The role of teachers in fostering transformational change towards low emission and climate-resilient development

Dr. Marie-Christine Ghanbari
Building bridges to create global and ecological citizen

1. CHILDREN AS AGENTS OF CHANGE
2. USING EMPIRICAL RESEARCH TO GET AN UNDERSTANDING WHY WE HAVE TO START IN SCHOOL TO CREATE RESPONSIBLE ECOLOGICAL CITIZEN
The students positive success and autonomy experiences lead to higher self-efficacy and has a positive impact on the self-concept. Cooperative and self-determined learning enables students to learn democracy, ecological responsible and get confident in its own competence.
We need action-oriented and cooperative learning to cover three board areas:

**Climate science**
why is the climate is changing?

**Mitigation**
how can we try to manage the change and reverse it?

**Adaptation**
how will we need to adapt to its impacts?
TAking over responsibility in school
- Cleaning the schoolyard and class
- Recycling projects
- Upcycling – being creative

Interdisciplinary Teaching
- Using upcycling to make their own fitness equipment in physical education class
- Project based learning in the local area – Clean City

4. Hands-on knowledge
Building roadmaps of action
5. Enhancing an active and physical lifestyle can reduce the air pollution.
To be physically active in adulthood we need to be physically active in childhood.
1. AGENTS OF CHANGE

2. USING EMPIRICAL RESEARCH

3. ACTION-ORIENTED AND COOPERATIVE LEARNING

4. HANDS-ON KNOWLEDGE BUILDING ROADMAPS OF ACTION

5. ACTIV AND PHYSICAL LIFESTYLE

- EMPATHY
- SELF-CONFIDENCE
- SELF-EFFICACY
- MOTIVATION
- OPEN MINDED
- SELF-ORGANIZED LEARNER
Thank you

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Practical and hands-on knowledge

Healthy physical fitness

Mental flexibility

Working memory

Motivation

Self-esteem

Self-efficacy
The students positive success and autonomy experiences lead to higher self-efficacy and has a positive impact on the self-concept. Cooperative and self-determined learning enables students to learn democracy, ecological responsible and get confident in its own competence.

Self-organized activities enable autonomous and self-determined decisions and social integration. This particularly highlighted self-responsibility and self-efficacy. Children and adolescents experience themselves as competent and self-effective in their acting.

3. USING ACTION-ORIENTED AND COOPERATIVE LEARNING METHODS

- Working memory
- Mental flexibility
- Self-esteem
- Self-efficacy
- Motivation

ECOLOGICAL AND GLOBAL CITIZEN
Imagine you are a child...

Physical activity
e.g. Hallal et al. (2012); Das & Horton (2012); Muthuri et al. (2014)

Self-concept
e.g. Marsh et al. 2006; Ghanbari, 2015

Physical fitness
Health-related physical fitness
e.g. Strong et al. (2005); Malina (2007)
- Children with unfavourable development condition (German and refugee children)
- Giving each child an equal opportunity and encourages these children
- University Students who becoming teachers
- Getting a better understanding of children and a pedagogy competence

Weekly meetings with the sportmentor kids // doing physical activity