

A Curriculum Development Blueprint: Building Cohesive Federally Funded Agriculture Curricula

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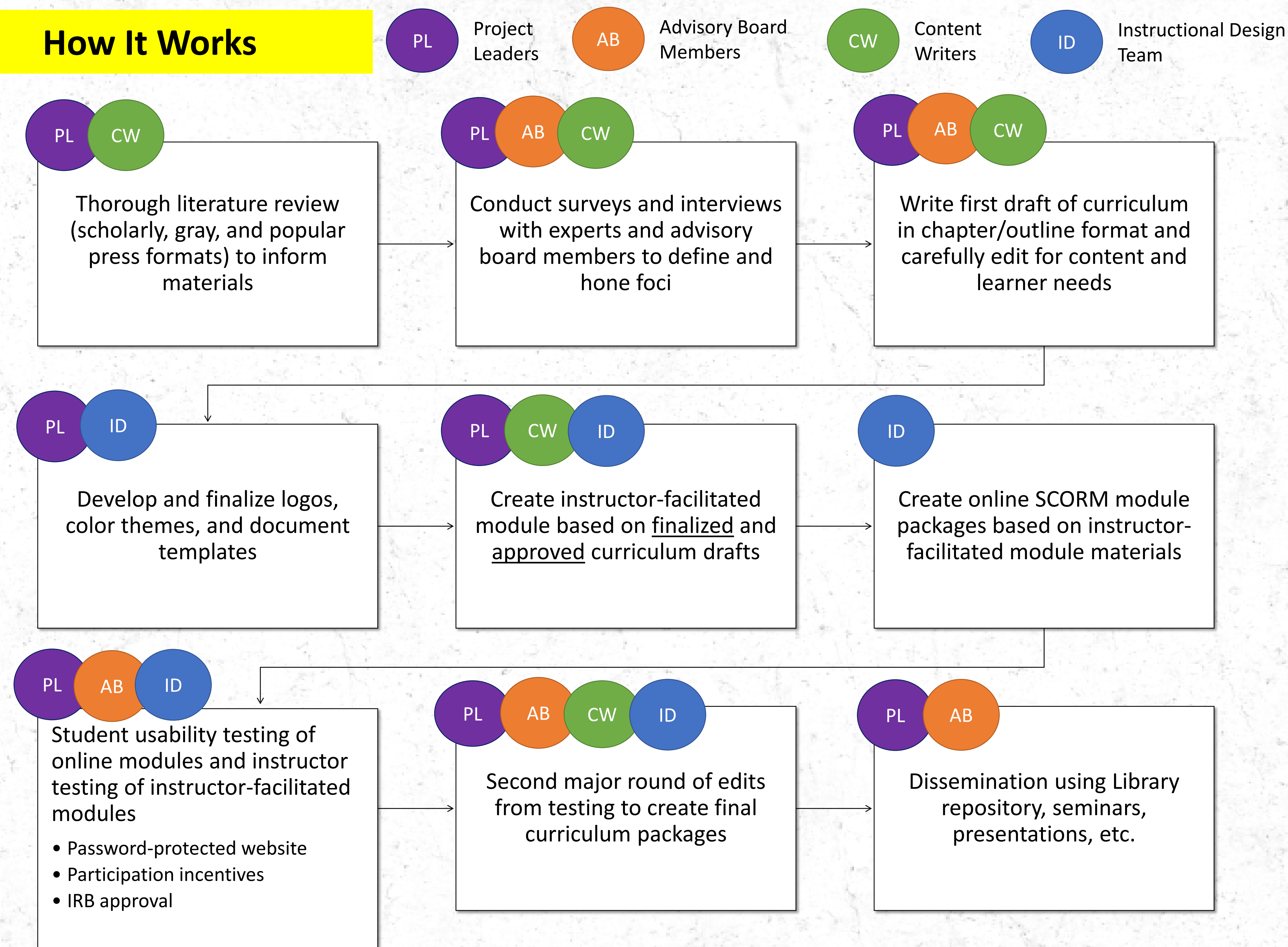
Introduction

- University faculty and secondary agriculture education teachers need curricular resources to inform their teaching (Easterly & Simpson, 2020).
- However, time for curriculum development is limited (Smalley & Smith, 2017)—free ready-to-use packages can meet this need.
- We combined expertise of multiple groups to create curriculum packages for two facilitation formats.
- The projects' complex nature required an innovative process.
- Projects were supported by the USDA National Institute of Food and Agriculture under grant numbers 2017-70003-26386, 2019-38414-30265, and 2020-70003-32313 and under the Texas A&M University Presidential Transformational Teaching Grant Program, Round 1.

Costs/Resources Needed

- Costs will vary depending on
 - breadth and depth of curriculum,
 - technology,
 - personnel compensation,
 - pilot testers, and
 - instructional design team members
- Our major cost involved **personnel**: project directors, subject matter experts, instructional designers, graduate research assistants, undergraduate student workers, advisory committee members, industry reviewers, and other reviewers

How It Works



Results to Date

We pioneered this process with Leggette (2017–2020), building on it with the succeeding two projects. A quantitative summary of team member numbers in each role is shared in the table below.

Project	Advisory Board Members	Content Experts	Graduate Students	Instructional Designers	Testers and Reviewers
Leggette (2017-2020)	10	2	1	2	20+
Leggette (2019-2022)	10	3	1	4	25+
Pina (2020-2022)	12	12	1	5	50+

Advice to Others

- ❖ **Testing:**
 - ✓ Build a contact list of instructors willing to test modules in courses from project onset, adding additional names over time.
- ❖ **Administration:**
 - ✓ Wait times and administrative activity loads are high with complex content and large reviewer groups. Closely plan and monitor deadlines to address delays promptly.
- ❖ **Authorship:**
 - ✓ Record and report authorship and acknowledgements statements accurately using Contributor Roles Taxonomy (CASRAI, n.d.).
 - ✓ Add library experts to your team to assist with authorship, copyright open access and other publication topics.
- ❖ **Technologies:**
 - ✓ Identify programs to be used and create accessible list of training videos for each, if available, to quickly train new team members.
 - ✓ Microsoft Office, Dropbox, Techsmith Camtasia, and Microsoft Teams were essential to create high-quality products and enable multi-person access.
 - ✓ Create and follow standard data management backup storage, version control, and clear folder organization.

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This project was supported by the USDA National Institute of Food and Agriculture through a Secondary Education, Two-Year Postsecondary Education, and Agriculture in the K-12 Classroom (SPECA) Challenge Grants Program no. 2019-38414-30265 and the Higher Education Challenge (HEC) Grants Program, grant no. 2020-70003-32313. Support was also received from the Texas A&M University Presidential Transformational Teaching Grants Program, Round 1.

