

Young volunteers: Environmental science learning through Zooniverse

What do young volunteers learn from their participation in online crowdsourced citizen science?

Environmental Science Agency (ESA)

- (1) Environmental science content and practice
- (2) One's own expertise in environmental science
- (3) Citizen Science experiences as a foundation for change

Young volunteers

Whether and what young volunteers report they learn from their participation in online citizen science?

Zooniverse

- ✓ Crowdsourcing scientific research
- ✓ Many research disciplines
- ✓ Volunteers
 - classify, annotate, draw and rank images & illustrations
 - transcribe diaries and texts
- ✓ Forum discussion

Study settings

- ✓ Interview with 10 young Zooniverse volunteers
- ✓ 8-13 old (n=4); 16-19 (n=6)
- ✓ Thematic analysis based on ESA aspects

Results

ESA1: (a) Increased project-specific content knowledge (identification of animals); (b) development of scientific skills (identifying/transcribing)

ESA2: (a) Identified with the role of 'classifier' or 'transcriber'; (b) having a 'following' and 'responding' role; (c) increased confidence in understanding/doing science

ESA3: (a) Research-oriented career, (b) teaching what they learn

Conclusions

- Zooniverse participation results in certain science learning gains
- Limited roles → need for broader range of activities/tasks