Behaviour Through the Implementation of Positive Reinforcement in EFL Classes. Journal of English Language Learning. Retrieved from: <https://media.neliti.com/media/publications/421948-developing-students-positive-behaviour-t-46b84fec.pdf>

Ogunleye, Tolu. (2018). The Study of Peer Pressure and Parental Influence the Choice of Career among Secondary School Students in Ogun State. International Journal of Educational Research. Retrieved from: <https://www.ajol.info/index.php/ijer/article/view/180886>

Ogundipe, Julius P., (2018). Missing Gaps in Safety Education and Practices: Academia Perspectives. International Journal of Civil Engineering and Technology. Retrieved from: <https://www.researchgate.net/profile/Ogundipe-Julius-P>

gundipe-Elizabeth/publication/322635379_MISSING_GAPS_IN_SAFETY_EDUCATION_AND_PRACTICES_ACADEMIA_PERSPECTIVE_S/links/5a659f060f7e9b6b8fdc1df0/MISSING-GAPS-IN-SAFETY-EDUCATION-AND-PRACTICES-ACADEMIA-PERSPECTIVES.pdf

UNEVOC. (2010). Increasing Public Awareness of TVET in the Philippines: A Case Study. International Centre for Technical and Vocational Education and Training. UNESCO. Retrieved from: https://unevoc.unesco.org/fileadmin/user_upload/docs/CS_Philippines_Public_awareness.pdf



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