

## Unleashing Creativity in Education: Tinkering Approach for Sustainable Food Lessons

The journey toward food sustainability is not just about cultivating crops; it's about nurturing minds. In the realm of education, the VET4Food project has developed an innovative path to foster sustainable thinking among students. To support such change of mindset in both VET teachers and students, within the scope of the project we created the "Edutainment Techniques and Digital Tools Handbook For VET Teachers", which was shared and deep dived during the 2nd Joint Staff Training Event of the Vet4Food project in Milano on Oct 24-27th 2023.

As part of this Event, we organized for all participants an interactive workshop with the Tinkering methodology, a pedagogical approach that aims to solve problems with the use of play, creativity, and insight.

In this article, we delve into the history, characteristics, and benefits of Tinkering, exploring its unique potential to seamlessly integrate with the important discussions around food sustainability.

### The Roots of Tinkering

Tinkering has its roots in the concept of handson, experiential learning. Dating back to the early 20th century, it gained prominence as a method to cultivate practical skills and problemsolving abilities. Over the years, it has evolved into a dynamic teaching approach that values the process of creation as much as the final product.



### **Characteristics of Tinkering**

- Hands-On Exploration: Tinkering emphasizes learning by doing. Participants actively engage with materials, allowing them to grasp complex concepts through practical experience.
- **Creativity Unleashed:** Unlike traditional teaching methods, Tinkering encourages divergent thinking. Participants are free to explore unconventional solutions, fostering a creative mindset crucial for tackling the challenges of food sustainability.
- Inquiry-Based Learning: Tinkering sparks curiosity and encourages students to ask questions. This inquiry-based approach instills a sense of ownership over the learning process, making knowledge more meaningful and lasting.

 Collaborative Problem-Solving: Tinkering often involves group activities, promoting teamwork and communication.
Collaborative problem-solving skills are essential in addressing the complex issues associated with sustainable food practices.

### **Tinkering in Action: The Vet4Food Workshop**

During the 2nd Joint Staff Training Event of the Vet4Food project held in Milano on Oct 24-27th 2023, leading partner Wattajob organized for all participants a workshop on the Tinkering methodology at "Tinkering Zone" of the Museo della Scienza e della Tecnica Leonardo da Vinci.



The purpose of the workshop was to experiment in a direct and interactive way how effective and enjoining the tinkering methodology might be. The Tinkering session lasted 2 hours and all participants to the 2nd Joint Staff Training Event actively took part in it. After a brief introduction and briefing from the staff of the "Tinkering Zone", participants worked in pairs with the task to let a small ball fall as slowly as possible.

After the practical experience a de-briefing session was delivered, to delve into the possible application of such methodology in the classroom with particular attention to sustainability issues.

# Why Tinkering for Sustainable Education?

Tinkering provides a unique avenue to integrate sustainability into education. By its very nature, this methodology aligns with the principles of sustainability, encouraging resourcefulness, innovation, and a holistic understanding of interconnected systems.

#### **Benefits of Tinkering in Training:**

- Engagement and Motivation: Tinkering captures the attention of learners by transforming the educational process into an exciting journey. The hands-on nature of Tinkering ensures that participants are not just passive recipients but active contributors to their learning experience.
- **Real-World Application:** Tinkering bridges the gap between theory and practice. As participants tinker with materials, they gain insights into real-world problem-solving, a crucial skill when addressing the challenges of sustainable food production and consumption.
- Lifelong Learning Skills: Tinkering fosters a mindset of continual learning. The skills acquired through Tinkering — adaptability, creativity, and critical thinking — are not only valuable in the classroom but also in navigating the complexities of a rapidly changing world.



## Linking Tinkering with Sustainable Topics

- Creating Eco-Friendly Solutions: Tinkering projects can be designed to address specific challenges in the realm of food sustainability. From creating innovative packaging solutions to designing efficient food production models, Tinkering provides a platform for students to actively contribute to sustainable practices.
- Understanding Ecosystems: Tinkering can be employed to build models that simulate ecosystems, fostering a deeper understanding of the delicate balance required for sustainable agriculture and food systems.





#### Conclusion

In the quest for a sustainable future, education plays a pivotal role. The Vet4Food project, through its exploration of the Tinkering methodology, exemplifies a commitment to innovative and engaging learning experiences. As teachers and VET trainers embrace Tinkering, they open doors to a world where creativity, sustainability, and education converge, shaping the minds of future leaders who will navigate the challenges of food sustainability with ingenuity and insight.





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