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Authors

Smith, Martin

Worker, Steven

Meehan, Cheryl

et al.

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Comparisons of Professional Development Approaches for Out-of-School Time Educators

MARTIN H. SMITH, UC Cooperative Extension (UCCE) Specialist and Faculty Member at UC Davis;

STEVEN M. WORKER, 4-H Youth Development Advisor, UC Agriculture and Natural Resources;

CHERYL MEEHAN, Staff Research Associate, UC Davis;

JENNIFER MCCAMBRIDGE, Director of Education, Outreach, and Diversity, NSF Center for Sustainable Polymers, University of Minnesota;

ALEXA MAILLE, 4-H STEM Specialist, Cornell Cooperative Extension;

CHARLES MALONE, 4-H Youth Development Educator, Cornell Cooperative Extension;

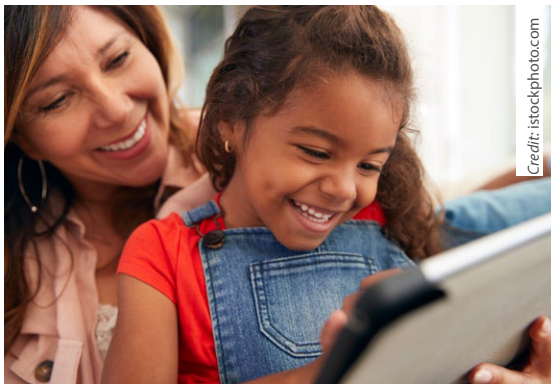
AMIE MONDL, Extension Educator for 4-H Youth Development, University of Minnesota, Extension;

ANNE STEVENSON, Extension Educator and Extension Professor, University of Minnesota, Extension

Introduction and background

Millions of young people engage in out-of-school time (OST) programs every year (Afterschool Alliance 2014; Peterson 2013). OST programs are offered before or after the school day, on weekends, or during summer months. OST programs are offered in a variety of settings, including on school grounds, in clubs, at summer camps, in outdoor settings, at museums, and at science centers (Durlak and Weissberg 2013; Eshach 2007; King and Dillon 2012). The content of structured educational opportunities varies from one OST program to another; overall, the scope of possible content is extensive and includes subject matter areas such as reading; arts enrichment; science, technology, engineering, and mathematics; nutrition and healthy eating; and physical activity (Afterschool Alliance 2014; Bodilly and Beckett 2005).

Participation in structured, skills-based OST education strengthens academic performance, motivation to learn, school attendance, physical health, mental health, and occupational success (Durlak and Weissberg 2013; Mahoney et al. 2010; McCombs et al. 2017). Additionally, youth improve their self-perception and develop a deeper sense of belonging in school, exhibit more positive social behaviors, and demonstrate reductions in substance abuse and problem behaviors (Durlak and Weissberg 2013; Durlak et al. 2010; Vandell 2013). Typically, youth involved in OST education are intrinsically motivated to participate when they are provided with diverse choices in programming as well as



Credit: istockphoto.com

opportunities that can help them develop, thrive, and succeed (Afterschool Alliance 2015; Bridges 2013; Eshach 2007; Peterson 2013; Lauer and Smith 2013).

Professional development for OST educators

Out-of-school time educators' roles and responsibilities are similar to those of classroom educators (Borden et al. 2011; Chi et al. 2013): Educators are tasked with delivering high-quality educational programming to youth. However, OST educators—including professionals, adult volunteers, and teenage volunteers—vary widely in education, background, and experience (Bradshaw 2015; Donaldson et al. 2019; Freeman et al. 2009; Stedman and Rudd 2006). Thus, to help ensure high-quality programming, there is a need to advance the knowledge and skills of these educators through effective professional development (Culp and Bullock 2017; Dierking 2007; Garst et al. 2014; Smith and Schmitt-McQuitty 2013; Worker and Smith 2014).

The professional development approaches discussed in this publication apply to all out-of-school time youth development programs. Our experience with professional development has been with volunteer and teenage educators in the 4-H Youth Development Program. The 4-H Youth Development Program is a large nationwide OST youth education program for individuals aged five to eighteen. As part of the U.S. land grant university system, 4-H reaches over six million youth annually with in-school, afterschool, camping, and community-based programming that uses a positive youth development framework (Arnold 2018). Programs are typically facilitated by paid staff or volunteers (adults and teens) who may or may not have prior teaching experience or formal training in education.

Effective professional development

Out-of-school time educators benefit directly from effective professional development that advances their knowledge and skills (Smith and Shea 2013). Consequently, educators who engage in professional development are better prepared to handle the inherent challenges associated with teaching, collaborating, and facilitating lessons, and are better equipped to support improvements in youth engagement and learning (Kennedy 2016). The results are improved program quality and youth development outcomes.

Salient characteristics of effective professional development include (Guskey and Yoon 2009; Penuel et al. 2007)

- extended duration of participation (an investment in time) so that educators can incorporate new ideas and strategies into their teaching practices incrementally
- active learning, whereby educators can discuss, reflect on, and engage with concepts cognitively and socially
- emphasis on the deepening of pedagogical knowledge (that is, teaching skills)
- issues of practice situated in authentic contexts
- data-driven decision making that uses formative evaluation data (i.e., using data to monitor learning so educators may assess themselves and improve their pedagogical practices)
- connections to broader organizational and systemic efforts, including aligning to an organization's theory of change or youth development framework, organizational strategic goals, and other ongoing professional development programs

Several professional development approaches include these six characteristics.

Effective professional development helps provide opportunities for educators to experience "ah ha!" moments that aid them in attaining new insights into familiar situations (Brown 2009). These insights help educators understand how they can use new teaching practices or implement different pedagogical approaches (e.g., asking youth open-ended questions, facilitating group reflection, or redirecting learning to focus on important concepts). Furthermore, these realizations are usually "discovered" through group reflection and dialogue rather than through explicit instruction.

Classifying approaches to professional development for educators

To achieve desired goals or outcomes, the selection of a professional development approach by an OST organization should be intentional and purposeful. To aid in the selection, we have reviewed five common professional development approaches for educators. (Note that the five approaches discussed in this guide are not the only professional development approaches available.) In table 1, the five approaches are summarized based on their frequency (whether sessions involving the approach are single episodes or whether they occur over an extended duration, with multiple increments); facilitation type (whether sessions are expert-led or educator-led); and participant grouping (whether sessions are individual-based or group-based).

In the following sections, we provide a fuller appraisal of the five professional development approaches by discussing their key elements, their strengths, the challenges associated with them, and their potential applications—as well as issues involved in adapting them for virtual uses. We also provide concluding thoughts on the effectiveness of each approach.

Table 1. Common educator professional development approaches

	Professional development approach				
	Expert-led episodic workshops	**Step-up incremental**	**Communities of practice**	**Lesson study**	**Organizational capacity-building using train-the-trainer**
Summary	synchronous meetings during which a group of educators focuses on a specific topic for a set amount of time	set sequence of educator workshops that alternate with curriculum implementations	organized networks of educators who deepen their expertise by interacting with, sharing with, and learning from one another	an educator community of practice that uses a cyclical process whereby educators implement lessons, collect formative data, and meet to discuss improvements to teaching	Experts provide professional development to trainers; the development focuses on both subject matter (curriculum) and effective teaching strategies (pedagogy); trainers then provide professional development to educators
Frequency	single episode	extended duration	extended duration	extended duration	for trainers, extended duration; for educators, single episode
Facilitation type	expert-led	educator-expert collaboration	educator-centered	educator-centered	for both trainers and educators, expert-led
Participant grouping	group-based	group-based	group-based	group-based	group-based
Recommended uses	policy distribution, safety guidelines, educator orientation	multiple-day curriculum; novice educators	multiple-day curriculum; novice and experienced educators	multiple-day curriculum; novice and experienced educators	program expansion and dissemination

Expert-led episodic workshops

Episodic (also referred to as stand-alone, discrete, or single-event) workshops are synchronous meetings (virtual or in person) during which a group of educators focuses on a specific curriculum, topic, or pedagogical strategy for a set amount of time (fig. 1)—for example, a 2-hour session on curriculum implementation, or a half-day workshop on experiential learning. Sessions are limited by time and typically involve an expert presenting information through lectures, demonstrations, group discussions, and interactive activities.

Key elements

- By design, sessions are single events. They are intended to cover a specific set of information in one meeting (for example, 2 hours on a Saturday, from 10:00 a.m. until noon, at a local library).
- A presenter (typically the expert) prepares an agenda and learning objectives, leading participants through the workshop's content or a set of activities.
- Participation ends at the close of the session; thus, there is no sustained commitment by either the presenter or the participants.

Strengths

- This approach may increase awareness of particular subject matter, or introduce a curriculum, pedagogical strategy, or new policy.
- Participants make only a one-time commitment.

Challenges

- Episodic workshops tend not to result in changes to educator behavior or in the use of new practices (Fleischer and Fox 2003; Garet et al. 2001). Such workshops tend to be disconnected from educators' learning settings and lack coherence with or practical applications to educators' practice, thus preventing the workshops from affecting educators' instructional repertoire.

Credit: National 4-H Council

- Intermittent workshops of short duration are unlikely to result in increased program quality or improved youth development outcomes.
- Some facilitators of episodic workshops, despite the time limitations, attempt to cover many topics. This can result a "mile-wide and inch-deep" approach, resulting in content that lacks coherence.
- In episodic workshops, educators typically lack the time and opportunity to think critically about their teaching practices and to reflect on how to incorporate new content, pedagogical strategies, or policies.

Potential applications

Episodic workshops may be used to

- introduce a new policy, procedure, or organizational initiative that does not require educators to adapt new practices or change how they teach
- reach large groups of people simultaneously
- introduce new curriculum resources; focus on overview of content and pedagogy; provide information on the availability of the resources
- achieve the aims listed above when programmatic resources (for example, time or funding) are limited

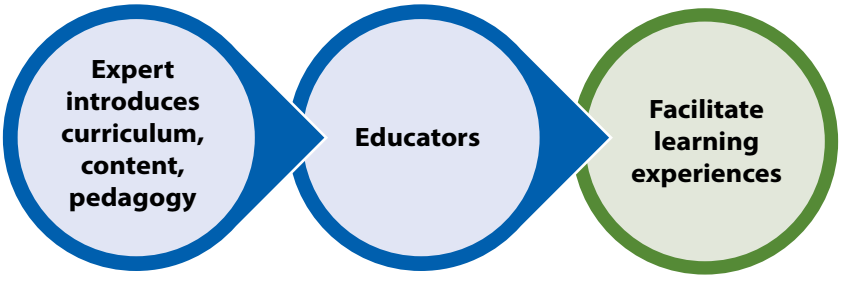


Figure 1. Episodic workshop.

Virtual adaptations

- Few adaptations are needed for the virtual realm; workshops may simply be moved to a synchronous online meeting platform (for example, Zoom). Presenters may need to employ different techniques to interact with participants.

Conclusion: Effectiveness characteristics of episodic workshops

Using the following criteria, we rate whether this approach exhibits the six salient characteristics of effective professional development (as mentioned above, under the "Effective professional development" heading):

☐ = does not exhibit

☒ = partially exhibits, or exhibits if included by the presenter

☒ = exhibits

Episodic workshops are ineffective at significantly improving educators' skills or pedagogical practices (Penuel et al. 2007). Specifically, they typically fail to include several of the six salient characteristics of effective educator professional development. In some situations, expert presenters may incorporate elements of active learning or connections to broader organizational efforts.

☐ = extended duration of participation

☒ = active learning

☐ = emphasis on deepening pedagogical knowledge

☐ = situated in authentic contexts

☐ = data-driven decision making that uses formative evaluation data

☒ = connections to broader organizational and systemic efforts

Episodic workshops are the form of professional development most often offered to 4-H educators (Smith et al. 2017). However, episodic workshops tend not to exhibit the six salient characteristics of effective professional development—that is, episodic workshops tend not to have extended durations, be situated in authentic contexts, or rely on data-driven decision making.

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Step-up incremental

The step-up incremental training model (Smith and Enfield 2002) involves a sequence of educator workshops that alternate with curriculum implementations to help ensure mastery of content and methodology, while providing the opportunity for group reflection and feedback (fig. 2). As educators advance their knowledge, skills, and experiences, each subsequent workshop represents a "step up" from the preceding one. This approach is a hybrid between two other professional development approaches: expert-led workshops and communities of practice/lesson study. While facilitators take an active role in organizing and presenting the workshops, participants—as they gain experience, learn to collect formative data, and reflect on their own practice over time—contribute more to the process with each workshop.

Key elements

- An introductory workshop lays a foundation of instructional methodology upon which curriculum content can be applied during subsequent workshops.
- During the workshops, facilitators share curriculum content and model pedagogy. Participants then practice, plan, and present curriculum activities to each other to help develop their confidence and competence.
- A significant amount of time is dedicated to group reflection. Facilitators and participants spend time reviewing and discussing each activity with respect to pedagogy, instructional goals, and logistical challenges.

Strengths

- The step-up incremental model allows for a guided professional learning experience that incorporates expert knowledge, integrates authentic practice, and supports collaborative educator development through reflection and peer feedback.


Credit: National 4-H Council

- The approach contains characteristics of communities of practice and lesson study in that it supports social connections over multiple group meetings, uses formative feedback from educator reflections to improve practice, and supports the development of strong networks of educators with similar goals and challenges.

Challenges

- This approach requires that participants commit to a series of at least three workshops held over time. Scheduling difficulties leading to participant attrition may arise.
  - The step-up approach is also dependent on an expert facilitator. This could prove challenging in some circumstances—for example, when it is difficult to find individuals with relevant expertise.

Potential applications

This approach is

- suitable for novice educators, volunteer educators such as docents, new afterschool educators, 4-H volunteers, and teens serving as cross-age teachers

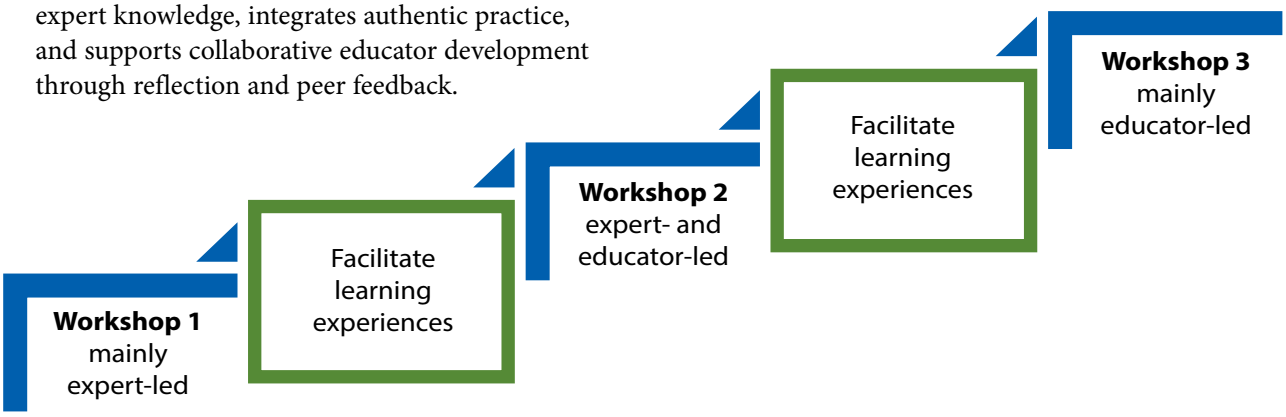

Figure 2. Step-up Incremental Model.

- promising for research settings in which investigators want to test the efficacy of educational materials—and which require fidelity of curriculum implementation across participants

Virtual adaptations

- Workshops may be delivered virtually using video communication platforms. Organization of documents and other materials can be supported with software products that allow sharing and editing of files.

Conclusion: Effectiveness characteristics of the step-up incremental model

The salient characteristics of this approach to effective professional development are rated using this key:

☐ = does not exhibit

☒ = partially exhibits, or exhibits if included by the presenter

☒ = exhibits

The step-up incremental model helps extend the duration of episodic workshops, providing opportunities for educators to reflect on their practice over time (Smith and Enfield 2002; Smith et al. 2004). Exhibiting the other elements of effective professional development depends on the expert presenters and what they ask educators to do between the workshops.

☒ = extended duration of participation

☒ = active learning

☒ = emphasis on deepening pedagogical knowledge

☐ = situated in authentic contexts

☒ = data-driven decision making using formative evaluation data

☒ = connections to broader organizational and systemic efforts

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Communities of practice

Communities of practice are organized networks of peers who have a similar role—such as OST educators—and who deepen their expertise by interacting with, sharing with, and learning from one another (fig. 3). They provide a forum for participants to grow as practitioners through collaborative exploration of topics that are directly relevant to their practice.

Key elements

- This approach is iterative, involving multiple meetings (no defined number) that occur over an extended duration.
- Educators learn actively, reflect on issues related to their teaching, and explore new ideas collaboratively.
- Learning is situated in real-world contexts.
- Every community of practice includes three primary characteristics.
  - Domain
    - What topics or issues are members going to address?
    - What are the connections to the organization's mission and youth development framework?
  - Community
    - Who are the members? What roles will they play?
    - How and how often will we meet?
    - What are the community's norms and ground rules?
  - Practice
    - How will the community of practice be proactive in sustaining constructive conversations among group members?
    - What types of resources are most useful to share?


Credit: National 4-H Council

Strengths

Communities of practice

- offer educators continued motivation for, acknowledgment of, and support for self-development efforts
- increase educators' confidence and advance their knowledge and skills, while also helping to build the overall capacity of an organization
- provide a forum for mentoring novice educators and include apprenticeship-like opportunities
- help educators build relationships and a sense of belonging, generate a spirit of inquiry, and advance professional confidence and identity

Challenges

- **This approach** requires a commitment of time and effort by educators.
- One size will not fit all possible settings; each community of practice will address unique issues or concerns.

Potential applications

Communities of practice

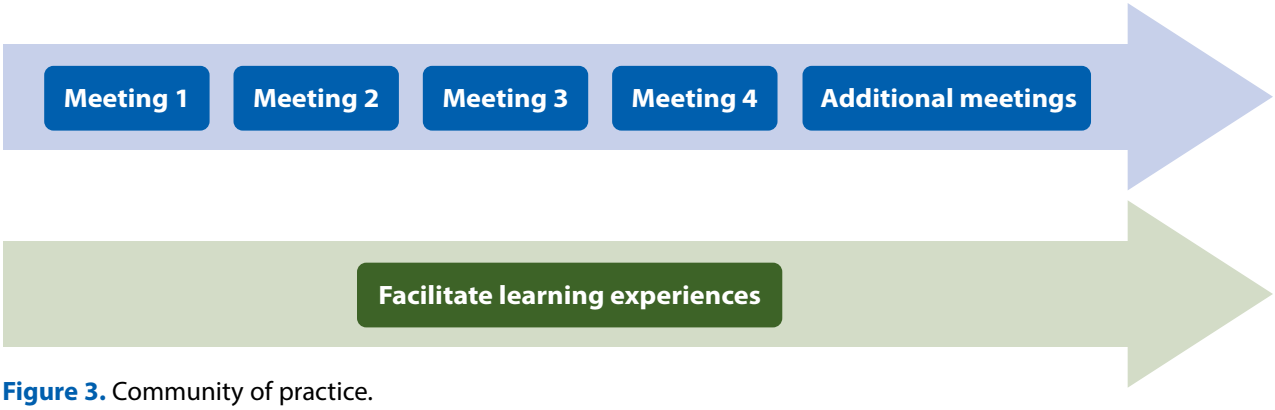

Figure 3. Community of practice.

- can involve a small group of educators (for example, six to ten people) working on delivering a curriculum over an extended duration
- are suitable for educators who are at one site or are distributed across multiple locations
- work well with mixed groups—that is, when novice and experienced educators work together

Virtual adaptations

Communities of practice

- can occur in person or virtually, or can be implemented through a hybrid (blended) approach that involves in-person and virtual meetings
- are easily adapted to the virtual setting; a synchronous online meeting room would be required to bring educators together

Conclusion: Effectiveness characteristics of communities of practice

The salient characteristics of this approach to effective professional development are rated using this key:

☐ = does not exhibit

☒ = partially exhibits, or exhibits if included by the presenter

☒ = exhibits

Communities of practice typically exhibit all six characteristics of effective educator professional development (Yildrim 2008). Specific attention must be paid to collecting formative data for data-driven decision making.

☒ = extended duration of participation

☒ = active learning

☒ = emphasis on deepening pedagogical knowledge

☒ = situated in authentic contexts

☒ = data-driven decision making using formative evaluation data

☒ = connections to broader organizational and systemic efforts

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Lesson study

Lesson study, a specific type of community of practice, is an educator-centered approach that occurs in increments over extended periods of time and in which educators facilitate lessons from the same curriculum (fig. 4). Lesson study relies on educators collecting feedback (formative data) from learners, themselves, and sometimes from independent observers to use in reflecting on their teaching practice.

Key elements

- Lesson study is iterative; multiple meetings occur over an extended duration.
- Lesson study group meetings alternate with lesson implementation so educators can reflect on feedback and refine their practice in real time.
- The emphasis is on educators' reflections on their teaching methods; they use formative data to improve their teaching and increase learning by youth.
- Lesson study is focused on real-world contexts. The focal points of lesson study meetings are the curriculum used and the teaching and learning that occur in the contexts where educators are engaged.
- Lesson study involves data-driven processes. Formative data from the learners and self-assessments from the educators are collected and interpreted to inform activity improvements, teaching, and learning. Formative data represent information—gathered through observation, surveys, artifacts, or other methods—to be used by educators to reflect and assess either their own abilities or youth progress toward learning objectives. In out-of-school time settings, formative data are often collected from the educator's own written reflections, from youth input or surveys, or from another observer's written notes.

Strengths

Lesson study leads to

- improved educator competence—the iterative approach helps educators improve knowledge and skills over time as they reflect, using data
- improved lesson planning—educators use formative data (from youth and educators) to make data-driven decisions regarding lessons; changes to new lessons are informed by formative data
- enhanced social connections—professional relationships are built, feelings of isolation are reduced, motivation improves, and collaboration increases
- collegial and supportive environment—a forum is provided for mentoring novices; the practice includes apprenticeship-like opportunities

Challenges

Lesson study

- requires a commitment of time and effort
- requires a commitment to ongoing collection and use of formative data; members of lesson study groups need to identify formative data strategies and tools that are developmentally appropriate

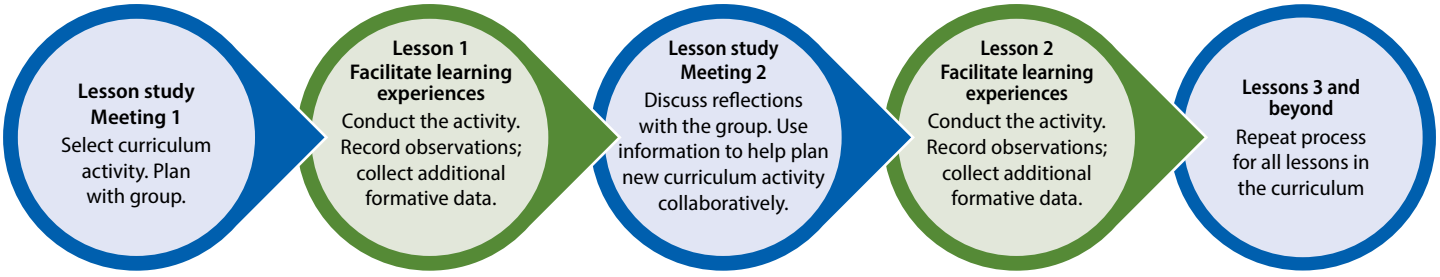

Figure 4. Lesson study.

Potential applications

- Lesson study can include programs or projects of extended duration in which small groups of educators work with a common curriculum (for example, afterschool clubs; SPIN clubs; camps).
- Lesson study groups are typically site-based; they may involve educators who are distributed across multiple sites (for example, within the same community or county).

Virtual adaptations

- Lesson study may be implemented in person, at virtual meetings, or through a blended (hybrid) approach (a combination of virtual and in-person meetings).
- Lesson study is easily adapted to the virtual setting. A synchronous online meeting room may be required to bring educators together.

Conclusion: Effectiveness characteristics of lesson study

The salient characteristics of this approach to effective professional development are rated using this key:

☐ = does not exhibit

☒ = partially exhibits, or exhibits if included by the presenter

☒ = exhibits

Lesson study exhibits all six characteristics of effective educator professional development.

☒ = extended duration of participation

☒ = active learning

☒ = emphasis on deepening pedagogical knowledge

☒ = situated in authentic contexts

☒ = data-driven decision making using formative evaluation data

☒ = connections to broader organizational and systemic efforts

Prior research on the use of lesson study with 4-H adult volunteers as direct providers has shown significant improvements in their understanding and use of effective pedagogy and content knowledge.

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Organizational capacity-building using train-the-trainer

Train-the-trainer is an approach in which an expert provides professional development to trainers who are from the same organization, focusing on both subject matter (curriculum) and effective teaching strategies (pedagogy) (fig. 5). Train-the-trainer approaches may be implemented using episodic workshops, communities of practice, lesson study, or other professional development approaches. The result is that a cadre of trainers—internal to the organization—can then provide professional development training to educators. Subsequently, the educators will facilitate learning experiences with youth.

Key elements

- Experts provide professional development to trainers using a selected approach (for example, workshops or communities of practice) with a focus on (1) the subject matter (curriculum), (2) effective teaching practices (pedagogy), and (3) information on how to train educators effectively.
- Trainers provide professional development to educators using a selected approach (for example, one-time workshop, step-up incremental training, community of practice, or lesson study).
- Educators, not trainers, implement learning experiences with youth.

Strengths

- The tiered structure (trainers → educators → learners) of train-the-trainer may be more cost-effective than hiring external trainers, or when compared to other professional development methods—particularly when recruiting trainers who already belong to the organization.
- The train-the-trainer approach affords opportunities for trainers to personalize the content, improving its relevance to educators. The new cadre of trainers, being internal to the organization, are able to provide tailored examples to show educators connections to their work and make content more relevant.
- This approach builds organizational capacity by developing a competent internal training team. Internal trainers may also experience higher levels of acceptance because they are familiar to the educators and have existing relationships with them.

Challenges

- Train-the-trainer, compared to other approaches, requires more time to prepare the trainers (for example, short, intense efforts lasting three to five days, or sessions that occur once a week over the course of ten to twenty days). In addition, trainers face heightened complexity in terms of both learning subject and deciding *how* to teach the subject.
- Because train-the-trainer usually involves a specific curriculum, trainers may find it difficult to tailor the curriculum to account for special needs and contextual factors.
- Trainers' fidelity to the approach may not be assured.

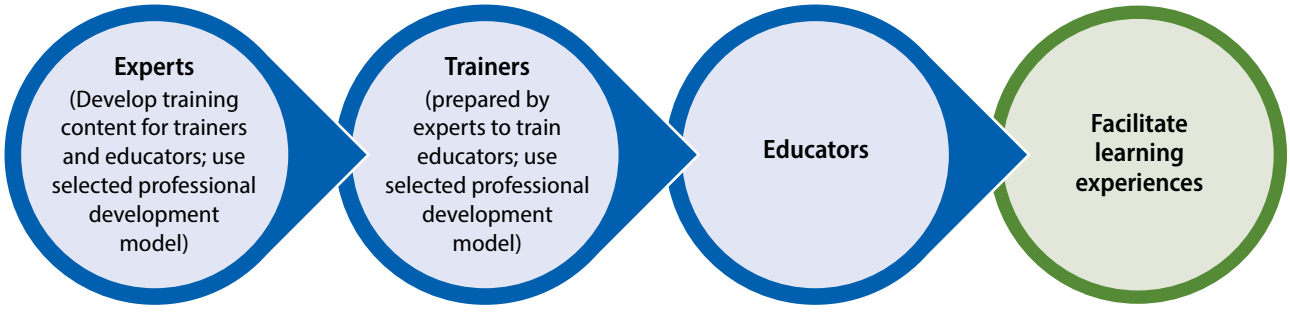

Figure 5. Train-the-trainer.

- Some programs rely on information delivery (lectures), an expert-to-novice approach that suffers from disadvantages similar to those associated with episodic workshops, and which does not lead to changes in educator practice.

Potential application

Train-the trainer might be applied when

- a specific or planned curriculum or program model is available that may be implemented as written and does not require educators to adapt for specific audiences
- resources are limited but a need exists to ensure that educators advance their awareness or knowledge of a curriculum or subject matter

Virtual meeting adaptations

- Few adaptations are needed; sessions may be moved to a synchronous online meeting room (for example, Zoom).
- Presenters may need to employ different pedagogical techniques to improve interactivity and increase participation.

Conclusion: Effectiveness characteristics of train-the-trainer

The salient characteristics of this approach to effective professional development are rated using this key:

☐ = does not exhibit

☒ = partially exhibits, or exhibits if included by the presenter

☒ = exhibits

Train-the-trainer approaches often involve episodic workshops. Sometimes, they incorporate additional characteristics of effective professional development for educators, including extended duration, pedagogical knowledge, and connections to broader organizational efforts.

☒ = extended duration of participation

☒ = active learning

☒ = emphasis on deepening pedagogical knowledge

☐ = situated in authentic contexts

☐ = data-driven decision making using formative evaluation data

☒ = connections to broader organizational and sys temic efforts

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Summary

In table 2, we present a condensed comparison of the effectiveness of each professional development approach. Overall, only communities of practice and lesson study exhibit all six characteristics of effective professional development. The other three approaches—workshops, step-up incremental, and train-the-trainer—may exhibit only a few elements, or may exhibit others only if the presenter intentionally includes them.

Table 2. Condensed comparison of professional development approaches

	Professional development approach				
	Expert-led episodic workshops	**Step-up incremental**	**Communities of practice**	**Lesson study**	**Organizational capacity-building using train-the-trainer**
Key takeaway	generally ineffective at improving educator practice	helps extend the duration of episodic workshops, providing opportunities for educators to reflect on their practice over time	considered effective	considered effective	often involves episodic workshops
Extended duration of participation	does not exhibit	exhibits	exhibits	exhibits	does not exhibit
Active learning	exhibits if included by presenter	exhibits if included by presenter	exhibits	exhibits	exhibits if included by presenter
Emphasis on deepening pedagogical knowledge	does not exhibit	exhibits	exhibits	exhibits	exhibits if included by presenter
Situated in authentic contexts	generally does not exhibit	does not exhibit	exhibits	exhibits	does not exhibit
Data-driven decision making using formative evaluation data	does not exhibit	exhibits if included by presenter	usually does not exhibit	exhibits	does not exhibit
Connections to broader organizational and systemic efforts	exhibits if included by presenter	exhibits if included by presenter	exhibits	exhibits	exhibits if included by presenter

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