Growing Plants for Growing Students: How Experiential Learning in Conservatories can Support Student Learning

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Background:
- New science education standards like the Next Generation Science Standards (NGSS) are requiring new ways of teaching which is expanding more into non-traditional methods
- Plant Conservatories and similar experiential learning centers (places where people learn by experiencing through observation and hands-on activities) can assist in teaching and fulfilling these new standards
- But there are factors that impact the effectiveness and feasibility of integrating these types of learning experiences

Research Question:
What are the key factors that can be addressed to effectively integrate experiential learning centers into science education?

Methods:
Step 1: Conducted research on plant conservatories and similar experiential learning centers
Step 2: Examined case studies/scholarly articles of relevance
Step 3: Sent survey to educators in the Seattle and greater area (Figure 2)
Step 4: Used steps above to help with curriculum development

Results:
Key Factors that impact the effectiveness and integration of experiential learning centers into science education

Integration:
- School Approval of Field Trip to an experiential learning center
- Many public schools have limited funding/resources
- Transportation and Covid-19 limitations/barriers (figure 4)

Implications:
- Experiential learning centers like the VP Conservatory can help schools that are struggling to engage students with learning and meeting NGSS outcomes
- We should understand our surroundings as potential resources to learn from and use it to our advantage
- Education needs more support from local, state, and federal governments
- Further research should be conducted to identify strategies that allow for more universal approach to effectively integrate experiential learning centers

Acknowledgements:
I would like to thank my faculty advisor/site supervisor Alexa Schreier, and my fellow interns Katie and Vy for all their hard work and dedication throughout the project as well as my friends and fellow PoE students for the support I received along the way.