

THE DEVELOPMENT OF KNOWLEDGE AND SKILLS: THE CONTRIBUTION OF ORGANIC FARMING TO THE INSTRUCTION OF GRADE 10 AGRICULTURE AND FISHERY ARTS IN THE CONTEXT OF TECHNOLOGY AND LIVELIHOOD EDUCATION

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Modern agriculture is also ahead in ecological solutions to major environmental and health issues, and one of them is the concept of organic agriculture. The integration of organic farming techniques into the curriculum for Grade 10 learners in Agriculture and Fishery Arts within the Technology and Livelihood Education (TLE) framework is expected to produce significant advantages. Organic farming emphasizes the utilization of natural processes and deliberately refrains from the application of synthetic fertilizers and pesticides. Sharing such principles in our teaching encompasses many global efforts to promote sustainability and environmental stewardship.

Badgley et al. (2007) have shown that organic farming has the potential to produce food for the world by maintaining an ecological balance. Incorporating organic farming into the TLE curriculum enhances students' comprehension of sustainable practices and cultivates a sense of environmental and community stewardship. Furthermore, it encourages a holistic comprehension of agroecological systems. The incorporation of organic farming into educational curricula cultivates an appreciation for biodiversity, underscores the significance of soil health, and illustrates the interdependence of diverse living organisms. This is consistent with the research conducted by Reganold et al. (2016). This includes the fact that organic agricultural approaches boost long-term crop yield while also preserving environmental sustainability.

Engagement in organic farming education offers tenth-grade students practical experiences that significantly improve their problem-solving abilities through tasks like composting and pest control. This pedagogical method facilitates students' comprehension of the principles of environmental sustainability by reducing chemical applications, preserving soil vitality, and promoting water conservation, thereby fostering their development as responsible stewards of the environment (Pimentel et al., 2005). This educational approach also highlights the importance of health and nutrition, instructing children on how to cultivate nutrient-rich, pesticide-free produce, which promotes positive behaviors and active participation in their communities. Further, as suggested by the FAO (2014), it prepares learners for occupations in entrepreneurship, environmental science, and farming, all of which encourage environmentally friendly methods.

Organic agriculture in education provides an interactive educational opportunity that relates theory to practical farming operation. It advocates for sustainable agricultural practices, equips students with vital competencies, and readies them for professions within the ever-evolving agricultural sector. By following these principles, students play a role in the preservation of biodiversity while simultaneously acquiring the expertise and abilities necessary for fulfilling careers that create a significant difference.

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