



Tailoring Agricultural Education to Improve Effectiveness

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Multiple learning formats accelerate knowledge sharing & adoption

Resources & Opportunities	Purpose & Impact
Formal Learning • Seminars, webinars & videos • Academic journals & reference books • Factsheets, newsletters, booklets • Web-based articles, blogs, industry magazines	• Spread awareness of issues and practices • Transfer essential knowledge • Provide reference tools for individuals • Lesser impact on adoption, as compared to experiential and social learning
Experiential Learning • Field days & interactive workshops • Replicated research trials, In-house demonstration trials • On-farm observations Social Learning • Direct contact with extension professionals & consultants • Peer-to-peer conversations and information exchange • Regional and peer-networking groups	• Practitioners gain knowledge and experience • Greater impact on adoption because they involve persuasive interpersonal interactions • Demonstrate feasibility, local application and efficacy

To increase resource effectiveness, consider:

1. **Time is a barrier to access all resources:** Time is a barrier to access all resources. Most agricultural professionals prefer:
 - a. Resources that require less effort to access and digest.
 - b. User friendly materials. Simplify complex information and focus on key findings, while de-emphasizing process and methodology.
 - c. Multiple formats for flexible access, including in-person events and online content.
 - d. Events scheduled at suitable times or repeated in multiple time slots where possible.
2. **How resources are used:** Growers and consultants may use certain resources as training tools for their vineyard teams and to educate a broader audience within or outside their organization. Identify key resources needed to share knowledge and communicate disease management decisions across their professional networks.
3. **Combining formal with experiential and social learning:** For example:
 - a. Conduct formal presentations and interactive sessions or demonstrations at the same events.
 - b. Reserve time for peer discussion and sharing of experiences during seminars and webinars.
4. **Adjust content for different audiences:** For example:
 - a. Job role and technical background. Agricultural teams consist of multiple job roles with varied technical backgrounds and duties, requiring different information and detail.
 - b. Industry experience. Those new to the industry must acquire basic knowledge, whereas experienced professionals seek out new information.
 - c. Individual preference for resource formats. For example, some prefer audio-visual material over written text or vice versa.
 - d. Differences in comfort with perceived risks of adopting practices. Audiences can be characterized as "adopter" types who differ in their responsiveness to resources (see below).

Tailor outreach programs to audience & learning style to promote knowledge diffusion & adoption of practices

Audience characteristics*	Learning style, preferred resources & opportunities
Early Adopters (~16% of population) - Comfortable with the risks of adoption of a practice - Possess significant resources - Adopt a practice when there is evidence of benefits "Opinion leaders": knowledgeable, experienced, respected, and well-connected	Seek out and make time to independently engage with complex technical information - Formal learning opportunities and resources - Opportunities for independent learning - Collaborative projects and research trials to generate new data and evaluate novel tools
Early Majority (~34% of population) - Deliberative and sensitive to cost and risk - Act when there is irrefutable evidence of practice benefits - Interact regularly with peers but are not "opinion leaders"	Draw heavily on experiences of their peers, limited time to digest complex technical information - Approachable, user-friendly resources that simplify complex information and minimize the time and effort to absorb key information - Experiential learning and peer conversations that demonstrate implementation, efficacy, cost effectiveness
Late Majority & Laggards (~50% of population) - Conservative, skeptical, risk-averse pragmatists - Possess scarce resources - Act out of economic necessity or societal pressure - Have fewer interactions with peers and may be suspicious of educators suggesting change	Seek information pertaining to practical, logistical, and financial factors and constraints - User-friendly resources that emphasize convenience, cost effectiveness, and the risks of being left behind - Social and network-based learning opportunities that demonstrate how others are successfully using a practice

**These are not personality traits. Individuals may shift between categories based on situational factors.*

1. Outreach programs that prioritize information delivery to early adopters capitalize on their position within the agricultural network, and their interest in exploring new practices and novel approaches.

Once engaged with a topic, early adopters are often persuasive, and others may look to them for guidance. Actively engaging them in experiential and social learning activities increases their exposure to the early and late majorities.

2. Conversely, engaging with the late majority and understanding the limitations and challenges they face can reveal opportunities to address barriers to adoption.

Building all network actors' communication and collaboration skills has benefits for effective knowledge diffusion & adoption.

Acknowledgement

Authors: Malcolm Hobbs and Monica Cooper – University of California, Cooperative Extension. April 2026. This work is supported by the Specialty Crop Research Initiative Award No. 2024-51181-43184 titled "Pathogen Monitoring and Disease Management Within a Vineyard FRAMEwork" from the U.S. Department of Agriculture's National Institute of Food and Agriculture. Any opinions, findings, conclusions, or recommendations expressed in this publication are those of the author(s) and should not be construed to represent any official USDA or U.S. Government determination or policy.