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Introduction

The scale and range of online citizen science projects and initiatives focused on biodiversity has evolved, particularly over the past ten years. Alongside interest and increasing public participation is growing recognition of its role contributing to learning. **How can these types of user experiences be explored from the context of learning i.e. citizen science participant learning journeys?**

www.iSpotnature.org (iSpot) is a citizen observatory launched by The Open University, UK in 2009. For over 10 years the OU has successfully extended engagement, teaching and learning about the natural world beyond the parameters of the laboratory or lecture hall through citizen science.



The iSpot platform uses the challenge of identifying nature to engage people as citizen scientists; encouraging learning about wildlife while building species identification skills. This poster shares an exploration of citizen science through a case study of user experiences in this online community.

Approach: citizen science and learning

The concept of a learning / learner journey applies to different educational settings and is defined here simply as a way to describe one's own experience, referring "to how people move between different types (or periods) of learning" (Thomson, 2021). User journeys can evolve reflecting spaces that stage the experience; interaction time which also influences the activity; how participants engage and the role of environment facilitating the experience (Benford, 2009). A desk review of secondary data sources was conducted to analyse user experiences, from the context of a range of learning approaches, using a five-step thematic method: explore, identify, contribute, personalise and recognition (Ansine et al., 2017).

Summary: iSpot community learning experiences

Research themes	Learning approaches	iSpotnature.org user community experience / activity	Research review and analysis (examples)
Explore	Social learning	A free online platform - anyone can browse iSpot: analytics data shows an average of 9 pages viewed per session with an average session duration of 8 – 10 minutes.	Participant learner engagement from purposive browsing. i.e. iSpot's 'browse observation' search page was the second highest page viewed. (Ansine, et al., 2017) p87.
Identify	Participatory learning	Registered participants can post observations and photos; gather content, share comments and in doing so give and receive help with species identification.	iSpot is described as having a participatory learning approach where as an active participant the learner engages in activity, developing their interest and passion" (Clow et al., 2011).
Contribute	Experiential learning	iSpot integrates participant rewards and motivation through a bespoke reputation system.	Registered participants gain scores for each of the species groups represented. iSpot gives points / scores for activity and this is a key feature behind how the site works (Silvertown, et al. 2015).
Personalise	Personalised learning	iSpot has tools and features that encourage and facilitate personalisation to meet the participants' interest and pace i.e. iSpot projects.	iSpot's design is described as one which gives participants control over the learning process (Scanlon et al. 2014) through technology with integrated tools and features (Woods et al. 2016). Over 3,000 projects were added in the first two years the feature was added (2014 – 2016) highlighting personalised interest based on selected sites, regions, habitat, species and / or time frames (Ansine et al. 2017).
Recognition	Active learning	iSpot has integrated and bespoke learning assessment tools i.e. iSpot quizzes; and associated courses. iSpot Quiz data / structured courses projects data	iSpot quizzes were added in 2013 as an assessment tool to support / provide evidence of learning, within the first year of development quizzes were done by approximately 50 participants per week (Scanlon et al. 2013). iSpot is also integrated into OU formal and informal courses i.e. Citizen science and global biodiversity .

References

Ansine J., (2021) Exploring citizen science learning journeys through iSpotnature.org: an online community of nature lovers, CitSciVirtual Conference, Citizen Science Association. [Poster Reference list](#).

Exploring nature with iSpot



- Join iSpot**
- Sign up to iSpot**
- Welcome to iSpot**
- Personalise**
- UK and Ireland latest observations**
- Help confirm global observations**
- Add a new Observations: languages**
- Add observation**
- Projects: group your observations**
- Species dictionary: taxonomy**
- Species Dictionary for UK and Ireland**
- Species Dictionary: taxonomic**
- Species browser: ID support**
- iSpot Quiz: learn & test ID skills**

Conclusions and Next steps

This poster summarises examples of learning reviewed within the context of established learning approaches applied to iSpot user activity. Analysis of this user experience, so far, suggests that citizen science learner journeys can occur individually as well as part of group experiences.

iSpot learner journeys can be described as being controlled by the participant; each unique in its own way based on levels of expertise / pre-existing knowledge and the amount of time spent involved. They can be on single or multiple topics which stop, start, continue based on the motivation and / or interest influencing engagement and experience.

Ongoing research underway seeks to better understand these experiences of learning from the perspectives of iSpot participants themselves; analysing user comments, other contributions on the platform and investigating motivations for participation. iSpot user comments, for example, are an important and rich source into participant behaviour. It is anticipated this research will help to foster new understanding of learning in citizen science through the practice of a citizen science online community focused on biodiversity.

Interested in learning out more?

- Are you a keen nature observer, recorder or citizen scientist?
- Would you like to have your wildlife identification skills and contributions recognised?
- Want to experience your own 'learning journey'?
- Join the free OU course:

[Citizen science and global biodiversity](http://www.open.ac.uk/citizen-science-and-global-biodiversity)

- Complete the course and get an Open University Badge and Statement of Participation! Go to:

www.open.ac.uk/citizen-science-and-global-biodiversity



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