

# STEMports: Community Workforce Development through Augmented Reality STEM Learning Experiences

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*The Station* is a collaboratively designed AR iPhone app connecting players to the world around them through educational quests.

**A community need:** Museums, parks, land trusts and similar spaces are rich learning resources for rural communities. They are eager for tools to help them connect with teachers, students, families and the public.

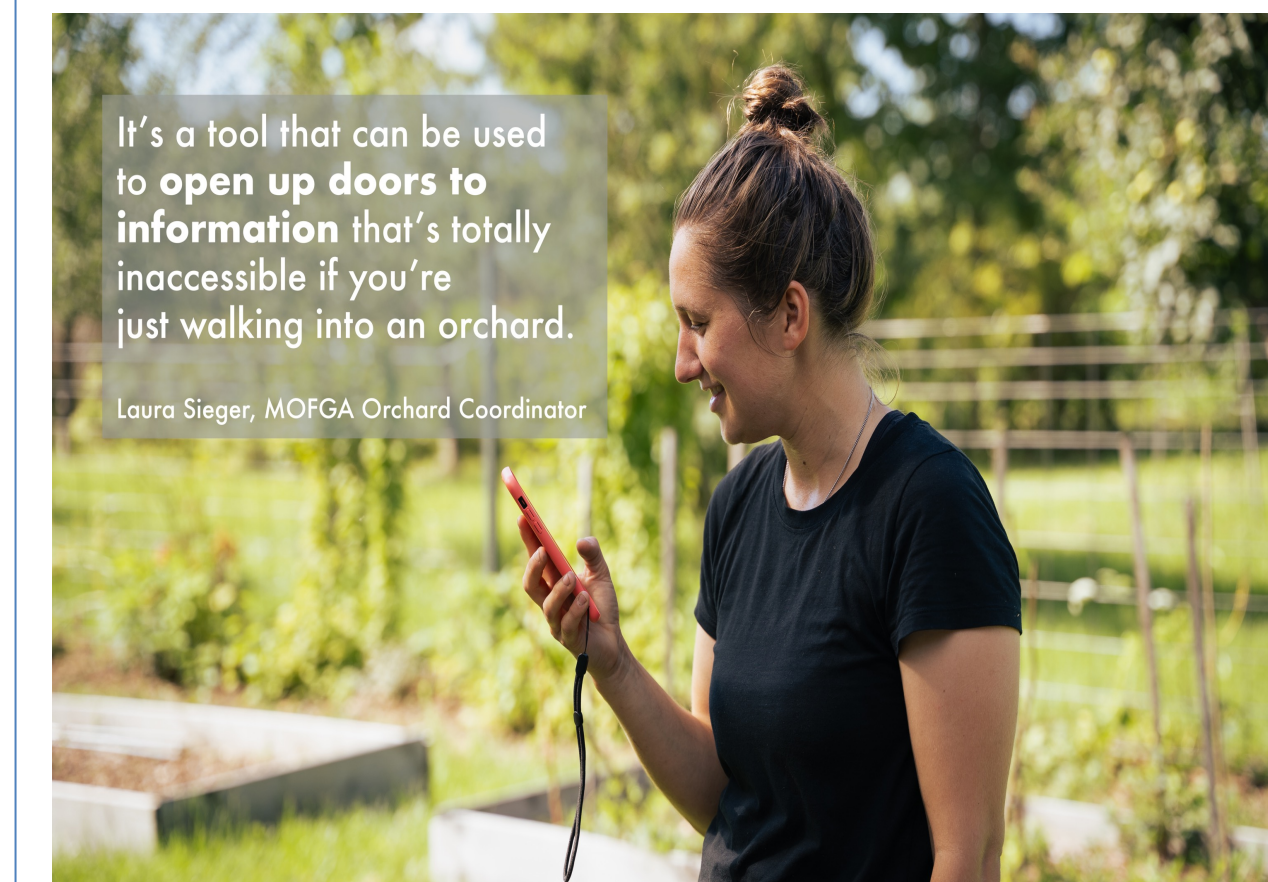
## Intellectual Merit

- Creation of an AR app and companion editor that allows users to create and play their own AR quests for community STEM learning
- Development of models and best practices for working with outdoor based organizations who want to engage communities using technology

## Community Engagement and Research

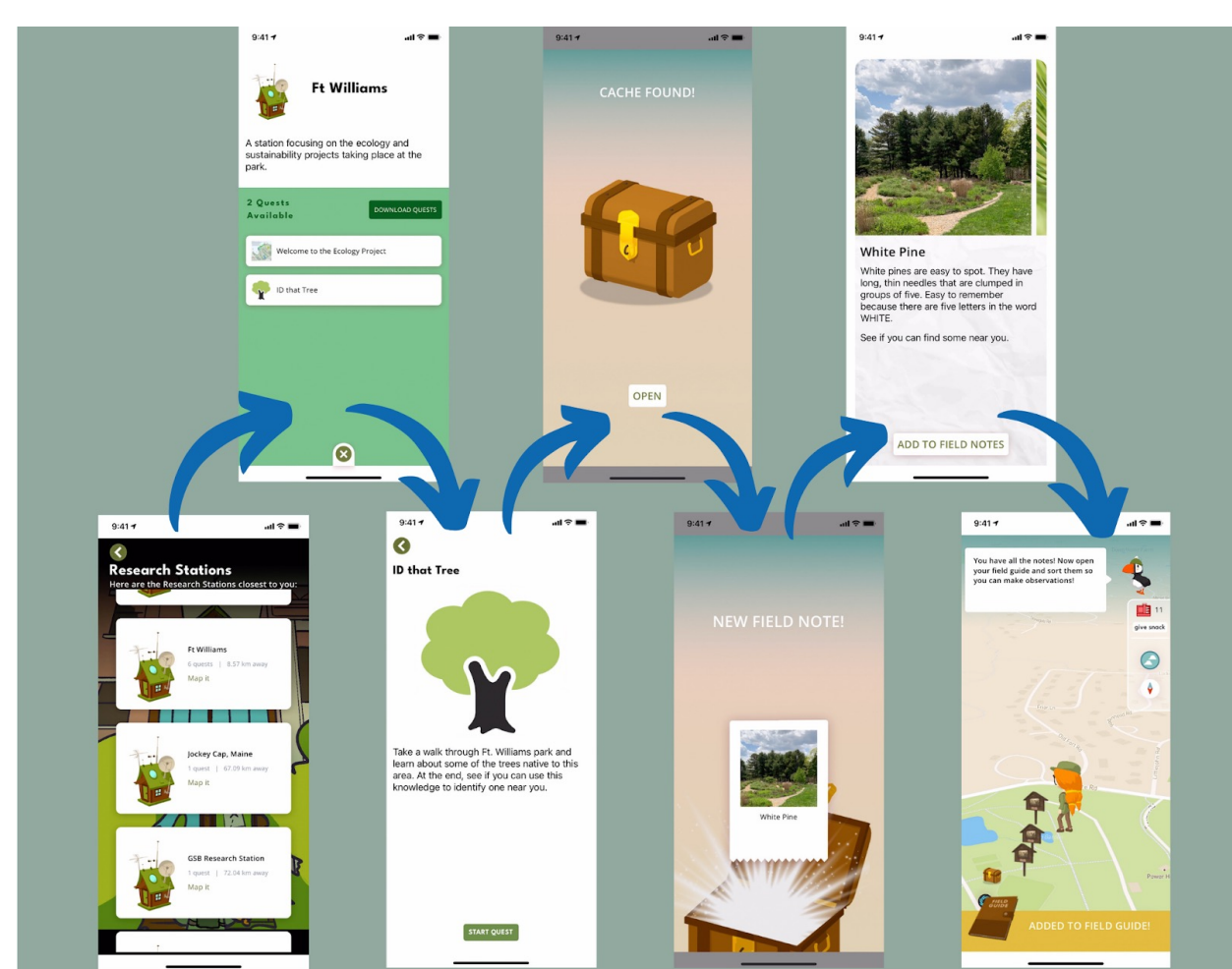
*Geographic Focus: Rural Maine communities*

- Dozens of quests co-created with partners across Maine to meet their educational needs.
- Held student centered design workshops directly engaging middle school youth.
- Used survey and interviews to collect data from students and community partners. **Key findings include:**
  - High levels of youth engagement with both content and the design process.
  - Partners increased appreciation of how technology can enhance the tell the stories of their work.



## Next Steps

- Expand available resources to provide formal and informal educators the tools they need to create content independently.
- Provide opportunities for existing partners to connect and create a community of *The Station* users who can support each other.
- Analyze final data and publish results.



**The App:** We launched *The Station* in the Apple app store in early 2022. The basic game loop can be seen in the above image



**The Editor:** Content is created through a web-based editor. Users can add text, photos and GPS locations without the need for coding knowledge. This allows for rapid prototyping.



Students, teachers, and informal educators have a new format in which to connect to local learning. Organizations have a tool to enhance their educational outreach and empower youth voice and choice.



Development of a model for for working with museums, parks and other spaces will inform the learning technologies and AR developer communities as they work to further engagement through the use of educational technologies.

