

**THEORIES LEARNED IN EPP ELEMENTARY AGRICULTURE, ITS APPLICATION IN
CONTAINER GARDENING AT HOME BY GRADE FIVE LEARNERS OF BIÑAN
ELEMENTARY SCHOOL FOR ACADEMIC YEAR 2020-2021**



ALBERT E. ALGODON
Teacher I
Biñan Elementary School

Abstract

Agriculture is determined as the science and art of cultivating the soil, and this highlights the main nature of plant production in agriculture, and it is included to the EPP subject, as Elementary Agriculture. Container gardening has been on the uptrend and continues to grow in popularity specially in the time of pandemic, especially in urban areas where green space can be limited. Going the container route saves space, helps control pests and overcome soil issues, enabling the availability of home-grown fresh produce without a yard.

This action research was participated by 60 students in Grade 5 enrolled under Blended Learning Delivery and Modular distance learning, academic year 2020-2021. It highlights the application of the theories learner in EPP Elementary Agriculture by its application to have a container garden at home.

As result of this action research, 58 out of 60 learners were highly knowledgeable in EPP-Elementary Agriculture. With this, learners were equipped to create their container garden to their household and knowledgeable enough to culture a vegetable plant.

Therefore, in this time of pandemic, to fight hunger, we should educate our learners on in creating vegetable container garden. This was a great help to their families to provide nutritious food. With this, implementation and hands-on activities in EPP-Elementary Agriculture was a great help.

Keywords: *Theories, EPP-Elementary Agriculture, Container Gardening*

INTRODUCTION

Agriculture defined as the science and art of cultivating the soil, and this definition highlights the main nature of plant production in agriculture, and it is included to the EPP subject, as Elementary Agriculture. Currently, agriculture is the power engine for economic growth. Food security, which is one of the major goals of United Nations, focus on the availability and accessibility of adequate food for all people.

Teachers are motivated if they believe they can perform the desired tasks and influence the teaching learning process with positive outcomes (Hoy J. 2018). Expectancy value theory suggests that teachers are motivated if they value what they teach based on their interest in the content, the content's usefulness, and amount of effort they are willing to expend on the content (Eccles W., 2012). Finally, schema theory suggests that a teacher's mental picture about a content area or topic shapes the way they think about and interpret information about the content (Winther J., 2012). Experiences can shape one's way of knowing and schema about the content. Using knowledge and information based on their experiences and available resources. Teachers with agricultural experiences had deeper conceptual understandings (Trexler s., 2011), were more confident in teaching agriculture (Humphrey F. 2014) agriculture in their instruction (Knobloch & Martin, 2012). Therefore, the agricultural content that teachers choose to teach and how those topics relate to their content areas are likely influenced by teachers' expectancy-value beliefs, ways of knowing, and schemas about agriculture. Container gardening has been on the uptrend and continues to grow in popularity specially in the time of pandemic, especially in urban areas where green space can be limited. Going the container route saves space, helps control pests and overcome soil issues, enabling the availability of home-grown fresh produce without a yard.

Based on the enrolment of Grade Five, there were 60 students enrolled under

Blended Learning Delivery and modular distance learning, academic year 2020-2021.

This study highlights the application of the theories learner in EPP Elementary Agriculture by its application to have a container garden at home.

METHODOLOGY

This action research was anchored on the following procedures that result for Theories learned in EPP-Elementary Agriculture, its application in container gardening at home by Grade Five learners of Biñan Elementary School for Academic Year 2020-2021.

First, the conduct of orientation of the students in the application of the learned theories in EPP- Elementary Agriculture through container garden.

Second, assessment of materials used in container gardening, and resulted to a list of common materials can be find at home useful for container gardening was identified.

Third, provision of seeds applicable for Container Gardening based on the determined applicable plants for container gardening and the organic fertilizers needed.

Fourth, assessment of container garden, the teacher utilized checklist for assessing the container garden at home. This is to how the theories learned in EPP-Elementary Agriculture is applicable for container gardening.

Last, Progress Monitoring, an accomplished feedback forms on the conduct if conduct of container gardening.

RESULT

The following are the result to the research conducted about the theories learned in EPP elementary agriculture, its application in container gardening at home by grade five learners of Biñan Elementary School.

Table 1
Theories learned of the Grade Five learners in EPP-Elementary Agriculture

Theories learned in Elementary Agriculture	Number of learners apply the theories learned	%
1.1 nakagagawa ng abonong organiko 1.4.1 natatalakay ang kahalagahan at pamamaraan sa paggawa ng abonong organiko 1.4.2 nasusunod ang mga pamamaraan at pag-iingat sa paggawa ng abonong organiko	56	93 %
1.2 naisasagawa ang masistemang pangangalaga ng tanim na mga gulay 1.5.1 pagdidilig 1.5.2 pagbubungkal 1.5.3 paglalagay ng abonong organiko 1.3 naisasagawa ang masistemang pagsugpo ng peste at kulisap ng mga halaman	59	98%
1.1 naipaliliwanag ang kabutihang dulot ng pag-aalaga ng hayop na may dalawang paa at pakpak o isda 1.2 natutukoy ang mga hayop na maaring alagaan gaya ng manok, pato, itik, pugo/ tilapia	59	98 %
1.3 nakagagawa ng talaan ng mga kagamitan at kasangkapan na dapat ihanda upang makapagsimula sa pag-aalaga ng hayop o isda	58	97%
1.1 naisasapamilihian ang inalagaang hayop/isda 1.2 natutuos ang puhunan, gastos, at kita	57	95%

Table 1, delivered the Theories learned of the Grade Five learners in EPP-Elementary Agriculture. It resulted to *Nakagagawa ng abonong organiko, natatalakay ang kahalagahan at pamamaraan sa paggawa ng abonong organiko, nasusunod ang mga pamamaraan at pag-iingat sa paggawa ng abonong organiko*, 56 learners or 93% apply this theory. “ *Naisasagawa ang masistemang pangangalaga ng tanim na mga gulay: pagdidilig, pagbubungkal, paglalagay ng abonong organiko, naisasagawa ang masistemang pagsugpo ng peste at kulisap ng mga halaman* lead

to 59 or 98% of the learners apply this theory. *Naipaliliwanag ang kabutihang dulot ng pag-aalaga ng hayop na may dalawang paa at pakpak o isda, natutukoy ang mga hayop na maaring alagaan gaya ng manok, pato, itik, pugo/ tilapia* conveyed to 59 or 98% of the learners relate to this theory. *Nakagagawa ng talaan ng mga kagamitan at kasangkapan na dapat ihanda upang makapagsimula sa pag-aalaga ng hayop o isda* lead to 58 or 97% of the learners apply this theory. *Naisasapamilihian ang inalagaang hayop/isda, natutuos ang puhunan, gastos, at kita*, 57 learners or 95% apply this theory.

Table 2
Level of Understanding of Grade Five Learners In EPP-Elementary Agriculture that Helpful to the Application of Container Garden At Home

Level of Understanding	No. of Grade 5 learners
Highly knowledgeable	58
Moderately Knowledgeable	2
Knowledgeable	0
Not knowledgeable	0

Table 2, entitled level of understanding of grade five learners in EPP-elementary agriculture that helpful to the application of container garden at home, conveyed that there were 58 learners were highly knowledgeable and 2 learners were moderately knowledgeable. With this, learners able to apply their understanding/ knowledge in establishing a container garden at home.

DISCUSSION

EPP-Elementary agriculture provides opportunities to learn basic agricultural skills and knowledge. In Grade 5 learners able to apply ways to efficiently feed a growing population and gain a better understanding of food production and distribution. In this time of pandemic,

educating our learners on in creating vegetable container garden may fight hunger. This was a great help to their families to provide nutritious food. With this, implementation and hands-on activities in EPP-Elementary Agriculture was a great help.

Integration of EPP across to other subject areas may apply to enhance the knowledge of students in EPP Elementary Agriculture.

ACKNOWLEDGEMENT

This action research would not have been made possible without the help and support of many people. The researcher would like to extend his sincerest gratitude to the following people:

Division of Biñan City, in their intention and support to nurture the culture of research.

Lani Alonte, EPS- EPP, to her encouragement and inspiration to the conduct of the action research.

Mr. Sonny L. Atanacio, PSDS District III for sharing his expertise in research; thesis adviser, for being so accommodating in all the queries in conducting the action research.

Ms. Pilar I. De Castro, for providing positive criticism and support in the conduct of the action research.

Ms. Rowena R. Leal, to the motivation and encouragement to finish the action research.

Biñan Elementary School Faculty members, Grade Five Teachers and Friends, for their encouragement, ideas, and support to the conduct of this study.

Algodon Family, for their immeasurable love, unfailing support, and continuous encouragement throughout the process of conducting this action research. This accomplishment would not have been possible without them.

And above all, the researcher will be forever grateful to the Almighty Father, and to His son, Lord Jesus Christ, for the life and strength given to him and all the blessings showered to him and to his family.

REFERENCES

Eccles W., (2012) Prospective elementary teachers' understandings of pest-related science and agricultural education benchmarks. *Journal of Agricultural Education*, 81-94.

Hoy J. (2018) Teachers' beliefs and educational research: Cleaning up a messy construct. *Review of Research in Education*, 307-332.

Humphrey F. (2014) Preservice elementary education majors' knowledge of and perceptions toward agriculture. *Journal of Agricultural Education*, 27-30

Knobloch & Martin (2012)). A comparison of experiential instructional strategies upon the science process skills of urban elementary youth. *Journal of Agricultural Education*, 1-7

Trexler S., (2011) Perceptions of agriculture as a context for elementary science teaching: A case of change in Sanilac County, Michigan. *Journal of Agricultural Education*, 28-36.

Winther J., (2012) Rural and urban adult knowledge and perceptions of agriculture. *Journal of Agricultural Education*, 44-53.