Name: Lito J. Libradilla	Yr. & Sec.: Grade 12 – STEM Asclepius
Subject Code: APLD05	Subject Title: Inquiries, Investigations, and Immersion
Module No: 2	Topic : Formulating a Research Title

IV. WE'RE ON OUR WAY

GOAL: Formulating research title

ROLE: Researcher AUDIENCE: Panelist

STEPS:

1. Formulate 5 research title based on your chosen topic.

2. Present it to your teacher

3. Attach it on the link provided by your teacher.

PRODUCT: Research title

1. Optimizing Renewable Energy Sources in a Smart Grid System:

Investigate methods to enhance the integration of renewable energy sources, like solar and wind, into a smart grid infrastructure. Explore technologies for efficient energy storage and distribution.

2. CRISPR-Cas9 Gene Editing: Ethical Considerations and Future Implications:

Examine the ethical implications of CRISPR-Cas9 gene-editing technology. Evaluate its potential benefits in healthcare and agriculture, while also addressing concerns related to ethics, privacy, and unintended consequences.

3. Augmented Reality in Education: Enhancing Learning Experiences:

Explore the application of augmented reality (AR) in educational settings. Assess how AR can improve student engagement, understanding, and retention of STEM subjects.

4. Design and Optimization of an Eco-Friendly Urban Transportation System:

Develop and analyze a sustainable urban transportation system that minimizes environmental impact. Consider factors such as electric vehicles, efficient traffic management, and public transportation integration.

5. Quantum Cryptography: Next-Level Security for Communication Networks:

Investigate the principles and applications of quantum cryptography for secure communication. Explore how quantum key distribution can enhance the security of data transmission in networks.

V. HOW FAR HAVE WE GONE?

GOAL: Finalizing the research title

ROLE: Researcher AUDIENCE: Panelist

STEPS:

1. Revise the research title chosen by your teacher

2. Follow the rules and elements of a research title.

3. Present the title to your teacher. PRODUCT: Final Research title

- 1. Optimizing Integration of Renewable Energy Sources in Smart Grid Systems: Enhancing the Efficiency of Solar and Wind Energy Distribution
- 2. CRISPR-Cas9 Gene Editing: Navigating Ethical Dilemmas and Envisioning Future Impacts: Balancing the Promise and Perils in Genetic Manipulation
- 3. Augmented Reality in Education: Transformative Applications for Enhanced STEM Learning: Exploring Innovative Ways to Improve Educational Experiences
- 4. Design and Optimization of an Eco-Friendly Urban Transportation System: Creating Sustainable Urban Mobility Solutions for Environmental Harmony
- 5. Quantum Cryptography: Elevating Network Security with Quantum Key Distribution: Harnessing Quantum Principles for Next-Level Communication Security