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"TREASURE" SAE: The **T**eacher **R**ejuvenation for **E**nhancing **A**griscience **S**tudents' **U**tilization of **R**eal-world **E**xperiences Virtual Simulation Game
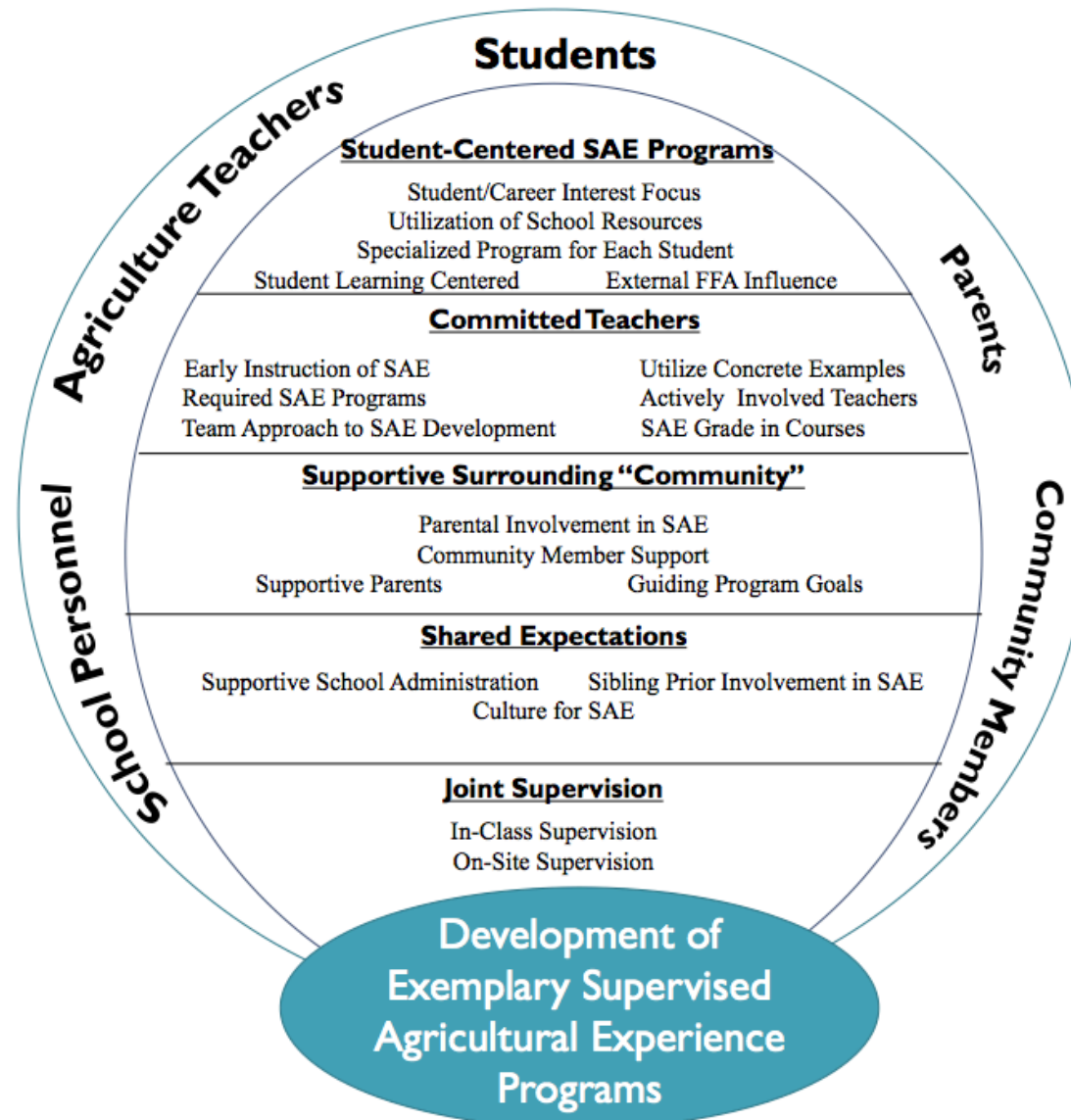
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Introduction

- SAE developed student knowledge, skill, occupational attitude, & educational attitudes (Ricketts, Duncan, & Peake, 2006; Lawver & Torres, 2012; Williams, 1979)

- Students begin SAE from extrinsic motivators (Bird, Martin, & Simonsen, 2013)

- Lack of knowledge about SAE (Lewis et al., 2011)

- No definition of success (Barrick et al., 2011)

- Teacher conceptual and theoretical beliefs are not carried out to implementation (Retallick, 2010; Wilson & Moore, 2007)

- Examination of components of successful SAE programs

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Conceptual Framework

Students

Agriculture Teachers

Parents

School Personnel

Community Members

Student-Centered SAE Programs

Student/Career Interest Focus
Utilization of School Resources
Specialized Program for Each Student
Student Learning Centered   External FFA Influence

Committed Teachers

Early Instruction of SAE   Utilize Concrete Examples
Required SAE Programs   Actively Involved Teachers
Team Approach to SAE Development   SAE Grade in Courses

Supportive Surrounding "Community"

Parental Involvement in SAE
Community Member Support
Supportive Parents   Guiding Program Goals

Shared Expectations

Supportive School Administration   Sibling Prior Involvement in SAE
Culture for SAE

Joint Supervision

In-Class Supervision
On-Site Supervision

Development of Exemplary Supervised Agricultural Experience Programs

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What did we do?

- Identified need areas
  - Determined pre-service & in-service teacher interest
  - Reduced teacher barriers
  - Recruited supportive community members
  - Developed a "culture" supportive of SAEs for all
  - Promoted supervision engagement

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What did we do?

- Student outcomes
  - Increased engagement in SAE programs
  - Improved agricultural education content knowledge
  - Improved problem solving and critical thinking skills
  - Increased awareness and pursuit of ag careers
 - Improved accessibility to resources for engagement

What did we do?

- Pilot Professional Development Session
  - Online, asynchronous learning module
  - Gaming simulation with real-world SAE scenarios

- Teacher Feedback
  - Pre-module creation: needs assessment
  - Three face to face gaming sessions: issues identified
  - Post-module reflection: summative evaluation

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What was the outcome?
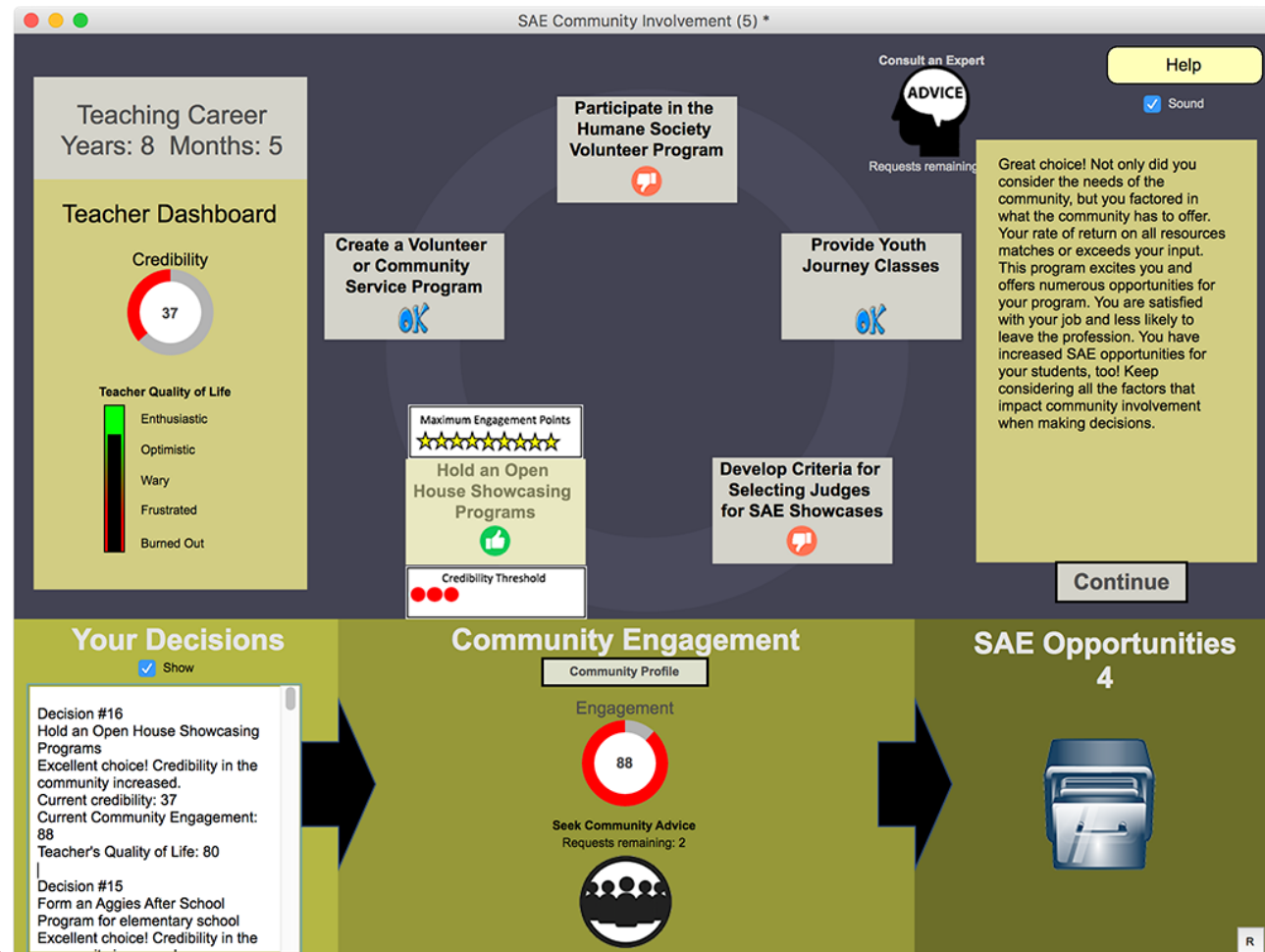
Teacher Feedback on the Pilot

- Open-ended reflection questions given to 50 agricultural education teachers across Georgia

- Focus group discussions with teachers following game play

- Gaming simulation could be improved with…
  - Immediate, automated feedback to game players on why their choices in the game were beneficial to:
    1. Reducing teacher burnout
    2. Building community credibility
    3. Enhancing quality of life

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What did we learn?

- Teachers were encouraged by online PD
  - Increased engagement
  - Increased interest in engaging in PD

- Teachers struggle with SAE implementation
  - Student project ideas
  - Resource acquisition
  - Establishment of culture for SAE
  - Conducting quality supervision of projects

Recommendations for the Classroom

- Encourage students/game players to see the educational purpose of the game (not just playing to "win")

- Structured reflection is key
  - Immediate, automated feedback through the gaming software is appreciated by players

- Consider using game simulations as vicarious exposure before face to face laboratories

Recommendations for PD Sessions

- Find ways to integrate technology

- Increase accessibility to the PD knowledge

- Don't forget that we need to remember the fundamentals of the profession

- Ensure a focus is made on engagement in the gaming session

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Questions?

Thank you!!