

Extension Education

Extension Programming During a Pandemic: The Cooperative Director Foundations Program

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Abstract

In summer 2020, when it became apparent that our Extension programming was not likely to be done in person in 2020/2021, a broad group of collaborators, representing universities, cooperative centers, and practitioners, began discussions to collaborate on some form of online learning platform to offer our Extension education modules for new directors on agricultural cooperatives boards across state lines and develop a program that was unavailable in most states. The objective is to describe the process, content, and lessons learned from our collaboration two years later. A legal entity was formed to develop and launch a common learning platform across our universities to handle registration fees and to pay for the development of the programs. The result is a comprehensive, peer-reviewed curriculum composed of 23 digital modules comprising 15 hours of content with a workbook written by a collaboration of 11 universities and 15 authors. We used state-of-the-art technology including storyboards, recorded lecturers, animations, vignettes, and online assessments for the digital content. In May 2022, adoption of the programming has begun slower than expected but moving in the right direction. We discuss lessons learned and about evolving new insights about future Extension programming for this largely underserved group.

1 Introduction

Agricultural cooperatives in the United States were made an explicit mission of the Cooperative Extension Service through the Cooperative Marketing Act enacted by the U.S. Congress in 1926 (Froker 1933). That act also allowed the formation of federated cooperatives, some of the largest of which are known as of this writing as CHS, CoBank, GROWMARK, and Land O'Lakes, as well as marketing agencies in common, some known today as American Dairy Cooperative, Midwest Agri-Commodities, and World Wide Sires. The act created various agencies in the U.S. Department of Agriculture (USDA) to study a broad spectrum of issues associated with agricultural marketing and purchasing cooperatives. Finally, the act authorized its inclusion in state Cooperative Extension Service programs.

In 2022, university faculty with Extension responsibilities to cooperatives exist in at least nine U.S.-based universities, with many having three-way appointments in Extension, resident instruction, and research for annual evaluation purposes. Many of these faculty are more broadly thought of as agribusiness economics and management faculty. In addition, six other universities have faculty doing research in cooperatives. These faculty collaborate through the North Central Extension and Research Activity (NCERA 210) project titled "Improving the Management and Effectiveness of Cooperatively-Owned Business Organizations," which can be found at https://www.nimss.org/seas/51862. These



Extension programs are often done in partnership with federated cooperatives or state and regional cooperative councils, and include curriculum with modules on accounting, finance, governance, human resources, leadership, cooperative principles, and strategy. We collaborate in two national programs, Farmer Cooperatives and National Council of Farmer Cooperatives director workshops, for directors and their stakeholders. Boland et al. (2021) report that more than 4,000 directors and employees of cooperatives attended land-grant university Extension programs nationwide in 2018.

In summer 2020, when it became apparent that Extension programming was not likely to be done in person in fall 2020 or in early 2021, we began discussions to collaborate in a novel way, envisioned as an online learning platform to offer our Extension programs for new directors on agricultural cooperatives boards across state lines. This was an underserved audience in more than 40 states because these types of programs are not available from Extension or state cooperative councils on a regular basis. The objective of this article is to describe the process, content, and lessons learned from our collaboration two years later.

A legal entity called the Center for Agricultural Cooperative Director Development was formed to develop and launch a common learning platform across our universities and cooperative centers and to handle operations, such as registrations, tuition, and reporting, for the distribution of the programs to cooperatives. The result is a comprehensive, peer-reviewed curriculum composed of 23 digital modules comprising 15 hours of content with a workbook written by a collaboration of 11 universities, 3 cooperative centers, and 15 authors. In April 2022, adoption of the programming, which started slowly, has begun. We discuss lessons learned from the experience at the end of our article.

2 Background on Extension and Research Programming in Cooperatives

Cooperatives play an important role in supporting higher education, which aligns with the cooperative principle of duty to educate members and potential members about the mutual-benefit or cooperative form of business structure. Land-grant universities have encouraged the development of classroom curriculum for high school and collegiate education on cooperatives, Extension programming, and research to better understand the cooperative business model. Boland and Barton (2013) reported that in 1976, there were more than 40 PhD agricultural economists with Extension responsibilities in land-grant universities. The majority of these were 100 percent Extension or close to it with a resident instruction component in teaching. Over the past 45 years, there has been dramatic change. In 2022, this number is eight faculty with PhDs with all but one having 50 percent Extension appointments or less. In addition, there are another six MS level cooperative Extension associates, with four being at universities with faculty and two in the same program without faculty. Two other PhD faculty with research appointments have some outreach responsibilities. All but one of these 16 MS or PhD level individuals have an endowment funded by cooperatives to support their program.

Boland et al. (2021) note that as a group of organizations, cooperatives are likely the largest contributor of endowments in departments with historical roots in agricultural economics with more than \$30 million in at least 12 universities that are used to fund faculty endowed chairs, graduate student fellowships, undergraduate student scholarships, classroom naming rights, and other similar activities. The endowments created by agricultural cooperatives have a strong preference for resident instruction through a collegiate class in cooperatives, Extension programming, and applied research.

King et al. (2010) provide an overview of cooperative research in the agricultural economics literature. These authors note that two of the nine contributions by agricultural economists in agribusiness economics and management were explicitly linked with cooperatives: (1) introduction of economic reasoning and pioneering theoretical advances in the study of agricultural marketing and management and (2) playing a key role in the design of institutions that are the foundations of agricultural credit markets. The *Journal of Economic Literature* code Q130 is entitled "Agricultural Markets and Marketing; Cooperatives; Agribusiness." Boland and Crespi (2010) found that the two topics



identified in King et al. (2010) have been the subject of more than 100 dissertations since 1951. Extension education efforts were originally focused on income distribution by cooperative boards of directors and how income is allocated as member capital (Wells, 1935; Hedges, 1951). Koller (1952) discussed the lack of education about why patronage income is being retained by the cooperative as equity. Both topics are important components of Extension programming in accounting and finance.

Recent research projects, many of which were funded by our stakeholders, include studies focusing on cooperative finance and capitalization (Briggeman et al. 2016; Li, Jacobs, and Artz 2015), subscription projects from 21 firms on agribusiness employee occupational health and safety (Risch et al. 2014; Hanson and Boland 2020), a 2019 special issue of the *Western Economic Forum* (Boland 2019; Cook 2019; Kenkel et al. 2019; McKee, Parsons, and Kenkel 2019; Park et al. 2019), and the updating of the *Handbook of Research on Co-Operatives and Mutuals* (Elliott and Boland 2022). A team effort led to an open access collegiate textbook in English and Spanish with peer review and suitable for tablet, e-readers, audio, and a print-on-demand feature with no royalties (Boland 2017).

The U.S. Congress authorizes and appropriates funds for the USDA Rural Cooperative Development Grants, which funds centers that engage in business development in a similar matter as an Extension program. Some of those centers are associated with land-grant university Extension programs in cooperatives such as the University of Wisconsin Center for Cooperatives, The Ohio State University, or the Cornell Cooperative Enterprise program, but large centers are not the typical way Extension programming is done to our stakeholder groups. Instead, our stakeholder groups engaged with university faculty in a variety of ways.

Our key stakeholders include state and regional cooperative councils and centers; state, regional, and national cooperative and agriculture-oriented trade and technical associations; large, federated agricultural cooperatives; and cooperative-oriented legal, financial, and strategic advisors. These groups help us work with our Extension audience, which is agricultural cooperative directors. Most programs have an advisory committee that meets once or twice during the year. This advisory board commonly includes cooperative directors, cooperative employees such as Chief Executive Officers or General Managers, the state cooperative council director, and donors. Engagement with the advisory board usually includes a discussion over education plans for the coming year, budgets, and a review accomplishment of the past year. Those who do not have advisory committees often rely on interactions with their state councils and the cooperatives that work directly with them for feedback and input on educational programming and resources.

University faculty with Extension responsibilities engage with stakeholders at an annual luncheon at the National Council on Farmers Cooperatives meetings in February. The typical format is an "Educators Luncheon" where the cooperative educators, state councils, and other stakeholders meet with a program agenda that includes a short description of what we are doing in our state programs. Our multistate research group, NCERA 210, which includes a discussion of our education programs is always held as a preconference before one of the largest cooperative education programs, Farmers Cooperatives. We usually have 5 to 10 stakeholders in attendance at our meeting. The academic group consistently serve as guest speakers, moderators, and facilitators, and regularly provide input for the planning committee.

2.1 Motivation for an Introductory or On-boarding Program for Cooperatives Directors

For many years, several stakeholders, including larger federated cooperatives and state and regional cooperative councils, had approached us with the idea of an introductory program for new directors that would be offered consistently, as was the case in states like Iowa, Kansas, and Nebraska. However, even in states with these programs, the number of attendees for in-person training was decreasing over time prior to the pandemic, due to consolidation of marketing and purchasing cooperatives, which has



accelerated in recent years as discussed by Boland (2020). A bimodal distribution is increasingly common in agriculture with growing numbers of very large and very small farms as discussed by Bekkerman, Belasco, and Smith (2019) and Hoppe (2014), which meant the population of potential producers to serve as directors is decreasing as well.

An examination of the USDA data on the number of farms and number of cooperatives suggests that farm consolidation has increased faster than farm supply/grain marketing cooperatives (MacDonald, Hoppe, and Newton 2018). However, Boland (2020) reports that the frequency of agricultural cooperative consolidation has increased substantially since 2000, and in areas of growth in crop yields, such as Iowa and Nebraska, consolidation has happened quickly in farm supply and grain and oilseed marketing cooperatives. Simultaneous with this decline was that the number of total boards of consumer cooperatives such as electric and telephone and mutual insurance cooperatives had not decreased, which meant more opportunities for directors who might seek to serve on only one board. Consolidation meant that directors needed to travel further for meetings, which was not conducive for attendance.

The development of directors' finance, governance, and leadership skills is a key area of focus for Extension curriculum. Cooperative boards of directors may not always reflect their membership in the sense that successful farmers, producers, or ranchers may not seek to run for the board of directors. Furthermore, a cooperative board of directors faces challenges distinct from investor-benefit firms, in that directors are selected solely from the membership. Thus, the available skill set for the board of a cooperative is more likely to be homogenous, drawing from agricultural business backgrounds, as compared to the boards of investor-benefit firms, which are often heterogeneous by design. Boland et al. (2021) reported that developing leadership skills for directors was the second most sought research priority from focus groups done with our targeted segment of cooperative directors as part of a broader self-study retreat. It took a pandemic to surface the idea of a multi-university area effort to develop common, national Extension programming for new directors of agricultural cooperatives.

3 The Process for Our Collaborative Program

Extension programming for agricultural cooperative directors is done in January to early March and in November to mid-December because of the nature of the marketing year in the northern hemisphere. In March 2020, on the cusp of the global pandemic reaching the United States, our universities announced that in-person Extension programming was suspended as part of overall university protocols. However, these protocols did not have immediate impact. By summer 2020, it was apparent that we would not likely be offering in-person programs in fall 2020 and winter 2021. A concept paper was written by two of the authors to discuss a potential collaboration on a digital product using an online learning program aimed at new cooperative directors. The concept paper built upon suggestions made by our stakeholder groups in past years because the audience was underserved in many states but never adopted by us due to a desire to maintain our own programs. That concept paper had the components of an Extension logic model, which we have provided in Figure 1 (Taylor-Powell and Henert 2008).

A feature of an online, collaborative multi-state Extension program was that as each director purchased a license for the program, they would be placed in a cohort, and the collaborators who contributed to the program's content would hold monthly Zoom office hours to discuss their respective modules and assist the director-learner develop a peer network across the United States. During summer 2020, a series of biweekly Zoom meetings were done to discuss the program's development. The program was nicknamed *Foundations*, referring to concepts that were considered foundational for the success of new agricultural cooperative directors on a board. Such directors typically had a high school degree and some college coursework that led to a two-year college degree. The participants in the biweekly Zoom calls included all but one of the land-grant university Extension specialists in cooperatives and others



 Challenges Declining numbers of new coop directors to participate in offered programming. Shrinking funds and provision of regular director development programs through state Extension or co-op councils. Pandemic causes uncertainty of inperson programming. Opportunities Increased stakes of director education due to industry complexities drive need. Growing recognition of need for diversity of gender, experience, and education in training co-op boards. 	 Academic Extension and outreach faculty. Endowment funding and state and federal Extension funding. Industry Advisory board consisting of co-op board leadership, subject-matter experts, practictioners. Cooperative education funds. Cooperative national and state councils. 	 Multi-institutional collaboration between universities and cooperative associations. Strategic planning by core leadership group to ensure concensus and cohesion around critical content. Content-creator toolkit designed to aid instructors' development of digital resources (e.g., "modules") with common formats. Peer review and revision of modules. Educational materials packaged for electronic distribution, with some on-demand print features. Created a legal entity outside of any existing industry or academic affiliation 	 Digital content that can be streamed and used asynchronously in an on-demand framework. 23 modules led by 13 different instructors. Short, instructor- led videos with concepts, terminology, and demonstrations. Downloadable and fillable workbook to accompany modules. 	 Knowledge Development of information in a consistent manner to be used across multiple states by multiple instructors. Actions Application of knowledge into a digital structure to encourage education ondemand. Condition New directors who are users of the content have the ability to increase their education and skills in a self-paced environment with some instruction in monthly Zoom sessions.
and education in training co-op		entity outside of any existing industry or		
Situation	Inputs	> Activities	> Outputs	Outcomes

Figure 1. Cooperative Extension Logic Model for Our Foundations Program

who had active outreach and research programs in cooperatives. A public foundation provided a small grant to help us get started, and Iowa State University provided additional funding.

3.1 Establishing Ground Rules for Collaboration

The participants agreed to several ground rules for collaboration. First, each author retained copyright materials to their individual content, and authors would be identified by their respective universities.



However, collectively, the *Foundations* product would be owned by a mutual benefit legal entity called Center for Agricultural Cooperative Director Development (CACDD). A legal entity was advantageous to house the content so it would be available in the more than 40 states without such Extension programs. The mutual benefit entity has no fixed assets or employees but has the flexibility to handle registration fees.

A second ground rule was agreement to peer review and provide authors proper credit for each module, so it could be considered for each author's annual university evaluation. A commonly used, well-tested online learning platform *Thinkific* was chosen to house *Foundations* at https://cacdd.thinkific.com/collections. A third ground rule was to abide collectively in a coordinated submission and review process that ensured a common "look and feel" among the modules but allowed for creativity by each author. One collaborator, Chris Kopka, who had previous experience in building online learning content and working with various platforms volunteered to create an outline for submission of materials. Authors were to submit text without images, tables, figures, or any graphics. The author, as a content creator, was to develop a storyboard for each slide that could be used by a graphics designer to understand the intricacies and flow of the materials. Implicit with this was our desire to be inclusive and include diversity where it made sense so that it was not just our voices as authors. The mutual benefit entity, CACDD, anticipated a nominal license fee that would enable annual costs of licensing *Thinkific* to be recaptured and any additional revenue to be shared between each author's Extension program in their state where there was an Extension program.

Finally, each author as content creator submitted common components of the learning modules: (1) a list of learning objectives; (2) common and important questions that an early tenured director would feel comfortable asking fellow directors or members of management in a board meeting; (3) post-assessment questions; and (4) a sampling of publicly available publications and other resources that a director-learner could access if they wanted more information.

3.2 Identification of Module Topics

The authors created a list of topics deemed to be introductory and foundational for a new or early tenured director. These were built upon topics taught previously by some in their own Extension programs and from stakeholder input. The list of topics was created in a shared, collaborative document, and each participant signed up for a topic, which we called modules. Each module was assigned two reviewers from the other collaborators. Table 1 shows the 23 different modules and authors. Modules were initially grouped into these broad categories: accounting and finance, governance, cooperative basics, strategy, and cooperative principles. Much of the information was publicly available in one form or another or being used in existing Extension programming, so no new content had to be created but most of it required modification for the development of the modules. This is discussed in the next section.

4 The Development of Modules

Foundations ultimately is a collection of educational modules with integrated visual and written media developed by 15 different content creators. In addition to developing the written materials described earlier, collaborators created presentation slides, wrote scripts for their own voice-over for each slide, and developed visual images to supplement the written content. Two of the collaborators assumed responsibility as producers of *Foundations* for coordinating these materials across the content providers. On the content creation side, Michael Boland created biweekly Zoom meetings throughout the summer and early fall of 2020 and worked with each collaborator to check that the review process was implemented, established consistency among and within groups of modules, and enforced deadlines. Chris Kopka and Boland identified, interviewed, and hired an editor, graphics designer, and actors to help provide voices for vignettes in various modules, and were responsible for the final integration of materials for each digital module.



Introduction	Authors (Content Creators)	
What is a cooperative?	Hannah Scott and Tom Worley	
The uniqueness of cooperatives?	Greg McKee	
Prime Board Directive	Chris Kopka	
Introduction to board terminology and procedures	Keri Jacobs	
Legal rationale for cooperatives	Chris Kopka	
Officers and committees	Frayne Olson	
Serving as an ambassador for your cooperatives	Courtney Berner	
Basics of financial statements	Brian Briggeman	
What is patronage?	Brian Briggeman	
Income and profit distribution	Michael Boland	
Evolution of law for cooperatives	Chris Kopka	
Duties of directors' part 1	Michael Boland	
Duties of directors' part 2	Michael Boland	
Policy governance	Kristi Schweiss	
Director effectiveness	John Park and Diane Friend	
Strategic thinking part 1	Will Secor	
Strategic thinking part 2	John Park	
Principles of equity management	Phil Kenkel	
Board evaluation	Courtney Berner	
CEO evaluation	Chris Kopka	
Financial benchmarking for cooperative directors	Phil Kenkel	
Summary of basic cooperative finance and financial management	Keri Jacobs	
Property rights in cooperatives	Matthew Elliott	



4.1 Module Storyboards

To organize the full set of module materials and assist the graphics designer in understanding the collaborator's vision for their module, each author was required to develop a storyboard, which is a way to organize material to help a graphics designer to visualize the digital content, images, and transitions between each slide. Collaborators used graphical content or images from Creative Commons or purchased licensed images to mitigate the risk of potential copyright issues. Similarly, ideas for creating an animation or vignette to illustrate a concept were included along with suggestions for a script, dialogue, and key learning message.

Here is an example of how one storyboard came together. The content creator of Governance and Duties of Directors had 15 slides, which were just text with no graphics, images, or figures. These were peer-reviewed for consistency in language, correctness, and adherence to learning objectives. The learning outcomes, questions, storyboard, and other materials were reviewed by Boland and Kopka to ensure all the pieces were in place for production. Each slide had instructions for the graphics designer or editor on what that slide might look like digitally. For example, a slide in the governance module had a list of Director Duties. The creator had suggestions for an image such as a picture of legal documents, which might be found in Creative Commons, or licensed for a fee, and could be used on the "Duty of Obedience" slide. Similarly, an introductory slide suggested that the four Duties of Directors be written as text be placed into a table or some other graphic.

Finally, the storyboard for this example suggested that an animation or vignette of 30 to 45 seconds be done with actors describing a situation where the director is pondering a situation related to a member and board confidentiality that would require the director to think about their duties of loyalty. The content creator wrote the dialogue for the actors, and in turn, the producer created or animated that content in a vignette. Throughout the modules, screen images were used to prompt the director-learner to pause the video and complete an activity or task. These were done as a way for the director-learner to check their understanding of a concept or idea.

4.2 Creation of Digital Content

Chris Kopka worked with the editor, graphics designer, and actors to create a draft of the digital content. The management of material collection, design, and integration required intense focus on deadlines. Our group benefited from hiring an outstanding editor who has significant expertise and a graphic designer who has depth of knowledge and access to the co-publisher that resulted in teamwork and collaboration. Teamwork and collaboration among the production team was key. As a draft of a module was undergoing production, the early versions were made available to the content creator to ensure that their storyboard ideas were developed as envisioned. Some modules were straight forward, notably in accounting and finance, because the concepts were similarly straight forward and lent themselves to production. Other modules, such as property rights, had more elaborate content, which resulted in more time and creativity in generating digital content to match the storyboard.

4.3 Creation of a Workbook

We understood from our own Extension experiences that director-learners desired hard copy content to write notes or "pull off the shelf" to consult before a board meeting. Therefore, we worked with our graphic designer to create a workbook that would also be available electronically in each module. The workbook contains a chapter for each module and the learning objectives, exercises, assessments, and suggestions for additional resources. The workbook is available online in a print-on-demand format in either softcover or hardcover, and distribution of the book included access via various online book publishers such as Amazon, Barnes and Noble, and Lulu. An Adobe Acrobat version of each chapter is available within the *Thinkific* site for each corresponding module, with the electronic file included in the overall tuition for the program. The files have the ability for the director-learner to enter content onto the



Adobe Acrobat version. Having a print-on-demand workbook was to recognize that some directorlearners might be in geographic locations where broadband or internet access was limited in terms of upload and download speeds.

4.4 Timetable

As many Extension colleagues experienced, there was a need to move quickly to develop programs during the pandemic. Externally we knew that to be relevant, we needed to be ready for November 2020 because our Extension programs generally begin that month. Authors began submitting draft modules for production and peer review in early September, concluding the end of October 2020. A deadline of December 1, 2020, for final drafts following peer review was used because many new directors came on board at an annual meeting that was held in the December to February time frame. Despite being in the middle of a pandemic and with resident instruction techniques being developed by virtually every author in the fall semester, the authorship, peer review, and production deadlines were achieved.

5 The Thinkific Online Learning Platform

Thinkific was chosen as our platform because of the functionality it offered in terms of registration capabilities, the ability to create licenses for multiple individuals or firms, and fee collection. Various internet browsers were tested to make sure the site worked for each one without any issues. A director-learner purchases a license to use the training materials, completes a registration form online, takes a pre-assessment that is designed to help us measure our learning objectives before and after completion of *Foundations,* and pays a license fee for 12 months of training access. This fee allowed us to build or update content in future years and cover our variable costs.

The modules were ordered sequentially as shown in Table 1 so that each director-learner completes each module in that order. However, other than the prerequisite pre-assessment, a director-learner can complete any module at any time without going in order. Each module begins with the director-learner playing the digital media file, which was in an MP4 format and stream the slides, digital media, vignettes, and content creator's voice and video. Simultaneously, the director-learner can open the Adobe Acrobat file for each module and print if so desired or use the print-on-demand hard copy if that had been purchased by a director-learner. At the end of the digital file, the director-learner is prompted to complete a post-assessment, which is captured and populated into a file with similar data from other director-learners. We can compare pre- and post-assessment data to measure the learning objectives.

6 Marketing Foundations to Extension Stakeholders

The original marketing plan relied upon working with the key stakeholders we knew from our ongoing Extension work, which were the state and regional cooperative councils. Each state has a cooperative state council such as the Kansas Cooperative Council or is a member of a multi-state regional council such as the Cooperative Network in Minnesota and Wisconsin that undertakes advocacy work on behalf of its members, who are cooperatives and, in many cases, provide educational programs or sponsor such programs with the state Extension specialist in cooperatives. Chris Kopka developed a series of promotional materials that could be used by these councils to market to their members. In addition, the *Thinkific* platform can, theoretically, have co-branding or private labeling, so that a local state or regional council be specifically identified for their membership base.¹

The original marketing and pricing plan, after the variable expenses of the *Thinkific* platform, such as legal, accounting, and other fees had been paid, was to charge a \$1,000 fee that would be split between the state/regional cooperative council and the state cooperative Extension program at the land-grant

¹We found that the *Thinkific* platform has a look and feel like Canvas, which is widely used by many colleges and universities for resident instruction.



university or contributing cooperative center. With this structure, we intended to provide an incentive for the state/regional council to market and promote the product, in conjunction with our Extension programs, with the state cooperative Extension program. The marketing and pricing strategy was developed with counsel from a group of seven key state/regional council stakeholders who included the executive team of the national association of state cooperative councils to listen to our ideas and learn about *Foundations*. However, the state councils did not want any such revenue-based incentives and, instead, viewed the online learning platform and content as a potential member benefit, except in two cases where there were existing programs. There was strong, initial conceptual interest to help market and promote *Foundations*. Ultimately, a \$500 registration fee was used, which enabled coverage of annual variable costs assuming 15 directors purchased a license.²

A promotional set of materials that describe and demonstrate *Foundations* and the online learning platform were made available to state and regional cooperative council officers and the author's university Extension programs. These materials were used as a public service announcement and distributed from February through April 2021. These were used in 24 programs in 15 states in the winter and summer of 2021. Notwithstanding these efforts, and broad introduction from a spectrum of cooperative stakeholders, in April 2022, we have three groups of cooperatives in different states using the program this summer and fall. What have we learned?

7 Lack of Distribution Success and Lessons Learned

A few factors, in and outside our control, contributed to the initial lack of distribution success within the first year of launch in 2021. We describe them here.

7.1 The Responsibility for Director Education

Chris Kopka told us that, "The Education Principle is the great, unfunded principle of cooperation." Even within a cooperative and across cooperatives, there is no clear mandate about who is responsible for ensuring that a board of directors understands its roles and responsibilities. Best practices would say that this should be a board function. Yet, we knew that many cooperatives delegated this function to their Chief Executive Officers or General Managers. Risch et al. (2014) mentioned that these individuals, in general, have more direct reports than their counterparts in investor-oriented firms. Thus, for some of these cooperatives, education for new directors as they onboard, while important, may not surface as a priority until the day that director shows up in the board room. We could have done a better job working with this key stakeholder, but we knew they were dealing with employee and regulatory issues related to the pandemic.

7.2 Collaborating with State Cooperative Councils

The choice of collaborating with state and regional cooperative councils was appropriate given that they are among the most important, strategically well-positioned stakeholders for our Extension programs. To be sure, not every agricultural cooperative is a member of their state's council. Furthermore, a cooperative council's primary mission is typically advocacy, with state legislatures meeting in the winter and spring. While it was possible to provide demonstrations for the cooperative council staff, we inferred that the advocacy function was preeminent for their members, particularly during the pandemic. While councils were encouraged and interested in the online learning platform, the initiative did not remain among their key priorities at that time as the pandemic developed and their members were dealing with supply chain, regulatory, cybersecurity, and labor challenges.

²The range of resident student, in-state tuition for a one credit class at the authors' universities in 2020 ranged from \$400 to \$790. *Foundations*, at 15 hours of content, is like a one-credit course.



7.3 Underestimation of the Preference for In-Person Learning

The pandemic brought virtually all education into an asynchronous or remote type format for some period. We expected that our targeted audience of early tenured agricultural cooperative directors, too, would seek similar learning opportunities. However, we consistently found from one-on-one discussions during and after launch that farmer-directors expressed preference for in-person learning in a peer, interactive, networking-oriented framework. While often expressing conceptual interest in an online format such as *Foundations*, as a practical matter few signed up to leverage and learn from the online platform.

7.4 Lack of Adoption in Our Own Extension Programs

While a collaborative group of authors developed the program, none of the authors decided to replace or complement their specific, existing in-person programs. Furthermore, individually and collectively, we did not use it to create a new Extension offering in states where there was no such product. Notwithstanding efforts in launching *Foundations*, each of the authors, individually, found themselves responding to near-constant changes in teaching modalities, family considerations, and more, inhibiting time, attention, and further resources from being dedicated to the fledgling online learning platform and the *Foundations* training content.

7.5 Boards Desire a Site License

We considered a new or early tenured director as the primary learner and primary purchaser. However, we soon learned that on the relatively rare occasion when an agricultural cooperative expressed interest, it revolved around purchasing *Foundations* through an all-board site license that would be available to all directors on a board. We have found, colloquially, that cooperatives are "hacking" the initial service launch idea, with the intention of using individual modules at monthly or quarterly board meetings as a shared educational component. In addition, we are now receiving requests for one or more of the creators to serve as a facilitator-instructor of the content with the full board. To date, this is our most positive indication of a beneficial use-case for *Foundations* going forward. As such, we have made modifications to the online platform to provide for full-board annual site licenses at \$2,000 and are experimenting with offering facilitation for an additional fee.

8 Green Shoots for the Future

Attendance at our in-person state meetings was high in winter 2022, and some incorporated components of the digital content into director education programming, especially from the governance modules. A typical program in January 2022 included in-person attendance for directors and instructors, panelists and some speakers brought in via Zoom, and digital media from the modules streamed with instructor facilitation. It is too soon to know whether attendance was higher due to lack of in-person meetings in 2021 or if the format brought in more directors. We have learned some things that bode well for the future.

8.1 The Need to Blend Digital and In-Person Learning

Early evidence from the change in teaching modalities caused by the pandemic suggests that a hybrid module with some in-person, remote, and asynchronous teaching is likely to have greater interest, with higher rates of adoption by farmer-directors serving on agricultural cooperative boards for subject matter like *Foundations* modules where examples, peer-to-peer learning environments, and "learning by doing" via facilitated case studies may be more appropriate (Black 2020; Pruitt, Tewari, and Mehlorn 2020). Our thought was that the online office hours in Zoom done remotely would help with this, but the reality is that *Foundations* looks too much like an online undergraduate class offered asynchronously. We have since made some changes in formatting.



8.2 Need for Advanced Material

It may be that the material in *Foundations* is perceived as too basic for some cooperative directors who believe they are "above-average" and want advanced material. We have been discussing a collaboration to offer content in a hybrid manner, along with more advanced material. This will occur in spring 2023. Anecdotally, we hear from directors serving on the more sophisticated federated cooperative boards that *Foundations* is the right level at which training is needed, but the value is in the discussions that happen when a group uses *Foundations* collectively.

8.3 Seeking Out Additional Partners

Some federated cooperatives own retail locations that once were cooperatives but have now merged into the federated cooperative. These merged entities maintain a board of directors with modified responsibilities. Much of our content in background, strategy, governance, and some accounting apply to these cooperative boards. As of May 2022, some federated cooperatives are actively considering a broad, multicooperative site license. If engaged, *Foundations* would also be tested for use across larger board and employee cohorts.

The issue of certification has been discussed. The National Association of Corporate Directors (NACD) provides a certification process. Before the pandemic, certification was done based upon a certain number of credits for attendance at their programming. Only several cooperative directors were members and had achieved NACD certification. One of the collaborators (Boland) has been active with NACD, and some of their content is principally designed for directors of public-benefit or investor-benefit firms. Three state cooperative councils provided similar certification based on attendance. These three state cooperative councils offer a beginning agricultural director certification program, where certification is achieved by attending the requisite offerings, which comprises 20 hours of instruction.

In 2022, NACD moved their certification to a 3.5-hour exam with a \$4,900 fee and additional coursework including a 15-hour set of materials like our *Foundations*. One of the authors, Boland, is taking the exam in summer 2022 and we will learn more about the process of certification. Our stakeholders have not asked for a certification, but we are studying what NACD is doing to learn more for our advanced training.

8.4 Collaboration Success Among Extension Specialists Amid Distribution Failure

The clear success was the ability to collectively pivot quickly and initiate a multi-university, cooperative center, and practitioner collaboration during a pandemic. Few of the authors before the pandemic had undertaken online learning production, complete with storyboards, animations, video modules, and online platforms. The success in publishing *Foundations* encouraged most of the collaborators to undertake a second project of significance, namely a new *Handbook of Research on Co-Operatives and Mutuals* (Elliott and Boland, 2022). Eleven of the 15 *Foundations* collaborators contributed to this effort. At the same time, building on the success of U.S.-focused collaborative publishing, the base of contributors for the handbook was expanded to include global co-authors. Many of the production steps learned via *Foundations* were leveraged for the handbook, including the decision to appoint two co-producers (co-editors in the context of the handbook), conduct weekly Zoom sessions with authors around the world, and institute an enhanced peer review process for the 30 chapters. We also negotiated with the book publisher in a similar way as we did our legal entity. Each author maintains copyright for their chapter, and the book publisher agrees to let students have access to each chapter if a university library purchases the handbook. This collaboration would not have been possible without building upon the momentum from the collaboration begun with *Foundations*.



9 Summary and Conclusions

We formed a legal entity called the Center for Agricultural Cooperative Director Development to have a common learning platform across our universities to handle registration fees to pay for the development of the programs. There is some cautious optimism that we will get more adoption in the future given that some of the in-person training is being brought back, but no one is saying we will do everything the way we did pre-pandemic. We did not achieve our goals in 2021, but 2022 has started out with more optimism.

At least four lessons were learned in this process. First, after years of discussing it, we decided to, in fact, work more formally across the state in a way that allows us to maintain the identity of our own universities, Extension programs, and cooperative centers, and bring learning products and services to market as one entity and serve underserved audiences in more than 40 states. A second lesson was that we were able to pivot to include facilitation once we understood how the directors wanted to use the information. The evaluation process with our modules did not provide that knowledge, but our engagement with stakeholders made that evident to us, and we had the flexibility to go ahead and move in that direction. Third, our educational programs are now being integrated into existing regional and national education programs. We have attended and been involved in planning committees for these programs but are now being more intentional and strategic in that process. Finally, it is evident to us that our stakeholder groups value and appreciate what we are doing collectively. The best evidence of this has been increased attendance and visibility to our programs coming out of the pandemic by our stakeholder groups.

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References

- Bekkerman, A., E.J. Belasco, and V.H. Smith. 2019. "Does Farm Size Matter? Distribution of Crop Insurance Subsidies and Government Program Payments across U.S. Farms." *Applied Economics Perspectives and Policy* 41(3):498–518.
- Black, M. 2020. "Insights for Asynchronous Lecture Viewing Behavior." Applied Economics Teaching Resources 2(5):18–25.
- Boland, M.A. 2019. "Governance in Agricultural Cooperatives." Western Economic Forum 17(2):42-51.
- Boland, M.A., B.C. Briggeman, K. L. Jacobs, P. Kenkel, G. McKee, and J. Park. 2021. "Research Priorities for Agricultural Cooperatives and Their Farmer-Members." *Applied Economic Perspectives and Policy* 43(2):573–585.
- Boland, M.A. 2020. "Measuring Duration in a Life Cycle Analysis of U.S. Agricultural Cooperatives." Staff Paper 20-03, Department of Applied Economics, University of Minnesota. <u>https://ageconsearch.umn.edu/record/302578</u>.
- Boland, M.A., and D. Barton. 2013. "Overview of Research on Cooperative Finance." Journal of Cooperatives 27:1–14.
- Boland, M.A., and J. Crespi. 2010. "From Farm Economics to Applied Economics. The Evolution of a Profession as Seen through a Census of Its Dissertations from 1951 to 2005." *Applied Economic Perspectives and Policy* 32(3):456–471. <u>https://doi.org/10.1093/aepp/ppq012.</u>
- Boland, M.A. 2017. *Introduction to Cooperatives and Mutualism*. St. Paul, MN: University of Minnesota Libraries Publishing. <u>https://conservancy.umn.edu/handle/11299/191871</u>.
- Briggeman, B., K. L. Jacobs, P. Kenkel, and G. McKee. 2016. "Current Trends in Cooperative Finance." *Agricultural Finance Review* 76(3):402–410.
- Cook, M.L. 2019. "The Emergence of GICL, the Graduate Institute of Cooperative Leadership: Engaged Scholarship, Theory and Practice in Cooperative Education." *Western Economic Forum* 17(2): 24-33.
- Elliott, M. and M.A. Boland. 2023. *Handbook of Research on Co-Operatives and Mutuals*. EE Elgar Edwards Publishing, forthcoming.
- Froker, R.K. 1933. "Extension in Cooperative Business Management." Journal of Farm Economics 15(4):685–690.
- Hanson, E., and M.A. Boland. 2020. "Safety Climate at Agricultural Cooperatives." Journal of Safety Research 75(1):150–154.
- Hedges, H. 1951. "Financing Farmer Cooperatives." Journal of Farm Economics 33(4), Part 2:918–926.
- Hoppe, R.A. 2014. *Structure and Finances of U.S. Farms: Family Farm Report, 2014 Edition*, EIB-132, U.S. Department of Agriculture, Economic Research Service. <u>https://www.ers.usda.gov/webdocs/publications/43913/50364_eib-132.pdf?v=42103</u>.
- Kenkel, P., G. McKee, M.A. Boland, and K. Jacobs. 2019. "The New Role of Agricultural Cooperatives in Pooling and Distributing Tax Deductions." *Western Economic Forum* 17(2):16–23.
- King, R.P., M. Boehlje, M.L. Cook, and S.T. Sonka. 2010. "Agribusiness Economics and Management." *American Journal of Agricultural Economics* 92(5):554–570.
- Koller, E.F. 1952. "Some Aspects of the Financing of Farmers' Cooperatives." Journal of Farm Economics 34(5):949-957.
- Li, Z., K. Jacobs, and G. Artz. 2015. "The Cooperative Capital Constraint Revisited." Agricultural Finance Review 75(2):253–266.
- MacDonald, J.M., R.A. Hoppe, and D. Newton. 2018. "Three Decades of Consolidation in U.S. Agriculture." EIB-189, U.S. Department of Agriculture, Economic Research Service. https://www.ers.usda.gov/webdocs/publications/88057/eib-189.pdf.



- McKee, G., J. Parsons, and P. Kenkel. 2019. "Livestock Marketing Benefits in the 21st Century." *Western Economic Forum* 17(2):34–41.
- Park, J., D. Friend, G. McKee, and M. Manley. 2019. "A Framework for Training and Assessment of the 21st Century Cooperative." *Western Economic Forum* 17(2):5–15.
- Pruitt, J.R., R. Tewari, and J.E. Mehlorn. 2020. "Reflections in Adjusting to a Global Pandemic from a Regional Agribusiness Program." *Applied Economics Teaching Resources* 2(5):32–43.
- Risch, C., M.A. Boland, J. Crespi, and M. Leinweber. 2014. "Determinants of Occupational Safety in Agribusiness Workers." *Applied Economics Perspectives and Policy* 36(3):546–559.
- Taylor-Powell, E., and E. Henert. 2008. "Developing a Logic Model: Teaching and Training Guide." Madison, WI: University of Wisconsin-Extension, Cooperative Extension, Program Development and Evaluation. <u>https://peerta.acf.hhs.gov/sites/default/files/public/uploaded_files/Logic%20Model%20Guide.pdf</u>.

Wells, J.E. 1935. "Financing Cooperatives." Journal of Farm Economics 17(1):167–175.

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