FOCCE

Forest Owner Carbon and Climate Education

Engaging and Supporting Family Forest Owners in Climate-Smart Forestry

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U.S. Endowment for Forestry and Communities

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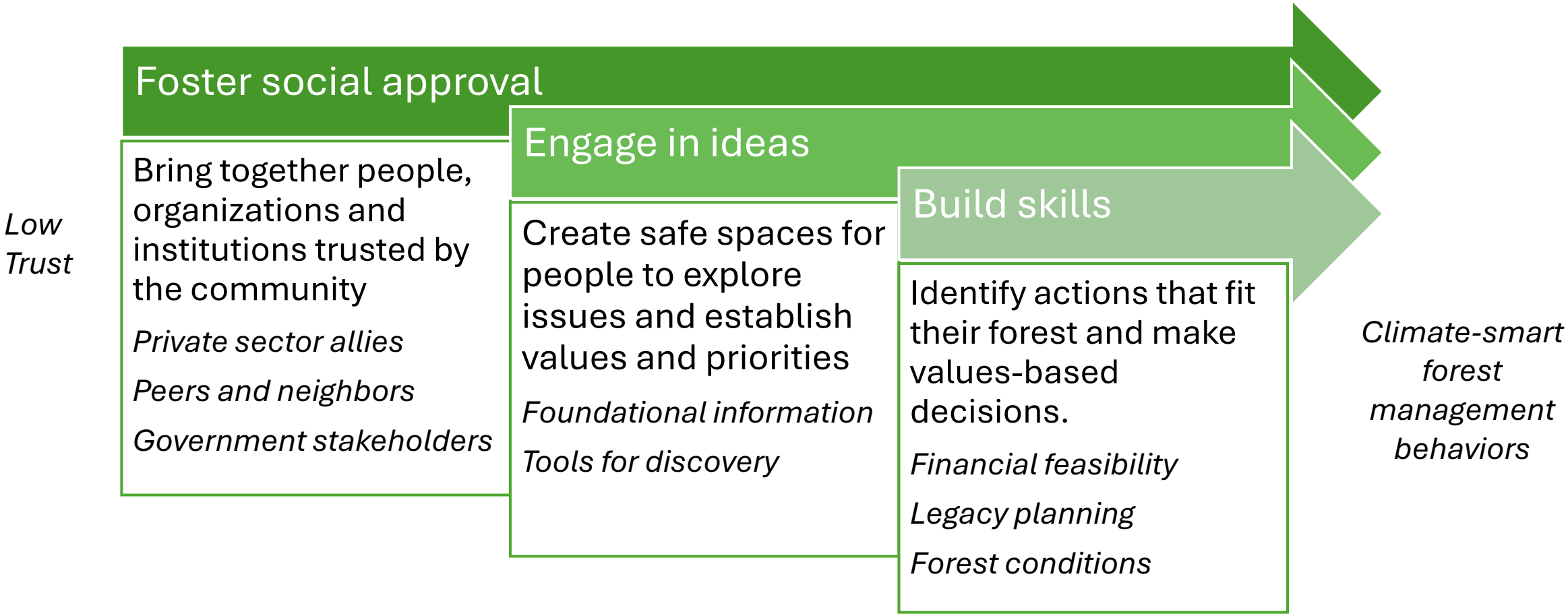
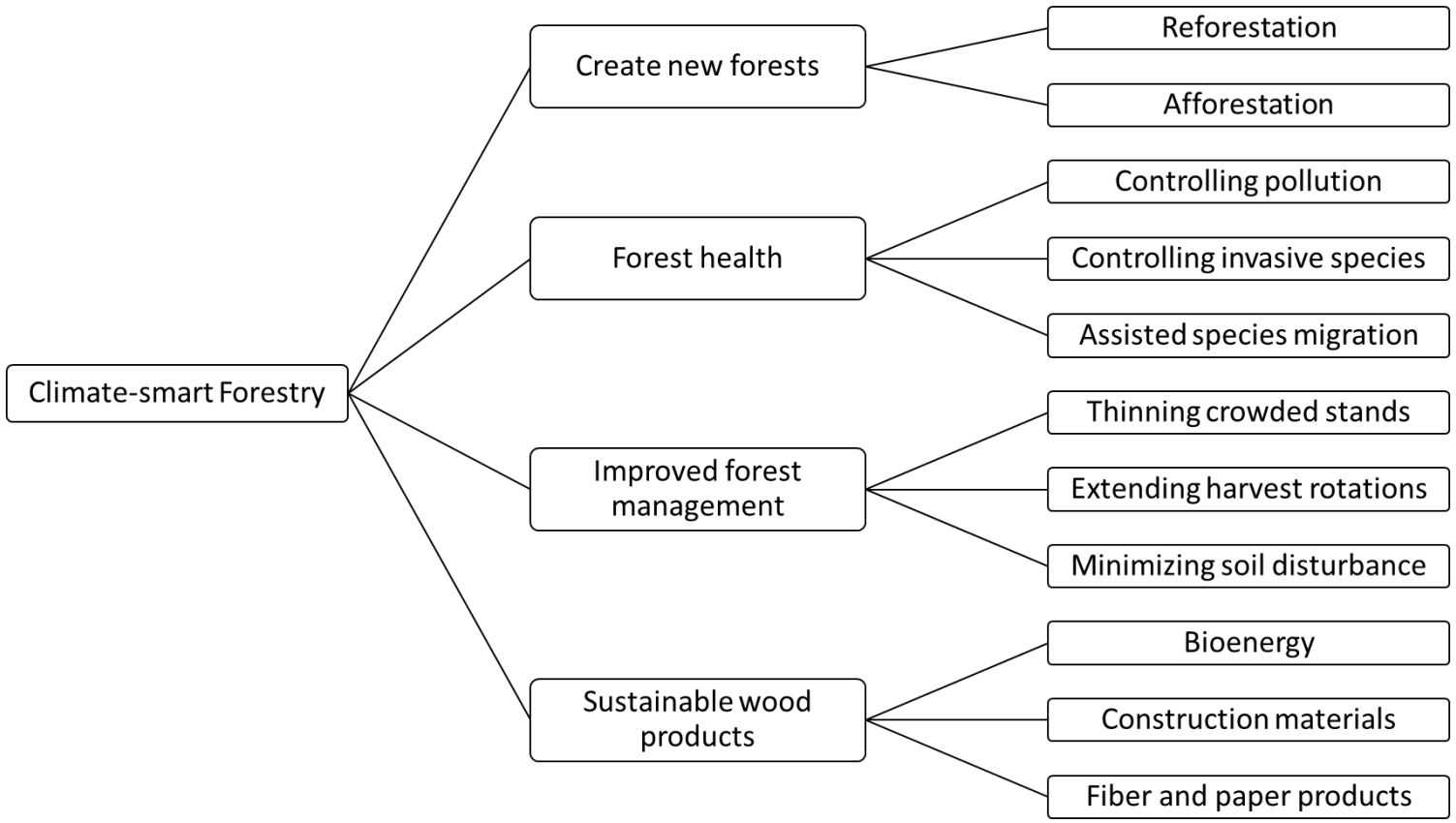
Moving Management Forward

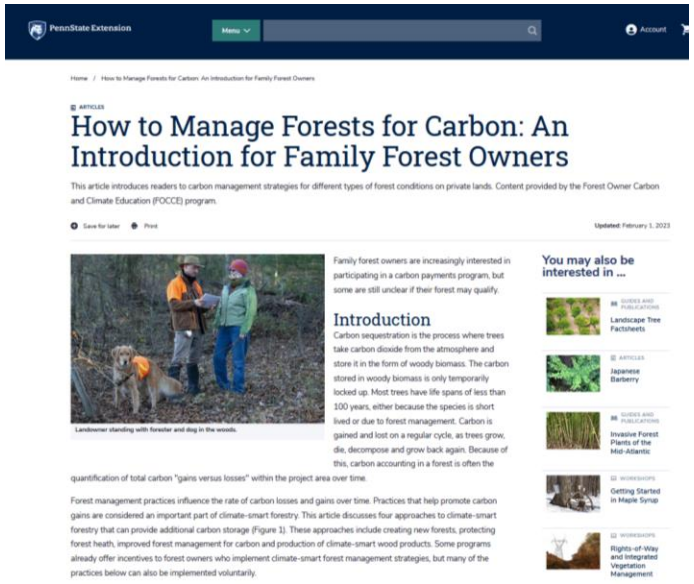


How could participatory education strategies help move management forward?

- Ongoing research
- Adult education theory
- Participatory education strategies
- Stages of growth and learning
- Evidence of impacts

Climate-Smart Forestry





https://extension.psu.edu/how-to-manage-forests-for-carbon-an-introduction-for-family-forest-owners

Ongoing Research

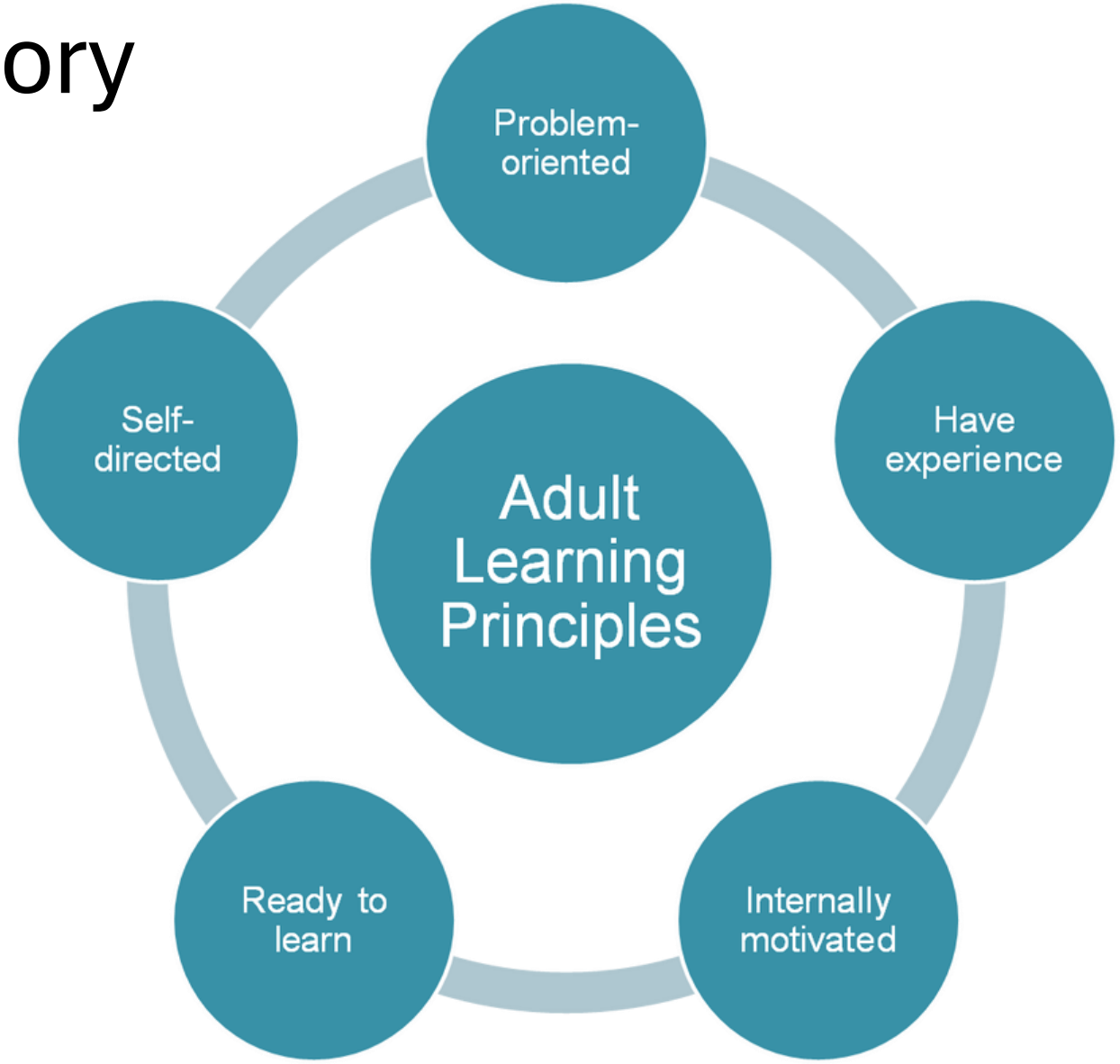
- N=112 responses in VA and PA
- Forest health goals
- Shorter contract
- Higher payments

Preferred Carbon Contract Features

Management activity	
No management, keep forested	18%
Deferring timber harvest	**24%**
Protect forest health	58%
Acres enrolled	
<25% of eligible acres	2%
25-50% of eligible acres	8%
50-75% of eligible acres	22%
>75% of eligible acres	**68%**
Contract length	
1 year	12%
5 years	67%
20 years	**20%**
Payment process	
Annual payments	**45%**
20% upfront then annual	**39%**
Tax discount	16%
Payment level	
$10 per acre	**1%**
$50 per acre	11%
$150 per acre	13%
$250 per acre	75%

Adult Education Theory

- Direct Instruction
- Self-directed learning
- Peer learning



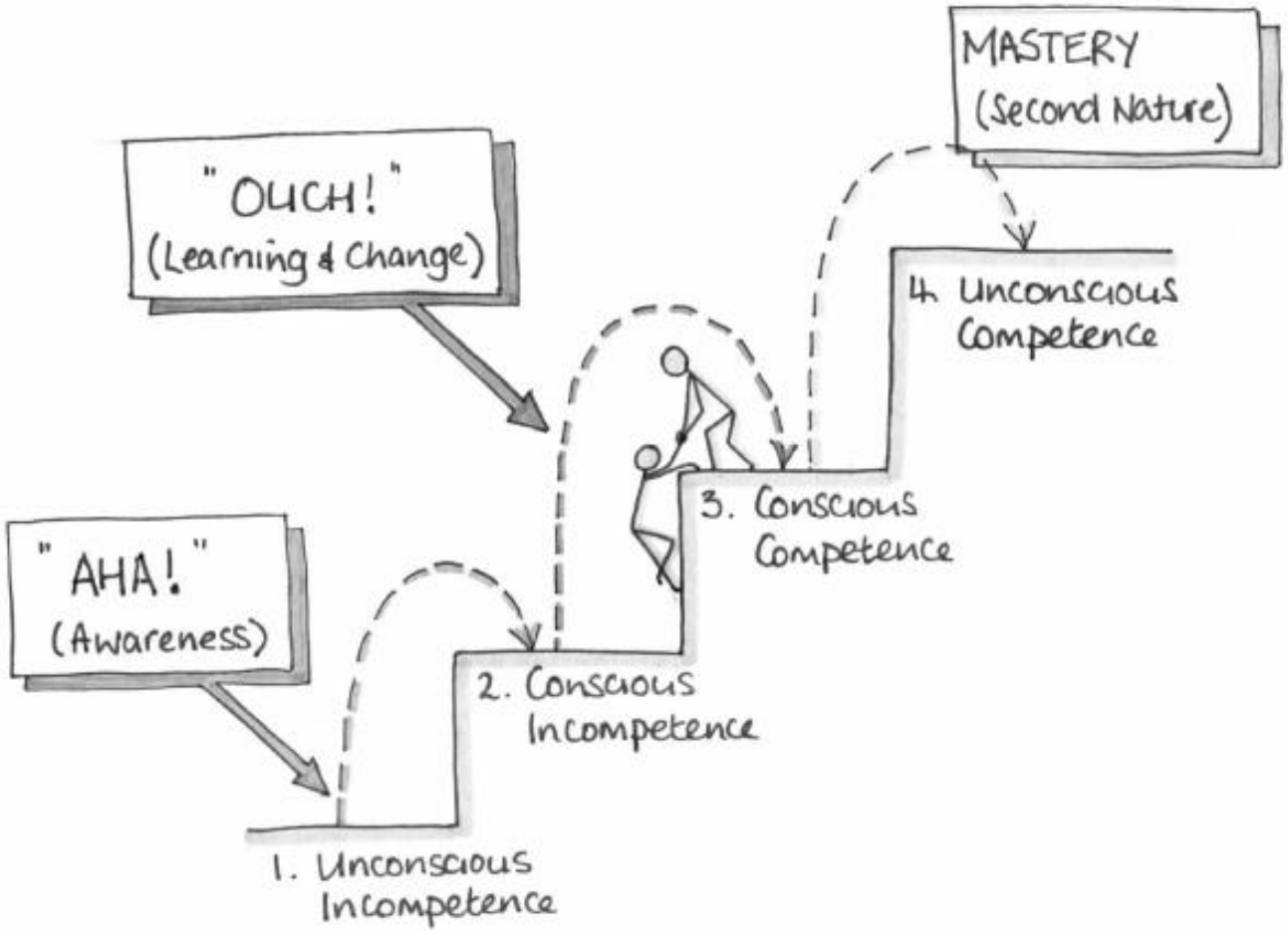
Challenges in Adult Learning

- Time limitations/competing responsibilities
- Lack of motivation
- Fear of technology/inexperience
- Mismatch with adult learning styles and learning preferences
- Lack of financial resources
- Cognitive overload
- Underdeveloped study skills

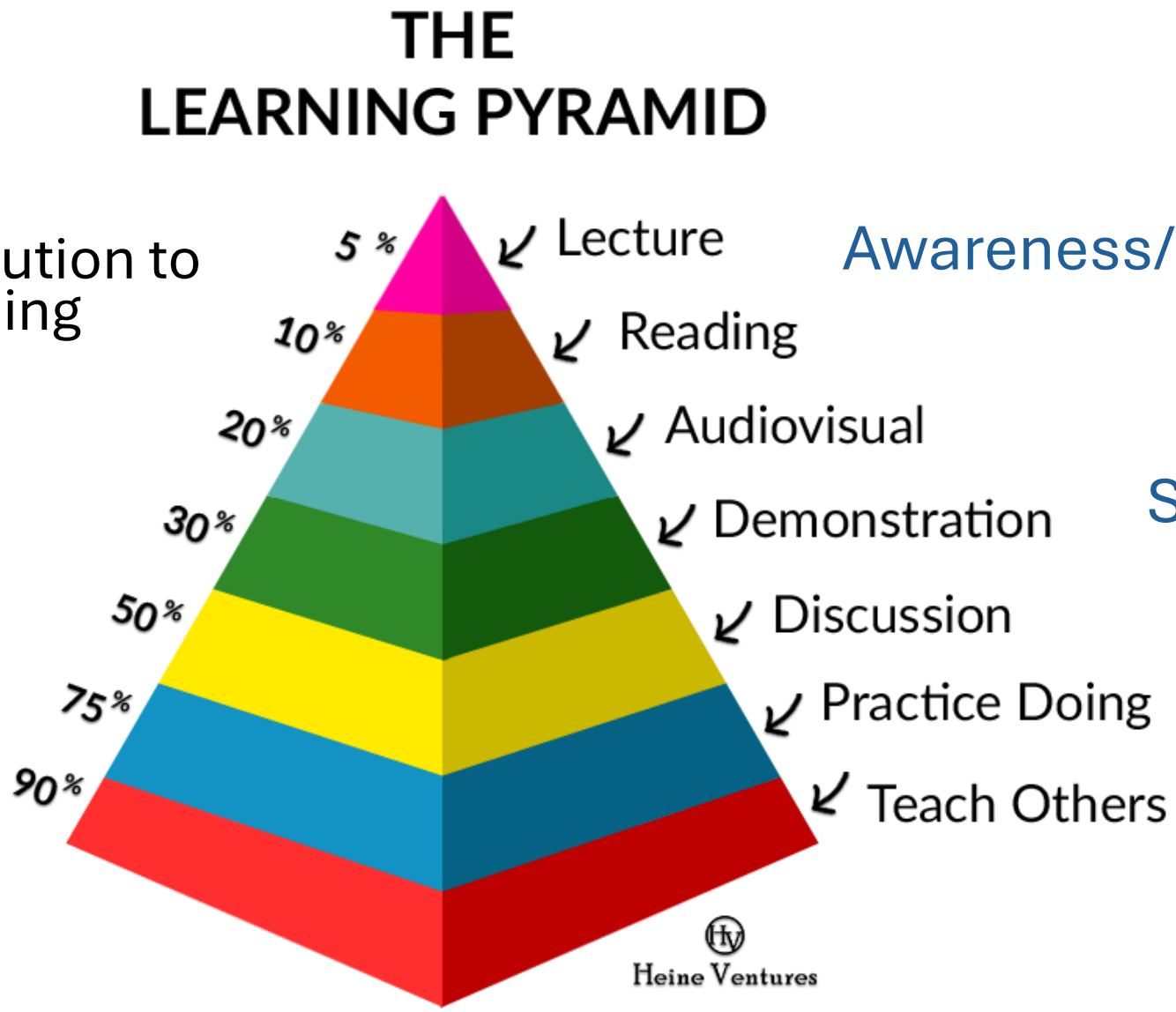
Participatory Education (peer learning, group work)

- A method allowing **students to shape their curriculum** by incorporating **personal learning goals**.
- Key Benefits:
  - Fosters a collaborative learning environment.
  - Helps participants develop skills and knowledge for action
- Learning Outcomes:
  - A greater understanding of problems and innovative solutions
  - Enhances psychological and social learning through group work.
  - Promotes diverse perspectives and critical thinking skills
  - Builds motivation and reduces anxiety among participants.

Stages of Learning



% contribution to learning

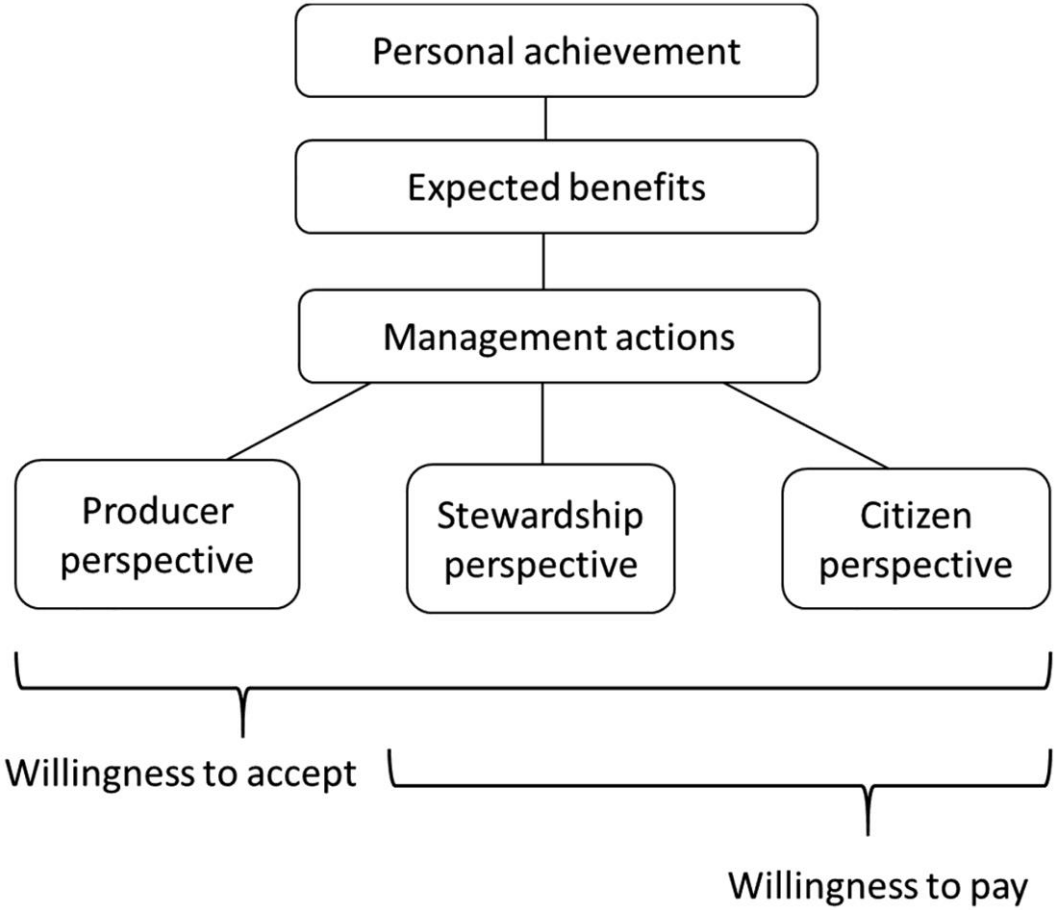


Awareness/motivation

Skills building

Peer to Peer Education

Financial Decision-making



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Routledge
Taylor & Francis Group

Check for updates

Economic and Ethical Motivations for Forest Restoration and Incentive Payments

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ABSTRACT

Private forest owners are both the suppliers and consumers of forest ecosystem services which poses a unique challenge to using incentive-based strategies to encourage forest restoration. We used focus groups and deliberative monetary valuation (DMV) methods to understand the choices of forest owners in Mississippi and Florida. Participants acted as jurors and made judgements about what actions a hypothetical forest owner should make when offered compensation to enhance key ecosystem services. Fifteen major themes were identified via qualitative data analysis. Results support a proposed conceptual model that links perspectives toward forest management with the expression of cultural values and choice. Allocation of income to ecosystem improvements revealed that intentional forest owners seek to maximize utility through personal achievement benefits, rather than income generation alone. Findings have important implications for forest policy and program design by improving the design and efficiency of economic interventions.

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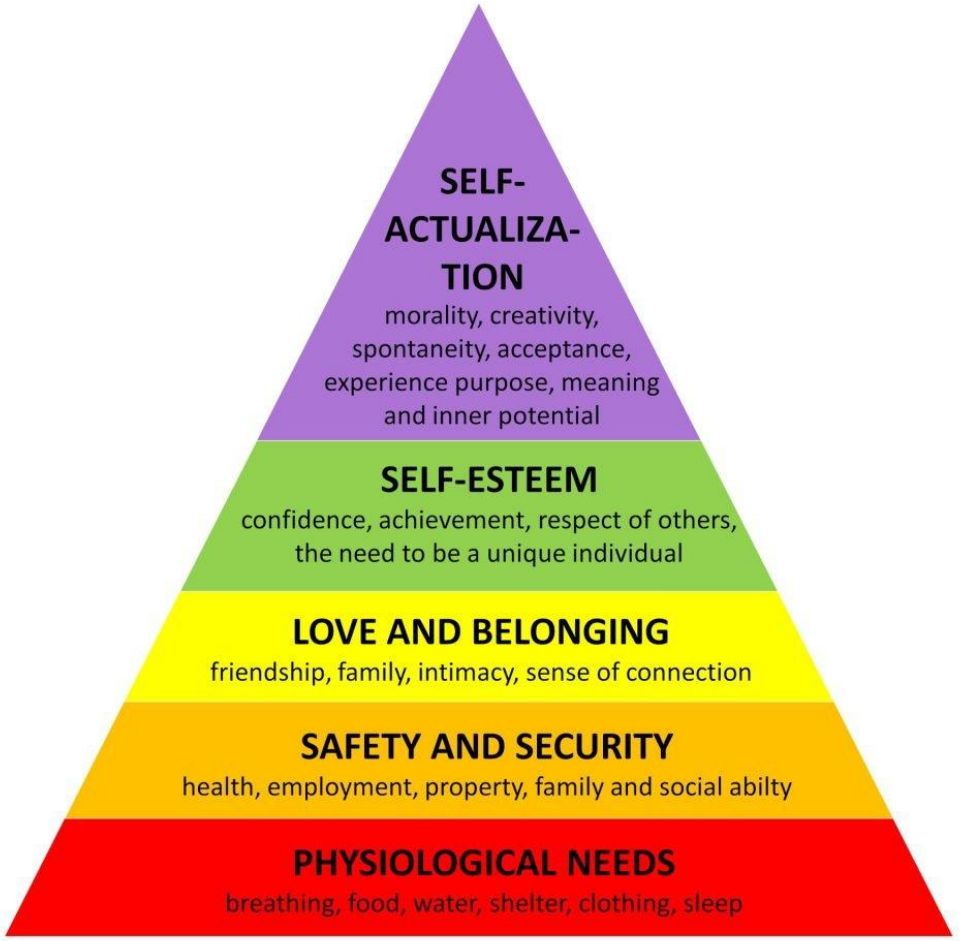
Cultural values; deliberative monetary valuation; ecosystem services; forest owners; forest restoration; incentives; longleaf pine

Decision-making Frames

- Skin in the game
- Financially feasible
- Needs-based decisions
- Stacking income streams

Stages of Growth

- Initially curious about topics that help address basic needs (e.g., income)
- Social approval provides validation and security
- Skills building provides a sense of accomplishment
- Teaching peers provides meaning and purpose



Maslow's Hierarchy of Needs

Impacts

- **Change in knowledge**
- **Change in attitude**
- **Change in confidence**
- **Willingness to talk to peers**
- **Ownership of ideas**

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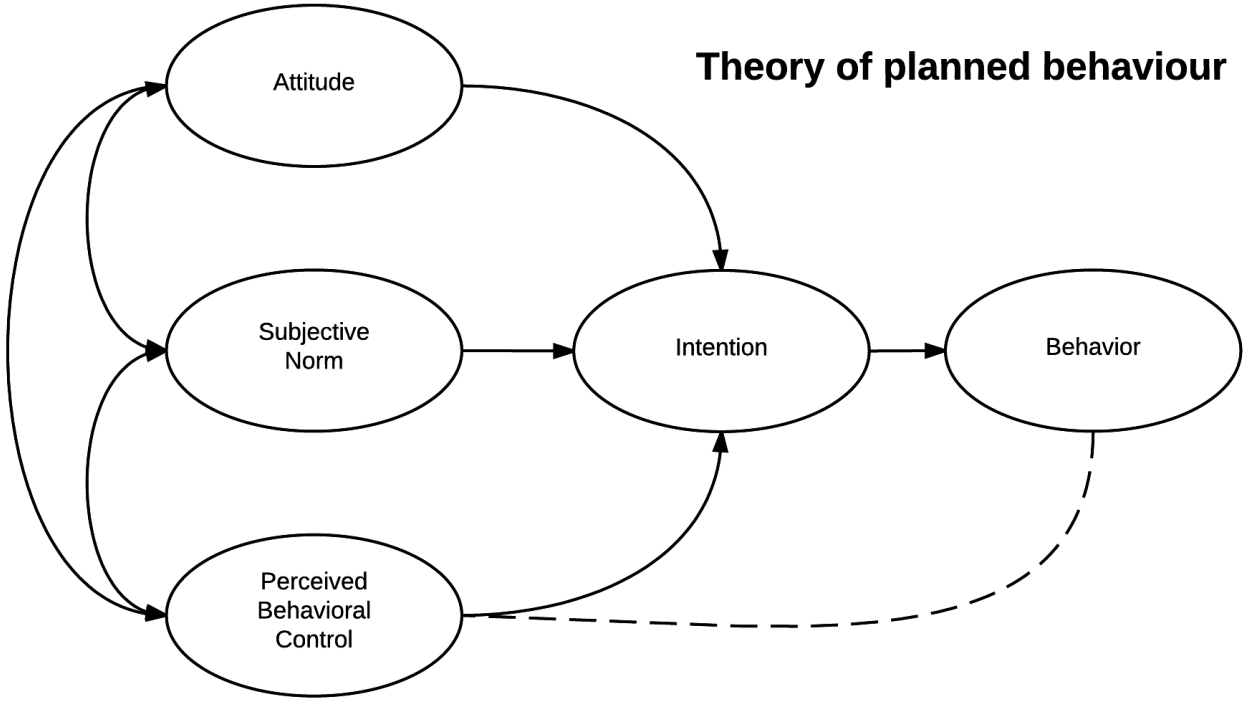
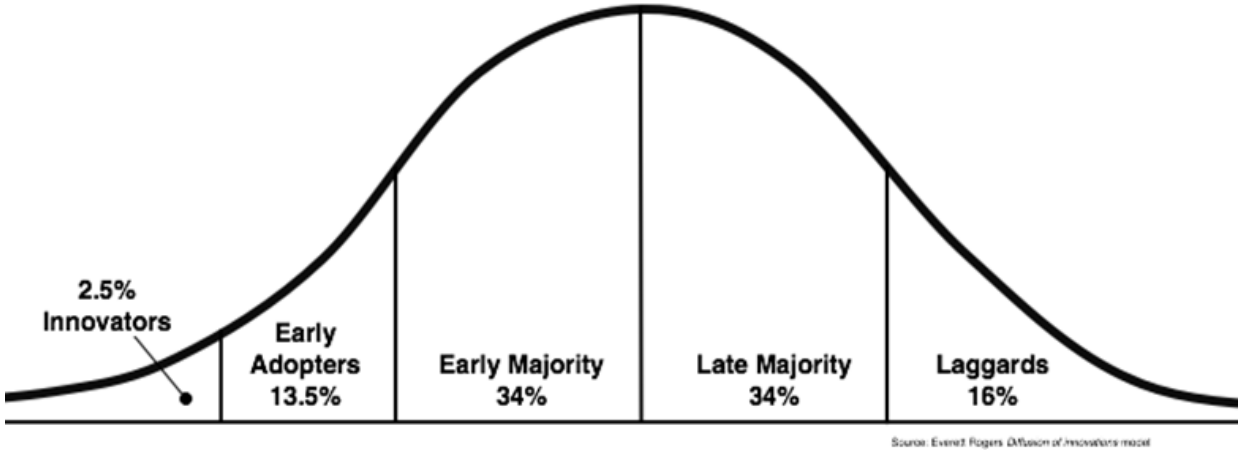




Diffusion of innovation theory

Peer Discussion Groups (1-5 agreement scale, 12 participants)

	Mean score BEFORE	Mean score AFTER	Difference
I think I am pretty good at understanding climate related topics	3.4	4.1	+0.7
I like learning about climate change topics	3.1	4.7	+1.6
I believe understanding climate topics will help me or my forest in some way	4.3	5.0	+0.7
I believe understanding climate topics will help my community in some way	4.1	4.7	+0.6
I am concerned about what could happen if I don't do anything about climate change	4	4.4	+0.4
I have skills to talk to my family and friends about climate change	2.6	4.0	+1.4
I have skills to communicate about local climate impacts	2.5	3.8	+1.3
I have skills to share mitigation and adaptation strategies that can support communities and ecosystems	2.1	3.8	+1.7
		Grand Mean	+1.05

Peers and Pro's 360 (18 participants)

How strongly do you agree with the following statements	Strongly disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Strongly agree
Participants felt free to communicate their opinions	0	0	0	6	11
The discussions helped broaden my understanding of the issue	0	0	1	3	13
The participants learned something from each other today	0	0	0	5	12
I feel more comfortable talking about these issues with my peers in the fut...	0	0	0	3	14
I really enjoyed listening to other people's point of view	0	0	0	3	14
Sum	0	0	1	20	64

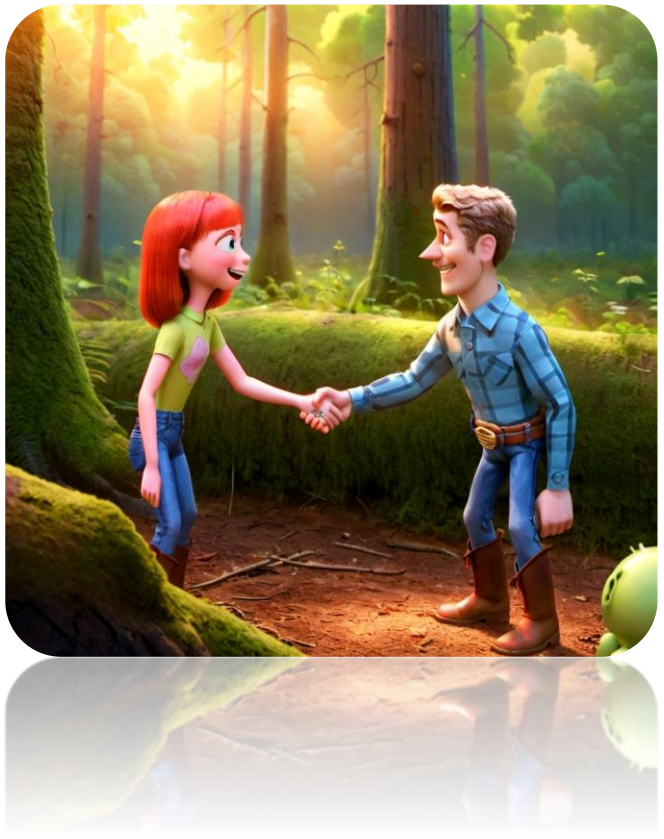
Feedback on Participatory Education Programs

"For me, it was just nice to have someone come out and say, 'Hey, there is information out here'…'I'm with you,' kind of thing."

"Reinforces some of my beliefs and opens new doors to trying things out."

"Many of the questions that other people ask are my questions, too. And those that are not give me insight on topics I never before considered. I love this format!"

"…It puts him (peer) as an expert…the fact that he had…done so many things and tried so many things…with his property and timber and things like that."



Conclusions

- CSF can seem scary.
- Planning projects can be over whelming.
- Creating opportunities for group work can provide the support and engagement needed to motivate action.
- Peer learning formats and curriculum available though FOCCE

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https://sites.psu.edu/focce/