

A close-up photograph of a person's hand holding a small, green, leafy plant with tiny white flowers. The hand is positioned in the center, with the plant growing from the palm and fingers. The background is a solid, muted grey. The overall image conveys a sense of care, growth, and environmental stewardship.

Empowering Pre-service Teachers for a Sustainable World

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Teacher Education



Creative Drama



Education for
Sustainability



Critical Literacy



Children's Literature



The Study

Empowering Pre-service ECE Teachers for a Sustainable World

- My observations as an educator & experience as a researcher
- Need for the study in pre-service teacher education & limited guidance for teacher educators (Alici, 2020; Ärlemalm-Hagsér, 2017; Davis, 2015; Davis & Davis, 2020; Ferreira et al., 2014)

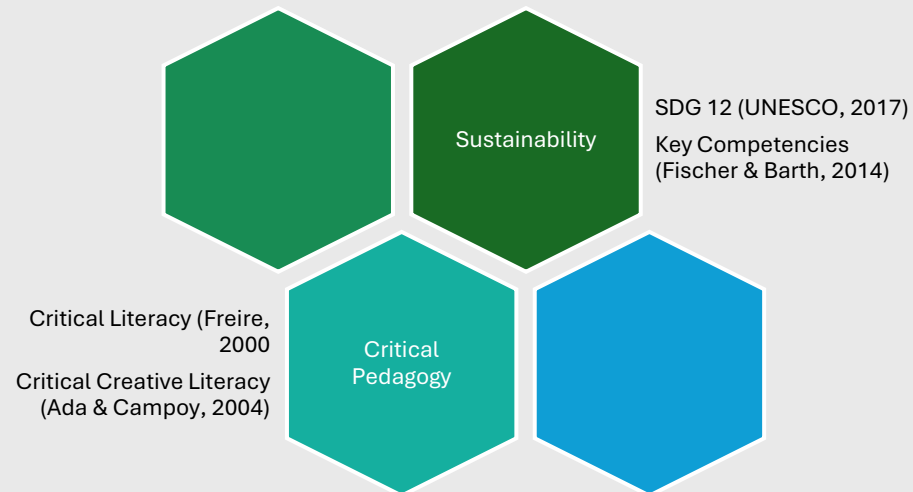
What type of education can empower all students at each level to become active agents of positive societal change (promoting equity, respecting diversity, and caring for the environment)?



The Study

Empowering Pre-service ECE Teachers for a Sustainable World

Theoretical Background



Purpose

Exploring Early Childhood Education (ECE) teacher candidates' experiences of Professional Development Training (PDT), which was designed to inform them about sustainable consumption via critical literacy during their practice teaching

The Study

Empowering Pre-service ECE Teachers for a Sustainable World

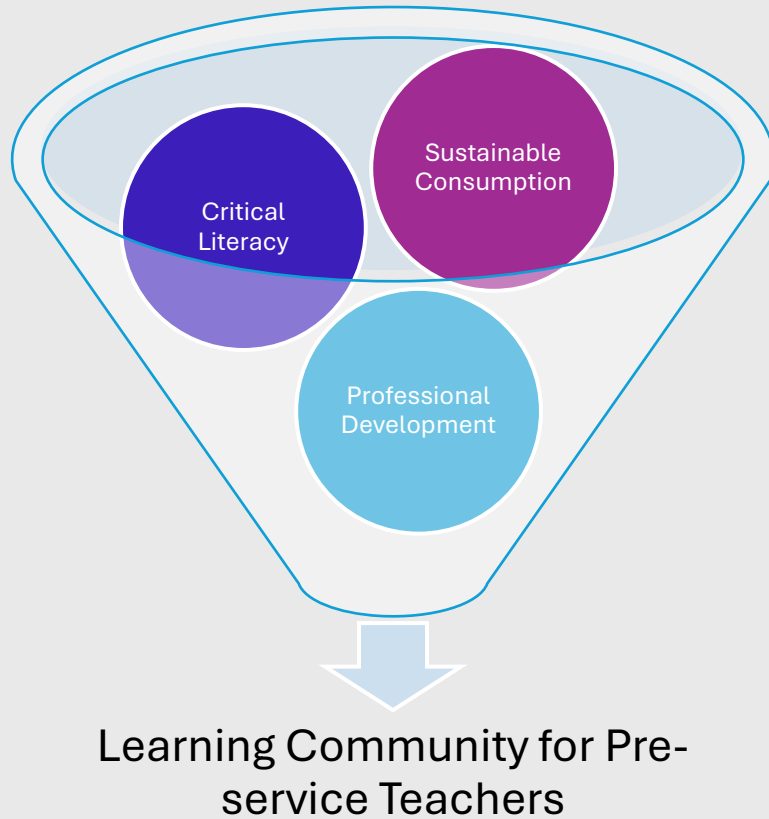
Single case study

Context: Public university with a green campus

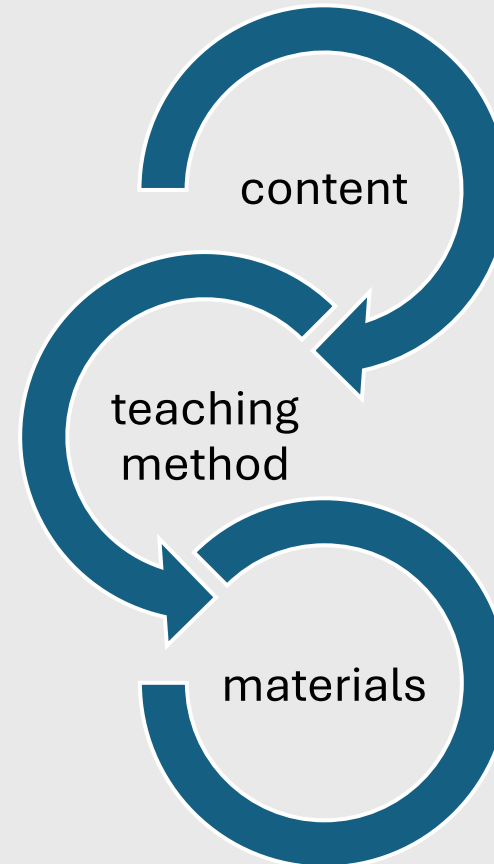
Participants: 6 senior students of ECE undergraduate program who are enrolled in the practice teaching course



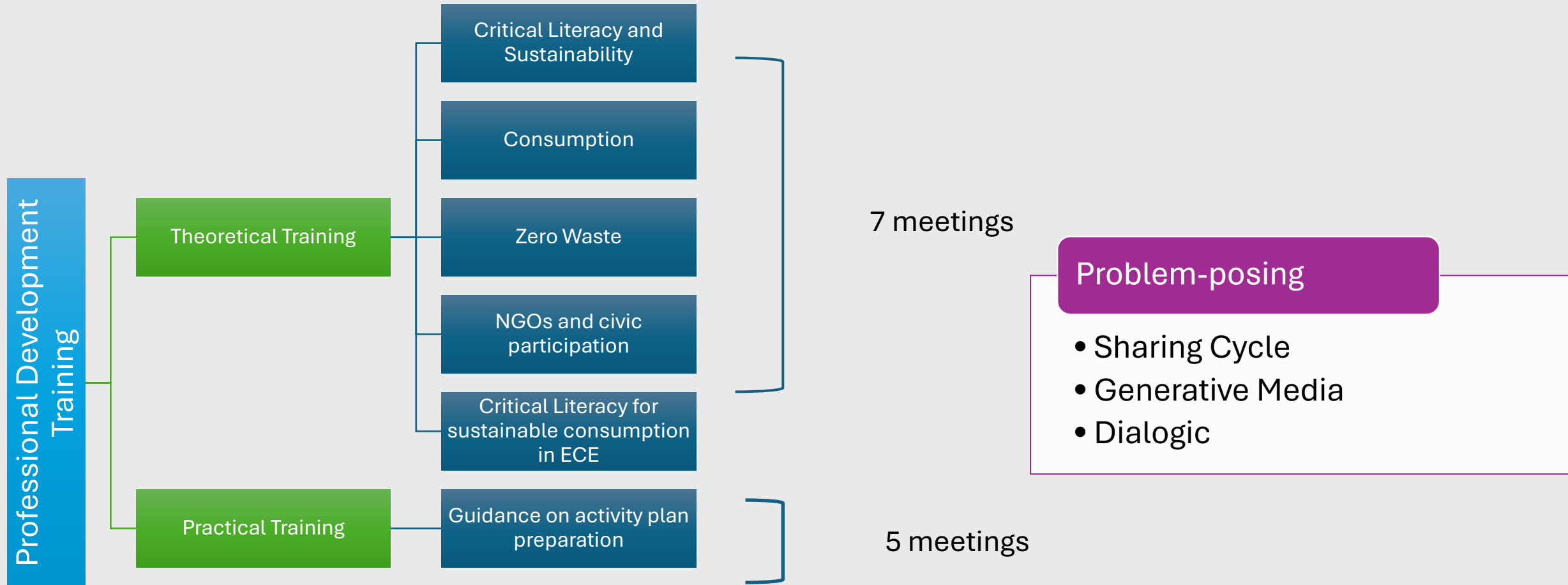
Professional Development Training

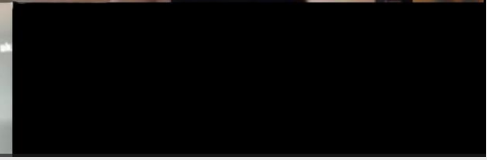
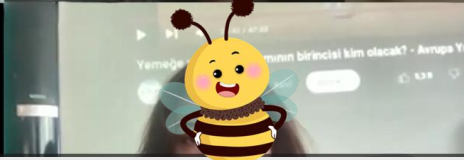


Holistic



Professional Development Training







A stylized illustration of a globe with green and brown landmasses, surrounded by various leaves and plants in shades of green and brown. The title 'Learning Community' is written in a large, white, outlined font across the center of the globe.

Learning Community

Outcomes of the PDT

- ✓ Enhanced understanding and knowledge in citizen and educator roles
- ✓ Improved learning processes and practices targeting sustainable consumption
- ✓ Self-efficacy in teaching
- ✓ Agency in citizen and educator roles
- ✓ Improved daily practice regarding sustainable consumption



Pre-Service Teachers' Experiences: A Journey Expressed in Their Own Words

I think being a responsible consumer is important for humanity.. I mean, for the Earth we live in. Because we don't live here alone. We're not the only ones. There are people who will come after us. There are people living together with us. So leaving them these resources..I mean the way we live as a family..as good as we can call it at that moment, allowing others to experience it. Not allowing but..how can I put into words? I mean make way for.. I mean there are some things, some responsibilities we need to take to enable them to live in the same conditions. And one of them is sustainable consumption.

Ada



Pre-Service Teachers' Experiences: A Journey Expressed in Their Own Words

..for instance, people buy a model of a mobile phone. Then an advanced model of the same brand is released, and they leave the old one and get the newer one. And another one is released and they leave the previous one. In fact, they don't need it. They buy it due to this unconscious consumption and I think that it has negative impacts on sustainability.

Mary



Pre-Service Teachers' Experiences: A Journey Expressed in Their Own Words

I think I have been a responsible consumer since the day I noticed that I had given up my comfort zone and stopped buying bottled water. And it is a very basic but very effective example for me. I was also complaining a lot about heating up the water. You know, like I'm going to take more than one water, like in a glass canteen with me. I spent my money and bought a steel thermos, a water thermos. One and a half liters usually meets the water I need when I am out during the day. And since I had difficulty carrying it, I actually developed a solution. I bought camping hooks, mountaineering hooks, and I attach them to my bag. And a plastic bottle.. because that's what I consume the most in this life.. Drinking water outside all the time, really. I simply changed that habit. I think even that was very effective in my life.

Virginia



Pre-Service Teachers' Experiences: A Journey Expressed in Their Own Words

Actually, it affected me more (in terms of teaching practice). Activities, it offered to think on them thoroughly. I mean before it was like empty underneath, I was thinking about doing something but without grounding it. But now, especially my last two activities, I started to think about from materials to which terms I use, how to say, how to make an impression, how to make it long-term learning. I started to think about all of them. And I felt more conscious, not as if I'm making idle talk. I trained in it, In fact. I have the necessary background. I am able to implement activities feeling like this.

Rosa



Pre-Service Teachers' Experiences: A Journey Expressed in Their Own Words

... I realized that sustainability is not just about throwing the paper in the recycling bin or even separating the plastics for the children. This was the first.. I think the best activity I did about this was the one about these toys. Old and new toys, what are the materials used, why there were such toys, etc. It was extremely enjoyable and fun to discuss and talk about it with the children. It [training] changed my perspective on activities a bit more.

Bell



Pre-Service Teachers' Experiences: A Journey Expressed in Their Own Words

...because this way we can expand both sustainable consumption.. sustainability from individual to public. First, I did it. Firstly, I developed myself. Later, I support other people to do it. It is a solidarity, we create a solidarity from individual to public this way. And we are doing it with children. The teacher who learns this skill shows it to her students the following year. Or, for instance, a school principal who is aware of this supports teachers more in this regard. Such as organizing more field trips regarding this. Or tries to integrate parents more..Therefore at this point, I think that the school principal, the teacher, the parent, the child, all of these are a whole. I think that if all of these are a whole, it [sustainability] can be more supported and it would be more beneficial for sustainability.

Simone

An activity plan example: Eco Olympics: Ada

The teacher prepares a provocation table with Olympic sports pictures, athletes from different countries and cultures, Olympic rings, books and medals. On these books, there are books about paralympic athletes to increase awareness of diversity. (The pictures will be provided after the activity.) At the end of the process, I will introduce one sport from the Olympics, which is fencing. I will show the equipment, make a match, allow children to use masks and gloves, and examine the foil weapon with my assistance.

Children enter the classroom and examine the table. The teacher carefully observes them and pays attention to their questions and interests. After enough time for the children to get familiar, the teacher makes a circle by saying the Make a Circle song. In circle time, the teacher asks questions according to her observations and focuses on the children's experiences. She asks;

- Have you done any sport?
- Have you ever watched a tournament/match on television or in person?
- How do you feel as you do sports and move?
- Would you like to be an athlete? In which sport?

The teacher explains that the Olympics are held for a long time to gather athletes worldwide, create a sense of togetherness through sports, and celebrate successes. She describes the duration as follows;

"Olympics are held every four years. This means that from the time you were born and just a baby until this day, four years have passed. It is a long time. For this long time, athletes have worked hard and trained. Can you imagine how much work and effort would be needed for this? It is an example of dedication and hard work."

Children and the teacher discuss and examine the different types of sports. The teacher highlights the points of diversity by asking;

- Can everyone be an athlete?
- Is sports for everyone?
- How can people with different needs participate in sports?

Children examine the Olympic rings, and the teacher draws their attention to the circles and colours. Rings are made from cardboard;

- What are these rings made of? What could be the reason I used cardboard?
- Why are they different?
- What do they mean?

After the discussion, she states the meaning of the rings and colours by highlighting diversity.

The teacher continues that the Olympics will be this year in Paris. She shows Paris using Google Maps so children can locate where it is and how far it is from Turkey. She says that lots of people visit Paris and stay there for days. She asks what might happen with all those people travelling and waiting to watch the Olympics. After the answers, she states that those crowds will eat, drink, and leave a waste. She asks children what they can do in this case to reduce waste. She asks whether it does damage nature and how.

The teacher wants the children to imagine they are going to Paris for the Olympics. However, it will be a different Olympics, and they will go through various tasks. She explains that sports include running, gymnastics, swimming, and hockey. She groups children as five by using the name pot. Children work in small groups and try to complete the tasks. The tasks are explained below:

- **For swimming:** Children swim and dive into the sea. There is a blue garbage bag that represents the sea. Children make swimming warm-ups and move as they see on the cards in the bag. However, on the bag, pictures of plastic waste fill the sea. Their task is to complete the moves and generate ideas to eliminate plastics.
- **For the running:** Children make running warm-ups by looking at the cards showing movement. They run a distance in the hallway; however, some obstacles make them slower. These are, again, wastes. They also generate ideas to reduce them.
- **For the gymnastics:** Children look at the cards with poses from nature in yoga. However, in each pose, next to the pose, there is a waste. Children try to make these poses as they hold them. They complete the moves and generate solutions by examining the wastes.
- **For the hockey:** Children use brooms and plastic waste as hockey pucks. The teacher wants them to think that the ice they are on is slowly melting, making it difficult for them to move. This group also generates solutions to the problem.

The teacher assists each group as they work together. She observes and takes notes of the children's ideas and questions. After each group is done, the circle is made. The teacher asked the children's solutions and how they felt. She values each child's contribution and suggests children share what they have discussed and learned with their families today. As they found valuable solutions, she says, "Let us suggest to the Olympic Committee how to be more conscious and share what you have thought of."

Children and the teacher prepare a brochure that includes children's ideas and drawings. The teacher assists the children in writing their ideas and names. Then, they mail this brochure as a PDF to the committee. This is done as an assessment, and the process ends.



Observed new perspectives and reconsidered sustainability and sustainable consumption from the learners' point of view



Increased self-efficacy as a critical educator



Learned about new sustainable consumption practices (fair-trade chocolate company, reusing coffee waste for dishwashing, making soap from waste olive oil)



Improved daily practice

What I gained from this experience

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A close-up photograph of a hand holding a small green plant with white flowers. The hand is positioned in the center of the frame, with the fingers gently gripping the plant. The plant has several small, round green leaves and clusters of tiny white flowers. The background is a solid, light gray color.

Thank you

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Alan, H. A. (2025). Critical literacy for sustainable consumption in early childhood education context: Pre-service teachers' experiences (Unpublished doctoral dissertation). Middle East Technical University Graduate School of Social Sciences, Ankara.