Florida Gulf Coast University

Engage K-12 Audiences in Their Watershed Through Use of Geospatial Technologies

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Presenters

FGCU

FGCU
THE WATER SCHOOL
Center for Environment & Society

FGCU
The Water School

Shaping Future GIS Water Resource Professionals @ FGCU

Faculty, Staff & Student

- Research
- Teaching

FGCU

Service-Learning
& Civic Engagement

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Environmental GIS Community Projects

FGCU students in the GIS Class have the option to partner with community groups to develop their final GIS project and earn service-learning hours.

- Naples Zoo
- ECHO Global Farm
- Engaged Estero
- CREW Land & Water Trust
- Fakahatchee State Park

Teaching Resiliency through Enviornmental Education in Schoolyards T.R.E.E.S.

The T.R.E.E.S. curriculum is Florida standards-based GIS integrated lessons and activities that allow educators to utilize their schoolyards as living laboratories to collect data and better understand their community.

T.R.E.E.S. Planning

Needs Assessment of EE in Schools

- Science and math needs related to data collection and analysis
- Schoolyards vary by campus
- Teacher training for a new program

FGCU The Water School Expertise and Resources

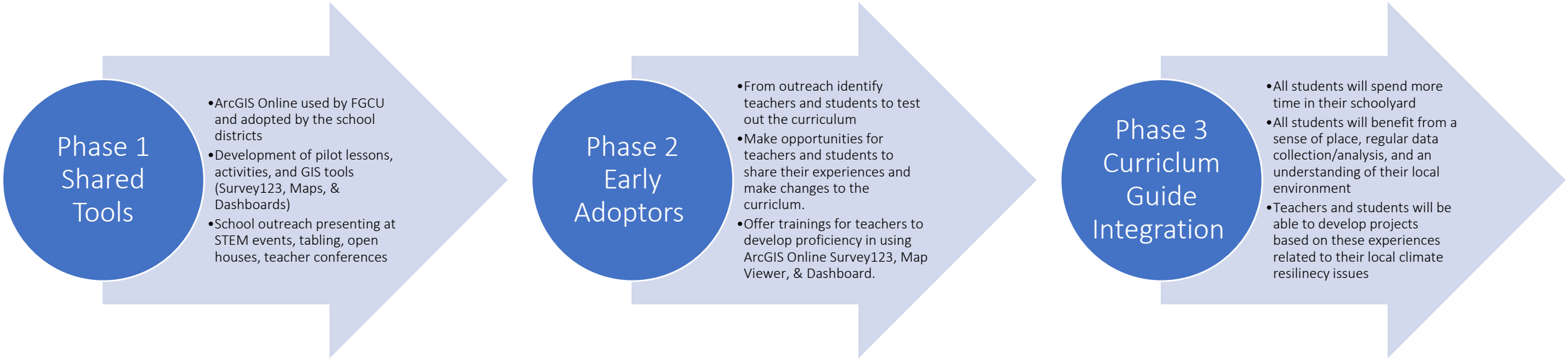
- CES works directly with teachers, schools, and district curriculum experts
- CES grows environmental know-how through education and nurtures connections to nature through direct experiences
- TWS utilizes ArcGIS Online among many other GIS tools for research, teaching, and training

Shared Vision

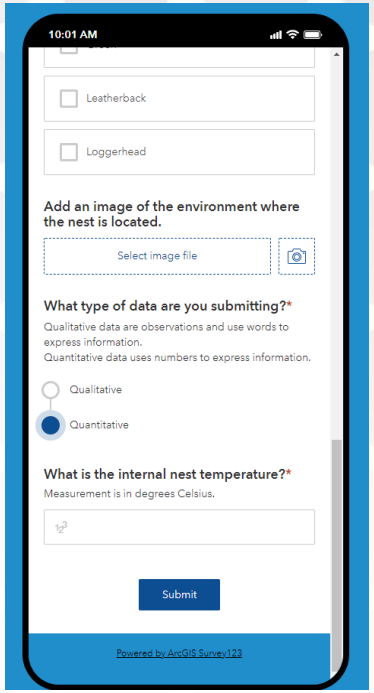
- All students will spend more time in their schoolyard
- All students will benefit from a sense of place, regular data collection/analysis, and an understanding of their local environment
- Teachers and students will be able to develop projects based on these experiences related to their local climate resilinecy issues

FGCU

T.R.E.E.S. Development



FGCU

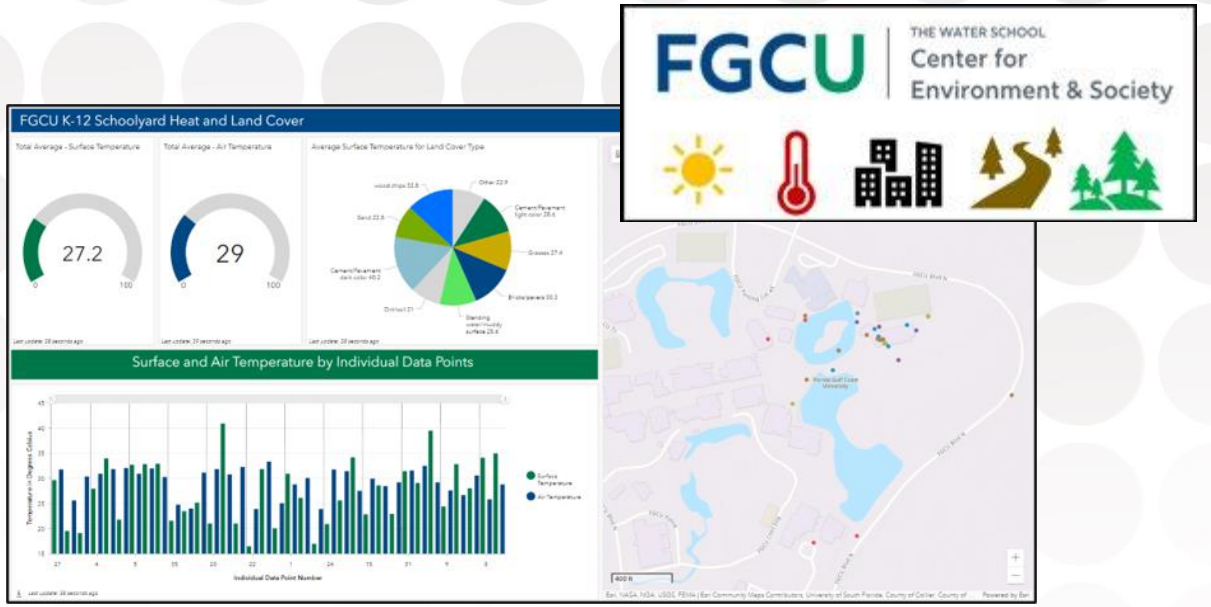


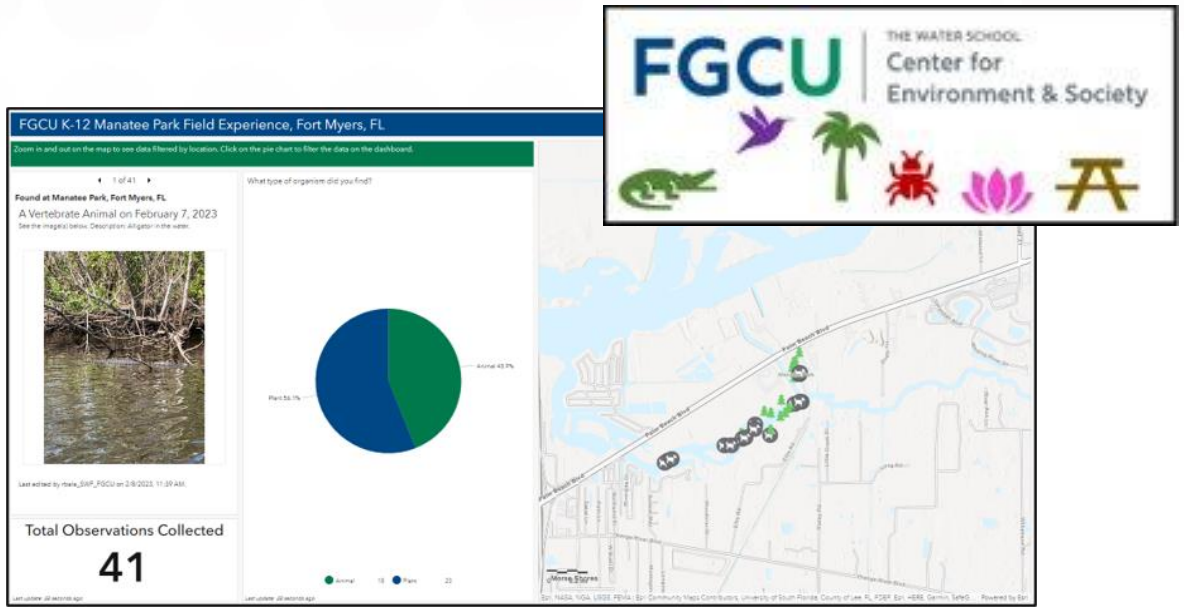
School District Collaborations

CCPS
Collier County Public Schools
Science and Environmental Studies

THE SCHOOL DISTRICT OF LEE COUNTY
PERSONAL | PASSIONATE
PROGRESSIVE

- Testing K-12 activities designed at FGCU
- Teachers adapting activities for their classrooms
- Teacher training with ArcGIS Online software to develop their own data collection tools





Teacher Training: GIS Software and Lesson Planning

Training sessions for teachers have occurred at school sites and on the FGCU campus.

Teacher training in using GIS for schoolyard learning involves lesson plan development along with designing the GIS tools students will use.

ArcGIS Online

- Survey123-data collection for the specific lesson
- Map Viewer & Dashboard-design for ease-of-use and understanding of data by school age audiences
- StoryMaps-describing and explaining data relationships using story.

T.R.E.E.S. Next Steps

- Continue teacher training and support for Lee and Collier county schools
- Begin outreach to the rest of the SWFL service area for FGCU (Charlotte, Collier, Glades, Hendry, and Lee)
- Expand T.R.E.E.S. development team
- Develop more partnerships around the region