

INVESTIGATING THE EFFICACY OF A COLLABORATIVE EVALUATION MODEL
USING VISUAL RESEARCH METHODS AND CONCEPT MAPPING STRATEGIES
TO EVALUATE A PROFESSIONAL LEARNING PROGRAM FOR
TEACHERS BUILDING COMPETENCY IN MEDIA LITERACY

by

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of

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DEDICATION

This dissertation was written almost entirely at the dining room table in our small condo as my family lived their lives around me. They watched television, played video games, brought me glasses of water, and quietly left to visit my mom to give me more time to work. The dogs sat at my feet keeping them warm while my fingers flew across the keyboard. I will always worry that the moments I stole from our time together as a family had a negative impact on all of us but for now, it seems we are still all in one piece and still just as close. As I near the finish, in the final phase of writing I am beyond grateful that I had them near me as I worked. For each night when I closed the laptop to take a break or when I struggled to open it back up again, they were there. Loving me. Supporting me. Believing in me. Joe, Jessica, Riley, and Mom, while I hope to write another much more interesting book that you might wish to read one day---this first one is for you.

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GLOSSARY CONSTRUCTS AND OPERATIONAL DEFINITIONS

Professional Learning Professional learning is the change process a teacher undergoes as they acquire knowledge and build confidence in a specific area of study. Professional learning happens over an extended period. It differs from professional development in this way. It is not a single “one and done” training experience. It is an ongoing practice in which teachers deliberately develop, practice, and reflect on their learning over time. In this study, growth in professional learning is self-reported by teachers

Media Literacy Media Literacy is the ability to access, analyze, evaluate, create and act using all forms of media messages, including, print, video, audio, images, graphics, and social media posts.

Media Literacy Education is the implementation of teaching strategies that foster and support media literacy in students and teachers

PBS Media Literacy Certification for Educators by KQED (PBS-MLC) is a self-paced, online, professional learning program for K-12 teachers interested in bolstering their media literacy competency. It was developed by KQED, the PBS station in San Francisco, California.

Cohort is a group of like-minded individuals who deliberately gather online or in person in pursuit of a common goal or to learn more about a specific topic

Professional Development specialized training for teachers and administrators intended to improve professional knowledge, build skills and bolster confidence in one or more content areas. Professional development programs are different from professional learning programs because they are not ongoing. Professional Development may be a single workshop or class and

does not provide multiple opportunities for teachers to develop, practice and reflect on their learning.

Evaluation is the process of identifying the value or merit of a program, determining if program goals were met and making recommendations for the future

Collaboration is the act of working together toward a common goal with the goal of making changes and improvements

Collaborative Evaluation is an evaluation method that involves the stakeholders in the program to measure impact and made recommendations for the future of the program. It is participatory in nature and is often referred to as “participatory evaluation.”

Competency is the possession of sufficient knowledge in a content area. For this study, growth in competency in media literacy is self-reported by teachers

ABSTRACT

The purpose of this study was to investigate the efficacy of collaborative evaluation as a method for understanding and describing how a collaborative professional learning program for educators will improve their self-reported skills in media literacy while engendering them to deliberately employ media literacy practices in their lesson plans. The model investigated for this study had six phases and employed the use of surveys, collaborative discussion, and the creation of visual artifacts to gather descriptive data to answer research questions. This participatory approach to evaluation gave participating teachers the opportunity to evaluate the data alongside the researcher. The role of the researcher as the program evaluator and facilitator leveraged the collegiality and strong relationships developed over time to gather detailed data about the professional learning program and the self-reported growth in media literacy competency of the teachers. Facilitators of professional learning for teachers can employ a collaborative evaluation model to gather testimony from participants describing their experiences that will inform the design of future programs for teachers. Findings suggest that including teachers in the evaluation of the programs in which they participate is an effective evaluation strategy that increases the chances that the data collected will inform the future professional learning programs for teachers. This model is recommended for programs that are meant to support teachers in building their competency in a specific content area, such as media literacy, over time through collaboration with peers.

CHAPTER 1

INTRODUCTION

What is Program Evaluation?

In her book, *Practicing Evaluation: A Collaborative Approach*, Rita O’Sullivan (2012) defines the specific role of evaluation research compared to basic research. She asserts evaluation research focuses on the effectiveness of a particular program to achieve its stated goals in a particular place at a particular time, while the goal of basic research is to contribute generalizable data to the literature. O’Sullivan maintains that evaluation is conducted to assess the effectiveness of a program in meeting its specified goals and to determine how it can be improved (O’Sullivan, 2012). Professionals who facilitate professional learning programs for teachers seek to measure a program’s effectiveness in meeting its predetermined goals for improving teacher knowledge, practice, or student achievement. These program evaluations inform decision-making as school and program leaders strive to secure funding and make improvements to programs that will meet the ever-changing needs of teachers and students (Guskey, 2017). Organizations outside of a school district who seek to provide professional learning experiences for teachers conduct evaluations to communicate the effectiveness of their programs to meet their intended goals while also proving their value to funders and future clients (Cooper, 2017). For example, a school district implementing a new initiative to designate time during the school day for teachers to meet in professional learning communities might conduct an evaluation to determine if this initiative resulted in improved instruction for students. The results of the evaluation would help district leaders determine whether they should continue

providing this collaboration time to teachers during the school year. Another example would be a school district implementing standards-based grading by hiring a facilitator to lead professional learning for teachers to learn to use this new way to assess student performance. The district might conduct an evaluation to determine whether the professional development provided supported teachers in the implementation of standards-based grading.

Types of Program Evaluation

Program evaluations may take many forms, but researchers of evaluation models agree that the most effective strategies for evaluating programs are those which include a close alignment to the goals of the program and examine a variety of evidence to measure effectiveness (Shaw et al., 2006). Programs can undergo both formative and summative evaluation. In the case of schools and educational institutions, formative evaluations provide data that can help improve internal measures such as student and teacher outcomes, while summative evaluations provide information for external agencies to explore future funding and policy development (Corn et al., 2012). The primary reason for formative evaluation is to determine how a program can improve during implementation while the goals of a summative evaluation are to determine whether overall outcomes of the program had a positive impact on its participants while making recommendations for the future (O'Sullivan, 2004b). A key characteristic of effective program evaluation is a mutual understanding by all stakeholders that the overall evaluation is about collecting and analyzing data to identify attributes of the program that are most successful in meeting program goals as well as those that do not lead to the desired program outcomes (Cooper, 2017).

Program Evaluation in K-12 School Settings

School administrators may enlist program evaluators to assess the effectiveness of professional learning programs in achieving the desired outcomes. This can help them make decisions about future programming and overall changes in teacher learning and student performance (Guskey, 2017). In K-12 education settings, program evaluations examine the goal attainment and outcomes of a program implemented in a school setting (Frey, 2018). When designing program evaluations, qualitative, quantitative, and mixed methods evaluation designs are used to determine if a program has met its intended goals. One approach is not preferred over another rather experts maintain that mixing and matching approaches aligned to the design and desired program outcomes of a program is a trait of skilled evaluation practice (O'Sullivan, 2004b). Quantitative methods use closed ended surveys and control groups while seeking to understand the program's effects on participants during and after a program is implemented. Qualitative data can be collected via interviews, field notes, open ended surveys, and observations. Some qualitative program evaluations are conducted with intent to capture description of perceptions that may not surface from the results of a quantitative Likert scale survey.

Participatory and Non-Participatory Evaluations

Evaluation provides a systematic way to answer questions about a program (O'Sullivan, 2004a). Evaluations differ in the role played by the evaluator and the participants. These roles can vary depending on the design of the evaluation. When an evaluation is designed with a goal to gather the most objective data, the evaluator may have little to no interaction with the program

participants and often distributes and analyzes surveys from a distance (Mathison, 2005b).

Evaluations conducted at a distance can be less biased and more credible because the evaluator does not establish relationships with the participants which can make it easier to keep their biases separate from the data. Those results, however, may be less accessible to program participants since they had less direct interaction with the evaluator. Participants may also be reluctant to fully engage in an evaluation conducted at a distance since no attempts are made to develop relationships in these types of evaluations (Frey, 2018). In contrast, evaluations that are designed to be more participatory place the evaluator closer to the program participants. This design allows evaluators to establish trust with participants and often yields a unique data set that reveals more complex answers to the questions posed in the evaluation. The data generated from an evaluation using a participatory approach is often more accessible to participants and is more likely to guide program growth and change (Rodriguez-Campos, 2012). Participatory evaluation allows evaluators to get a deep description of participant perceptions and outcomes since evaluators work with intended users and stakeholders to determine the appropriate methodology and design of an evaluation (Brown & Woods, 2013). In K-12 educational settings, teachers have the potential to contribute to the evaluation in valuable ways (Guskey, 2000). If designed well, this participation provides an opportunity for teachers to reflect on the value and the benefit for themselves as teachers and for the well-being of their students (Corn et al., 2012). Some researchers have found that educators tend to shy away from participating in evaluations because they do not think they have the time, or they do not believe they possess the skills to effectively evaluate their own learning (Guskey, 2009). As a result, they elect not to participate in the process or leave it to outside experts to conduct an evaluation (Guskey, 2017). A closer look at

studies devoted to the evaluation of professional learning reveals that most programs are evaluated at a distance by outside experts who conduct quantitative surveys (Landry et al., 2010). There is very little research that examines the efficacy of an evaluation model in which teachers play an active role in analyzing the data collected in a summative evaluation of a program in which they participated (Guskey, 2016). Involving program stakeholders, such as teachers, in the evaluation process is known as collaborative evaluation and is a participatory design that can be implemented to ensure the results of an evaluation are used to improve a program (O'Sullivan, 2012). Collaborative evaluation has been utilized in the fields of medicine, business, and in some international schools for nearly two decades, but has been under-studied in American educational settings. The few studies from educational settings that exist have fallen under scrutiny for taking many years to complete (Lake et al., 2017).

Program Evaluations Conducted with Concept Mapping Methods

Concept mapping is a specific evaluation and planning strategy that can take many forms. In quantitative studies, data are arranged in shapes that are used reveal key relationships between statements generated in surveys filled out by participants (Kane, 2007). Evaluators can study these shapes and the relationships between the data points as they make recommendations for the planning and implementation of a program. Qualitative studies use concept maps as an artifact created by participants to share their reasoning (Kuzmin, 2012). These participant-generated concept maps can be powerful discussion and reflection tools for participants, as well as for program evaluators and designers. Regardless of the type of evaluation, concept maps serve as a visual representation of a program and the impact it may have had on participants. Gathering

artifacts, such as concept maps, is an evaluation strategy intended to reveal deeper understanding of a program and its value (Sutherland & Katz, 2005).

Evaluating Professional Learning for Teachers Building Competency in Media Literacy

I work for Montana PBS, the public television station in Montana, to facilitate professional learning programs for teachers who are interested in building their skills using digital tools and expanding their competency in media literacy. I developed a model for professional learning called Teachers Innovating and Learning Together (TILT). The TILT program was an on-going, small group collaboration among teachers with a shared interest in media literacy. I facilitated monthly meetings with teachers wherein we discussed tools and strategies for helping students learn using digital tools. The teachers who participated in TILT worked with me throughout two school years to study the use of technology and digital media tools in the classroom. The 2019-20 school year was spent engaged in a collaborative learning effort to earn eight micro-credentials as part of the PBS Media Literacy Certification for Educators by KQED (PBS-MLC) program. The PBS-MLC was developed by KQED, the PBS station in San Francisco, California in 2019 in collaboration with the National Association for Media Literacy Education (NAMLE) to provide educators with a free, research-based, and self-paced program for developing competency in Media Literacy Education. This program is available to any teacher who wishes to build their competency in media literacy. It can be found online and was developed to be self-paced for teachers to pursue on their own as they work with students during the school year. As a public media educator, I admired this program for its quality and unique delivery. My experiences working with teachers as a facilitator of professional learning led me to believe there could be value in providing support to teachers as

they participated in this program. Thus, I developed TILT as a collaborative model to support teachers in earning this rigorous online certification. The group met monthly to develop instructional plans and interpret the requirements of the program. As teachers began to earn micro-credentials, I could see the cohort model was providing teachers with the support they needed to earn the micro-credentials while motivating them to be more deliberate in how they taught students to navigate digital tools. I wanted to closely examine the collaboration between the teachers and how it was contributing to the growth of their competency in media literacy, so I might be able to replicate and improve upon it in another setting with different teachers. To help me evaluate the success of the program, I designed a collaborative evaluation of the TILT model using concept map building and discussion as a method for gathering evidence regarding the effectiveness of the TILT model. Research studies focused on collaborative evaluation informed the design of my evaluation model. One study conducted by Bubb and Earley (2009) indicated that using a collaborative evaluation model in educational settings is justified as many schools and organizations offering professional learning experiences do not have the resources to effectively evaluate their programs and could benefit from knowing how to self-evaluate (Bubb & Earley, 2009). Organizations, like Montana PBS, who are devoted to providing professional learning opportunities for teachers, seldom include a comprehensive evaluation in their program model and thus fail to provide a complete picture of the impact of the program to funders and stakeholders (Cooper, 2017) often resulting in the disappearance of the program.

Statement of the Problem

I entered this dissertation study as a scholarly practitioner seeking to explore problems of practice so I might use research to implement solutions that would lead to change in my field of education (Perry, 2016) . My interests in collaborative teacher professional learning and media literacy led me to develop programs for teachers that I hoped would strengthen their confidence and practice. Anecdotal feedback from teachers I visited with, informally, told me my work was helping teachers implement new strategies and try new things, but I did not have any formal data to support this. As I developed and implemented programs for teachers, I discovered the need to evaluate my programs so that I could describe their impact to other teachers, administrators, members of Montana PBS staff and future funders. Prior to this study, I had only used a single survey method to collect feedback from teachers about their experience working with me. It was challenging to get teachers to fill out the survey since they are often moving on to their next task once the professional learning program has concluded. The feedback collected on those surveys did not provide me with data that helped me judge the merit of the program and often left me struggling to describe how my programs were meeting their intended goals. My own experience as a classroom teacher helped me empathize with teachers about this. I know there were plenty of surveys about a professional learning experience I participated in that were left unanswered. It was not that I did not want to share my feedback, it was that my time was limited, and I had to prioritize tasks based on those that I felt were most impactful for my students. I did not see participating in an evaluation as having much of an effect on my instruction or on the learning of my students. I assume most teachers I work with in my programs feel the same about their time and the evaluation process. This study provided me with the opportunity to conduct a full

evaluation of one of the professional learning programs I was implementing which was something I had not done before and in doing so led me to explore how teachers might be persuaded to be more active in the evaluation process. If I could make the experience feel like a valuable use of their time perhaps, I could collect data that described my programs with more accuracy.

Statement of the Purpose

The purpose of this study is to investigate the efficacy of collaborative evaluation as a method for understanding and describing how a collaborative professional learning program for educators will improve their self-reported skills in media literacy while engendering them to deliberately employ media literacy practices in their lesson plans. My attempts at single survey evaluation did not provide me with data that helped me determine if the goals of my program were being achieved. As I learned about collaborative evaluation and how it could be used to include teachers in the evaluation process to gather more descriptive data, I was interested in how it might also persuade teachers to take more of an interest in the evaluation process and how it might also provide richer learning experiences for teachers. Studies about employing self-evaluation tools in schools and long-term projects involving teachers exist, (Bubb et al., 2016) but none of them examine how teacher participation in evaluation design can also contribute to improved pedagogy.

When I examined the literature about media literacy and collaborative professional learning, I learned that media literacy and collaboration are both topics that researchers have attempted to study using both qualitative and quantitative methods, but findings suggest that many studies do not capture evidence that indicates a change in teacher thinking and behaviors

that are aligned with media literate practices (Ranieri et al., 2017). It seemed that collaborative evaluation could be an effective way to gather data about professional learning programs for teachers developing media literacy competency. Previous research suggests that media literacy professional learning programs for teachers are often evaluated using surveys that may leave an evaluator and the program designers with more questions than answers (Arke & Primack, 2009). While surveys conducted at a distance can be a faster method for collecting data, they often fail to reveal the detailed description that can chronicle how a particular program led to changes in practice or knowledge for participating teachers to a future participant or a program funder (Guskey, 2017). Similarly, assessing teacher learning through a single survey at a distance may not reveal growth or a change in practice supported by the professional learning experience (Guskey, 2000). For these reasons, I conducted this study to investigate the efficacy of a collaborative evaluation model to gather data about the self-reported learning of teachers who collaborate to build their competency in media literacy.

Program Goals for TILT

The first step in evaluation of a program is to define the scope of work and gather program information to use in the evaluation (Kapp, 2010). After this happens, program designers set measurable goals and outcomes for the program (Mathison, 2005a). Before the cohort of teachers pursuing PBS-MLC began, I set the following program goals based on the strategic plan adopted by my organization that prioritizes the meaningful use of media in schools by supporting educators with high quality professional learning experiences. The goals of the TILT program are to:

- Increase the total number of PBS Media Literacy Certified teachers in Montana by offering a cohort support program and incentives for completing the program;
- Build media literacy competency in participating teachers through pursuit of media literacy certification and collaboration with peers;
- Increase the implementation of media literacy experiences for students in the classrooms of participating teachers.

Research Questions

To investigate the efficacy of a collaborative evaluation as a method for understanding and describing how a collaborative professional learning program for educators will improve their self-reported skills in media literacy, the following research questions were developed to guide the study:

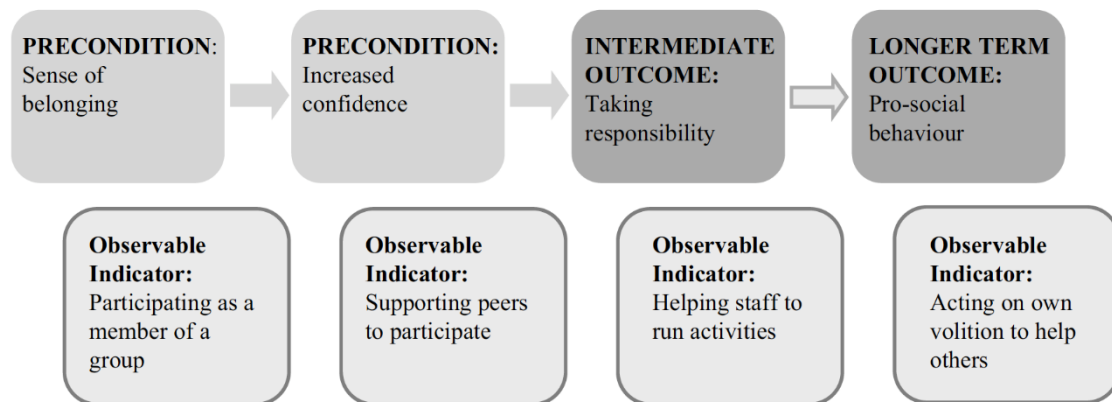
1. What is the efficacy of a collaborative evaluation model to assess the impact of a professional learning program for educators?
2. What types of actionable data are generated through a collaborative evaluation model of a professional learning program for educators?
3. What preconditions and observable indicators are needed to achieve the desired intermediate and longer-term program outcomes of a collaborative evaluation model of a professional learning program for educators?

Theoretical Framework

Theory of Change, (ToC) can be understood as the how and why an initiative works and can be classified as both a process and a product (Cooper, 2017). Unlike other evaluation

theories, ToC does not focus on the impact of the intervention on the outcomes of the program. Rather, it seeks to capture the preconditions, both short and long term, that connect the intervention to the program outcomes. While the outcome in a program is still measured, ToC combines outcome data with the understanding of the process of change that occurs during the program to identify significant learning about a program's impact. ToC guides the evaluation to identify preconditions, intermediate outcomes as well as longer term outcomes. Figure 1 depicts how observable indicators are identified to help understand the pathway between conditions and outcomes (Cooper, 2017). In alignment with my third research question, I used Theory of Change to identify preconditions for examining TILT program outcomes.

Figure 1. Theory of Change Outcomes Pathway, (Cooper, 2017)



Many program evaluations develop a theory of action (Rallis, 2017) to guide the evaluation process toward finding evidence that the program goals were met. This theory of action is developed based on the logic and theory of the program and aims to make sense of what stakeholders say and do. The theory of action allows evaluators to locate where the research questions fall. The following theory of action guided the evaluation of the TILT program,

If teachers are given opportunities to collaborate with their peers, a sense of collegiality will develop. They will build skills and knowledge, both individually and collaboratively, to improve their instructional practices in media literacy and a broader culture of learning in schools. This collegiality will motivate teachers to become agents of their own learning. These improvements will result in the self-reported improved instruction of media literacy for students.

Limitations

This study relied on the testimony of its participants to measure their growth and the changes that took place while participating in the program (Cooper, 2017). While teachers are a trusted resource in the evaluation of programs, (Corn et al., 2012) a limitation of this study could be the limited knowledge and experiences the participants have participating in an evaluation. Their inexperience may have prevented them from providing the information needed to adequately measure change or growth due to their own modesty or misunderstanding about the goals of the program. Another limitation of this study is the timing of when the program was implemented and when I designed this evaluation model. I did not design this model until the program had already begun therefore, I was not able to collect any data prior to the evaluation that could have served as baseline data demonstrating a clear change in thinking or practice. Finally, this study took place during a global pandemic threatening the closure of schools and under shelter in place orders across the United States. The stress of this situation on everyone involved did affect this evaluation, its implementation, and the outcomes. The TILT model was designed to be facilitated as an in-person professional learning model. When the COVID-19 pandemic closed schools, all interactions between group members transitioned to online

meetings using video conferencing. While all members of the group continued to actively participate, the fatigue and isolation brought on by the pandemic changed the way the group felt about collaborating. The desire to use video conferencing for meetings decreased and this may have impacted their ability to provide the highest quality feedback during the evaluation meeting.

Delimitations

There are a variety of methods that can be applied to the evaluation of professional learning for educators. The delimitations of this study lie in my choices to study a summative evaluation model using collaborative methods with a group of teachers who have worked together in a cohort for more than two school years. Only those who have been an active participant in this TILT group participated in the study. There are other teachers who have pursued PBS-MLC with my support but they were part of a different cohort. While there are other programs available for teachers who want to learn more about media literacy education, a delimitation of this study is my choice to use the PBS Media Literacy Certification for Educators program. Another delimitation is the participatory nature of this study. The teachers worked together to evaluate the program and to identify the changes in their practice and thinking that resulted from their participation. My role as both a participant and researcher are a delimitation of the study as well. The two years I worked with these teachers' piloting programs provided an opportunity to build strong relationships that assisted me in designing and implementing an evaluation model and this study to suit the needs of the participants. The methods used in this study are a delimitation in that I specifically chose to use concept mapping methods and collaborative evaluation to conduct this study based on my own interests in these methods.

Assumptions

The assumption made in this program evaluation study is that the educators who participated perceived their experience as valuable and wished to explore the depth of that value by participating in this study. Further, it is my assumption that each participant chose to participate in this program because each of them believes media literacy is a competency that should be strengthened in both teachers and students.

Significance of the Study

There are very few studies in the literature in which teachers are included in an evaluation of a professional learning program in which they participated. Many programs use surveys to gather a teacher's initial reaction to the program, (Guskey, 2000) but few bring teachers to the evaluation table and invite them to participate as collaborators. A study of the literature about professional learning revealed that a collaborative evaluation model could produce results with a more layered view of the program and its merit (Rodriguez-Campos, 2012). The participatory nature of this evaluation makes it significant as the teachers themselves participated in a facilitated collaborative discussion and a media making activity to identify the key themes and attributes that make the TILT model effective for teachers and students.

CHAPTER 2

LITERATURE REVIEW

Understanding how programs are evaluated is crucial to designing and implementing effective evaluations plans. As I prepared to design and implement a collaborative evaluation using qualitative methods, I reviewed the literature to explore the following questions:

- What models of evaluation are commonly used by program evaluators?
- How are qualitative methods used to evaluate programs?
- What is collaborative evaluation and what are the attributes that make it effective?
- How are concept maps utilized in evaluation studies?
- How are media literacy education programs evaluated?
- What are the attributes of successful program evaluation for teacher professional learning programs?

Program Evaluation Models

The seminal research about program evaluation has been conducted by Michael Quinn Patton. Patton believes program evaluation is a science and, in his words, “evaluation is systematic inquiry in to how and how well interventions aimed at changing the world work” (Patton, 2018). Over the course of his career as a program evaluator, Patton has identified 130 unique models for program evaluation (Mackay, 1995). As evaluators work with stakeholders to identify the best method for evaluating a program the things that must first be considered are what is being evaluated, for what reason, and how the results will be used (Patton, 2019). Once an evaluator identifies these key questions, selecting an evaluation method from a long list of

130 is less daunting since different approaches to evaluation serve different purposes and meet unique needs.

There are six evaluation methods which are most highly recommended: summative, formative, developmental, systems change, principles-focused and blue marble evaluations (Patton, 2019). While this is not an exhaustive list of evaluation tools it does provide a snapshot of the various types of programs and the evaluation methods which can be selected to match program goals. The following is a description and example of each of these six methods.

Summative Evaluations

Summative evaluations render judgements on merit, worth and significance of the program (Patton, 2019). A summative evaluation takes place after a program has completed a cycle or has ended permanently. For example, a summative evaluation study conducted by Gillespie et al (2018) was used to study the productivity and accomplishments of a program for Nurse Faculty Scholars at the Robert Wood Johnson Foundation which supported cohorts of next generation national leaders in academic nursing through career development. A cross sectional survey design used structured and open-ended questions to evaluate the impact the cohort program had on the productivity and accomplishments of nursing scholars. Data were analyzed using descriptive content analysis and the results of the study were a summary of strategies used by the scholars to manage tensions and realize synergy within their work. The evaluation informed the structure of future programs focused on early-stage nursing faculty members using the strategies to support future emerging nursing scholars (Gillespie et al., 2018).

Formative Evaluations

Formative evaluations aim to make improvements and revisions to existing programs in an effort to improve upon it in a future iteration of the same model (Patton, 2019). An example of this can be found in an evaluation study conducted by Kordaki (2010). Researchers wished to evaluate a computer-based, problem-solving environment for computer programming instruction employing the use of multiple forms of representation, motivation, active participation, appropriate feedback, and multimedia content. The aim of the study was to evaluate student progress over time as they developed their skills working in this environment. The study was developed so that participants were given multiple tasks over a period as researchers assessed their skill development with each new task. Students were provided with opportunities to express different types of knowledge such as intuitive knowledge. The study results revealed that students gain better results in this learning environment than they do in other environments devoted to coding instruction. The positive results of the study were used to expand the program offering more opportunities to students learning to code using the framework of the program (Kordaki, 2010).

Developmental Evaluations

Developmental evaluations center on social innovations and adopt the philosophy of “building the plane while you fly it” mentality meaning that a new program can be evaluated while it is in the design and implementation phase (Patton, 2019). In a pilot study design process for a website, “The Knowledge Hub,” for families with children who have disabilities, a developmental evaluation was used to gather data from users of the platform that could inform changes and iterations before it was launched to a larger audience. This study was conducted

prior to a full evaluation of the impact of the program as part of the initial design process. The study was designed to assess the usability and utility by collecting brief anonymous web-based survey data with both open and closed ended questions. Descriptive statistics and a summary of key themes were used to report findings. The results were used to improve the website for future users (Cross et al., 2018). Another example is a study by Dickson et al (2014) of a professional development program for health care workers which was conducted using Patton's developmental evaluation approach. Patton developed this approach to be used in settings that support complexity and innovation and where the intended outcome is to explore multiple options rather than recommend a specific intervention (Dickson & Saunders, 2014). This study found that an evaluation culture was a good fit for programs that are complex and in constant change. Findings revealed the several measures were embedded in the program to gather data, analyze it, and make changes based on that data throughout the program. In this method, the role of the evaluator as a collaborator is an integral part of developmental evaluation (Haertl et al., 2009).

Systems Change Evaluations

Systems change evaluations determine the impacts of major changes within a system and tend to be dynamic, adaptive and resilient (Patton, 2019). An example of this evaluation method can be found in the work of Sanchez et al (2015) when they conducted a multiyear, participatory evaluation of the New Mexico Community Health Coalition seeking to identify structures and process that led to system changes and long-term community improvements (Sanchez et al., 2015). This study measured initiatives that had undergone intermediate system changes such as networking and partnering, joint planning of programs and services, leveraging resources and

policy initiatives. Data revealed that when organizational, social and policy changes are made they lead to intermediate systems changes such as new and enhanced networks and partnerships, new programs and services, policy changes and more funds brought into the community. These changes resulted in the following desired outcomes: reduced health disparities, improved systems for personal and public health, promotion of health and safety, preventing and reducing disease and promoting healthy behaviors (Sanchez et al., 2015).

Principles-Focused Evaluation

A principles-focused evaluation (PF-E), judges principles held by organizations and examines their clarity, meaning and whether or not they are actionable (Patton, 2019). Principles are statements that provide the foundation for an intervention and should be able to guide choices and problem-solving within a program. A principles-focused evaluation allows for the evaluation of contextual adaptations to successfully guide social interventions in dynamic contexts (Turner & Cromhout, 2020). Turner and Cromhout used a PF-E method in a retrospective case study to evaluate the effectiveness of the *Saving Lives at Birth* project, a program implemented to reduce the mother-to-child transmission of HIV in one of South Africa's poorest rural areas. The research team conducted this study by extracting values from existing project documents, reports and clarifying interviews. They applied a framework developed by Patton called the GUIDE framework to analyze the principles for providing guidance, being useful, inspirational, developmental, and evaluable and articulate the effectiveness of the principals. The researchers examined existing documents to look for patterns in the values, expressed norms and concerns raised. They found PF-E to be an effective process for identifying and articulating effectiveness of the *Saving Lives at Birth* project. It was a useful way to ensure that the evaluator and all the

stakeholders have a clear and thorough understanding of the project and are fully engaged with the process (Turner & Cromhout, 2020).

Blue-Marble Evaluations

The Blue-marble evaluation refers to the iconic view of earth as it appears from space to be a blue marble. A Blue-marble evaluation looks beyond borders and silos to connect evaluative thinking and methods (Patton, 2019). Blue-marble evaluations employ global thinking principles to view the world holistically. It begins with watching for, making sense of, and interpreting the implications of things that are interconnected in the global system. Blue-marble perspective is both an approach to evaluation and a way of thinking about all aspects of systems change initiatives and interventions from local to global (Patton, 2020). Nonprofit organizations such as the Collaborative Crop Research Program (CCRP) use Blue-Marble principles to evaluate their programs devoted to agriculture research in the Andes and Africa. The Blue-Marble evaluation stance helped this organization envision new ways that growers and consumers can participate in a sustainable and productive agricultural system by reviewing previous evaluations and the existing Theory of Change to find places where principles of Blue Marble evaluation can be employed to take on a more global perspective.

More Evaluation Methods

Patton has developed 130 different models of evaluation which can make selecting the right method challenging for evaluators and researchers. To organize those methods so that evaluators can make educated decisions, researchers have attempted to categorize those methods by their approach to conducting evaluation. For example, Mackay et al (1995) synthesizes

Patton's methods into three main categories: methods that are guided by academic research, methods focused on conducting an impact analysis of the input and output of a program, and methods taking a diagnostic approach (Mackay, 1995).

Methods Guided by Academic Research

Some evaluation studies employ research methods such as pre-test and post-test comparisons, using control groups and analyzing test scores to evaluate the effectiveness of a program. An example of an evaluation study guided by academic research methods can be found in a community-based positive youth development program (PYD) in Hong Kong which evaluated by Ma et al (2018) to determine the program's impact on the psychosocial development of Chinese adolescents who participated in the program using a one-group pretest-posttest design to investigate changes. A 61-item self-administered questionnaire was used in the study containing measures of demographic information and holistic youth development. The positive outcomes of the program and the results of the pretest-posttest comparison demonstrated that the PYD program approach was an effective strategy for enhancing protective factors for development among Chinese adolescents (Ma et al., 2018).

Methods Focused on Conducting an Impact Analysis

A non-degree program in Brazil involved their program stakeholders in an effort to get a richer set of data that would be used to improve the program while building a culture of evaluation in the organization (Cornachione et al., 2010). This evaluation employed a case study method using surveys, interviews and focus group data, as well as archival data from past programs with the intent of making the most of the evaluation resources available to them. The outcomes of this study were the collection of a richer data set that was used by the program

stakeholders to improve the program. Participants learned about the value of working within a culture of evaluation. These outcomes are similar to a study at a free-standing community based mental health clinic providing occupational therapy (Haertl et al., 2009). This study attempted to explore the scope of services, the satisfaction of therapists and clients and the perceived efficacy of the services provided by the clinic using surveys and interviews systematically designed around the needs of the stakeholders. Using Patton's interview guide approach researchers gathered in-depth data about the relationships developed and the services provided by the clinic in stakeholder interviews. The outcomes of this study revealed high levels of satisfaction and perceived efficacy in the community-based model of the clinic. This satisfaction informed future decisions about the growth and expansion of the clinic.

Methods Taking a Diagnostic Approach

Some evaluation studies present several different evaluation methods to stakeholders and allow them to choose the method that suits their evaluation needs and interests. For example, Mackay et al (1995) evaluated programs used in the "English Language Teaching Project" implemented in language centers in Java, Sumatra, and Bali. Teachers and program directors were given the option to choose between the three types of approaches (Mackay, 1995). Mackay's participatory evaluation was designed to cut costs by involving participants and empowering them to choose the best method for evaluation. For this study, the participants chose a diagnostic approach to evaluation, so they could look closely at specific program components and determine where improvements could be made (Mackay, 1995). Professional skills workshops were developed based on the evaluation and efforts were made to improve specific teaching skills held by teachers and directors.

Qualitative Program Evaluation

Qualitative methods have been found to be a prudent choice when researchers are seeking to illuminate program practices such as the how and the why of a program and its intended outcomes (Rallis, 2017). The literature reveals many unique perspectives about qualitative program evaluation including Eisner's Educational Connoisseurship and Criticism Model for conducting program evaluations (İsmail, 2010). This method uses principles of art criticism to describe, interpret and evaluate a program and requires the evaluator describe the impact of the program using words rather than numbers as they attempt to help users appreciate, value, and understand a program. Eisner's model is suited for evaluators who seek to tell the story of a program, to describe the experience of users, and to help form decisions about the future of programs (İsmail, 2010).

Many program evaluations develop a theory of action to guide the evaluation process toward finding evidence to determine if program goals were met (Rallis, 2015). This theory of action is developed based on the logic and theory of the program and aims to makes sense of what stakeholders say and do. The theory of action allows evaluators to locate where the research questions fall and how program interventions effectively impact outcomes. Rallis (2015) describes why she endorses qualitative methods when evaluating programs in a chapter of the book, *Credible and Actionable Evidence: The Foundation for Rigorous and Influential Evaluations*. In her chapter, Rallis describes how she developed a theory of action to evaluate a professional learning program for educators in a school district. She worked with program stakeholders to develop a theory of action that guided the research questions and specific qualitative methods for the evaluation with the following statement,

If teachers are compensated based on their professional learning, their salaries will increase, and they will become agents of their own learning. They will build skills and knowledge, both individually and collaboratively, to improve their instructional practices and a broader culture of learning in the schools. These improvements will result in increased student learning (Rallis, 2015, p. 141).

This statement defined actions, causes and effects of the program and was used to design the evaluation. Studying the theory of action helped Rallis define her research questions and identify the stakeholder groups who would participate in the evaluation of the professional learning program for teachers.

Many studies using qualitative techniques use semi-structured interviews and thematic coding to capture rich description of the findings. Qualitative program evaluations provide recommendations for future decision-making by aligning participant insights to program goals. In a study devoted to evaluating a public health curriculum (Komaie et al., 2017) evaluators were able to identify program components that led to deeper learning for participants while also developing a clearer understanding of how the curriculum led to increased understandings of health research. Qualitative methods are often used to gather a richer data set intended to more effectively improve the program with the goal of creating of an evaluation culture within the organization (Cornachione et al., 2010). Qualitative methods are shown to promote reflexivity among participants as they participate in interviews and focus groups with question sets developed based on their specific needs (Haertl et al., 2009). An example of this can be found in the study of a home care program for hemophilia patients conducted by Rosnagel et al (2019). This study used qualitative interviews with patients and program staff to gain important insights about the effectiveness of a program intended to improve the care of hemophilia patients by offering services in their homes (Rosnagel et al., 2019). Evaluation findings revealed the service to be highly valued as it eased the burden of care while program nurses were found to be

effective and critical to the success of the program. Another key finding in this study was the need for improved promotion of the program as well as overall communication about its function. These recommendations were used to develop stronger promotional and communication strategies to support the future of the program (Rossnagel et al., 2019).

Collaborative Evaluation

Collaborative evaluation seeks to include all stakeholders in the program to describe impact of the program. These evaluations are conducted with participants rather than on them. Participants and those implementing the program play an active role in finding the attributes that make the program successful (O'Sullivan, 2012) such as analyzing data sets, coding for themes and making final recommendations to program facilitators based on the analysis. Collaborative evaluation assumes that active and ongoing participation results in a stronger evaluation. They are more democratic than experimental as the authority to make decisions and evaluate programs is shared with those who are responsible for implementing them (Lusky & Hayes, 2001). While there are many approaches to this participatory form of evaluation, all are devoted to the active engagement of stakeholders and the need for the results of the evaluation to be used in a meaningful way (O'Sullivan, 2012) long after the evaluation occurs.

Previous studies have identified three types of evaluation with collaborative methods: collaborative, participatory, and empowerment (Rodriguez-Campos, 2012). The role of the evaluator determines the type of collaborative method. In a collaborative method the evaluator is in control of the project and delegates specific tasks to the collaboration members (CMs). Rooted in Patton's utilization focused approach with emphasizes the importance of collaboration between program stakeholders and evaluators this method is used to conduct both formative and

summative evaluations (Haertl et al., 2009). The participatory method sees the evaluator with less responsibility working alongside the CMs while still maintaining control of the overall project (O'Sullivan, 2004b). Explored in depth by David Fetterman, the empowerment method is entirely controlled by the CMs with the evaluator acting as a resource to be consulted when needed (Rodríguez-Campos, 2012b). Empowerment evaluations seek to provide program stakeholders with the tools and skills to produce the desired program outcomes (O'Sullivan, 2004b).

Examples of effective collaborative evaluation can be found in a variety of fields from healthcare to both formal and informal education. In a 2013 study that lasted three years, math teachers who participated in a professional evaluation committee were able to improve their practice, to build leadership skills, and to improve their data-based decision making. Survey data revealed that teachers who participated in the collaborative evaluation process used evidence to make teaching and learning more deliberate (Thomas, 2013). A collaborative evaluation of a high school drug prevention program used quantitative survey data and found that throughout the evaluation process there were several examples where the evaluator and the participant were learning from one another. Their collaboration led to the design of the evaluation to include more than just an assessment of the program goals, but also the attitudes, behaviors and factors that support success which improved the design and implementation of future programs (Orsini et al., 2012). This improved the quality of the data collected and helped plan future programs more successfully. Similarly, a collaborative evaluation of a non-governmental organization (NGO) doing humanitarian work in Burkina Faso found that involving stakeholders in the evaluation process improved the sustainability of their health care user fee exemption program (D'Ostie-

Racine et al., 2016). Researchers conducted semi-structured interviews with individuals and a group interview and then performed a qualitative thematic content analysis. The research team found they were able to promote evaluative thinking into the culture of the organization as data were used to improve the program and to help implement future iterations. A study conducted by Corn et. al (2012) found that teachers who are involved in collaborative evaluation are more likely to accept and even embrace change in an organization. Corn discovered that more important than implementing evaluation plans was an educator's ability to use the data findings from the evaluation to inform change (Corn et al., 2012).

In her work as a professional evaluator, Lillian Rodriguez-Campos, has developed a six-step model for conducting a collaborative evaluation. The steps of Rodriguez-Compos model are as follows: identify the situation, clarify expectations, establish a collective commitment, ensure open communication, encourage effective practices, and follow specific guidelines (Rodríguez-Campos, 2012b). Rodriguez-Compos finds that collaborative evaluations guided by these steps ensure that all stakeholders are included in the evaluation process. Rodriguez-Compos maintains that stakeholder involvement assures that the results of the evaluation are more likely to be used to inform the future of the program. A similar participatory collaborative evaluation model, The Participatory Training Evaluation Method, (PATEM), was developed by Kuzmin to be implemented in one setting as a summative evaluation of a program where stakeholders are encouraged to reflect on the goals of the program (Kuzmin, 2012). Using the PATEM model, a facilitator guides participant stakeholders to generate statements about the program and reflect on how they met program goals. Each participant shares their reflection during a group presentation at the end of the evaluation. Models like Kuzmin's PATEM that are intended to last for a shorter

period of time, may have an advantage over other collaborative models, such as the one used to evaluate a nursing education program that was guided by a community engagement model (Lake et al., 2017). Researchers conducting this evaluation found the overall evaluation took years to uncover data which resulted in participants being unable to use the results of this evaluation in a timely fashion.

Concept Mapping in Evaluation Studies

Concept Mapping is a hands-on approach to helping learners develop visual presentations of complex ideas and their relationship to one another using symbols, text, and color (Gerstner & Bogner, 2010). Concept maps are used in a variety of learning settings to gather unique information about how participants perceive their experiences (Gurupur et al., 2015). In evaluation studies concept mapping is a method used when developing a conceptual framework of a complex topic for use as a guide to evaluation or planning (van Bon-Martens et al., 2014). Qualitative concept mapping is a method wherein participants generate statements in response to an open-ended prompt about the program and its goals. Those statements are sorted into common themes and then rated by participants for impact, effectiveness, necessity, and value. These ratings are analyzed using multivariate deductive statistical analyses—often performed by a software program (Kane, 2007). A group interpretation of the concept map is presented in the results of the evaluation. (van Bon-Martens et al., 2014). A collaborative study using group concept mapping as a method to evaluate a nursing education program revealed a process that was more participant driven and relevant to its subjects which yielded results that were multi-dimensional with an unanticipated structure and order that could be applied to future planning and decision making (Hagell et al., 2016). This study conducted by Hagell et al (2016) applied a

five-step strategy to gather data from participants. The first step was to generate ideas in a focus group setting, followed by an activity to structure ideas using individual sorting and rating. After that, ideas were mapped and clustered. The maps and ratings were interpreted and utilized to describe the impact of the program (Hagell et al., 2016). In a study conducted by Ethan Haymovitz (2017) and his team, concept mapping was used to explore the participants perception of the values and influences of a social emotional education program, Social Harmony, a program for K-8 schools focused on social justice and community building. Concept mapping was part of a mixed methods approach to this evaluation to include program stakeholders in the evaluation. Participants generated statements in response to a prompt about the program. Those statements were organized into key themes by the research team. Later, stakeholders participated in a card sorting activity in which they sorted themes and organized them based on their relationships to one another. The results of the card sorting activity were analyzed by computer software to generate concept maps for further analysis. Researchers in this study were able to examine the relationships between a large number of statements generated by participants about the Social Harmony program revealing key themes that led to the success of the Social Harmony program (Haymovitz et al., 2018). Quantitative and mixed method studies that use concept mapping often have large groups of participants producing even larger sets of data to be analyzed to gather and compare multiple points of view with efficiency and precision (van Bon-Martens et al., 2014). The mixed method concept mapping strategy gives program stakeholders a greater voice in an evaluation study as they participate in the evaluation by analyzing the statements generated in the initial phase of the study and use sorting methods to analyze them (Hagell et al., 2016). Computer analysis conducted with software programs such as

MASDAQ, produce quantitative data by analyzing the relationships and the themes generated and sorted by participants (Kane, 2007). Another study, conducted in 2007 by Hepworth and Paxton used concept mapping to study three specific factors related to help-seeking for bulimia nervosa and binge eating (Hepworth & Paxton, 2007). Researchers conducted semi-structured interviews with 63 women to elicit information about help-seeking. They used Leximancer software to analyze the key phrases and statements made by participants in the interviews to identify major factors that were common among all participants. This software produces similar concept maps for text sets with related semantics and different concept maps for texts with different semantics. The results of this study highlighted the need for awareness campaigns to reduce both self and perceived stigma by others toward bulimic behaviors. When concept mapping is used in evaluation studies the concept map itself is generated by computer software and is the result of a multivariate statistical analysis and becomes a visual representation of the themes that emerge from the study and their relationship to one another.

Concept Maps and Teacher Professional Learning

The use of concept maps and other visual artifacts created by participants in a qualitative study are known as Visual Research Methods and are employed as a strategy for gathering a participant perspective that may be too complex to capture during an interview alone (Johnson & Coleman, 2020). Visual research methods can be paired with interviews and focus groups as researchers attempt to uncover detailed descriptions about participant learning and perceptions. There has been increasing precedent for the use of visual methodologies for studying teachers and their cognitive processes. When employing these methods researchers invite subjects to make drawings or photographs to reveal how they think or feel about an experience or topic

(Bessette & Paris, 2019). In a study conducted by Ward et al. (2017), concept maps were created by teachers before and after an intervention to assess their understanding about the Nature of Science. Researchers on this study applied the theoretical frameworks that informed their study to evaluate the concept maps and were able to identify evidence of learning between the pre-intervention concept map and the post-intervention concept map. Johnson and Coleman (2020) conducted a study with teachers using a concept mapping narrative method to elicit the complex and interconnected conceptualizations of the specialized knowledge of assessment literacy. Johnson and Coleman (2020) found that concept maps gave participants a way to share information that was not easy to access or express. They also discovered that concept maps gave participants opportunities to express their knowledge in simple and in complex terms (Johnson & Coleman, 2020). Johnson's and Coleman's interpretation of how concept maps work suggested they are a form of representation as communication and that this method simultaneously seeks to encourage participant agency whilst imposing a structure that is aligned to the social context of the research exercise. Another study sought to combine metaphor development and visual research methods to capture the perceived identity of teachers who were also doctoral students. In this study conducted by Betterman and Paris (2020), teachers wrote metaphors about their perceptions of their role of both teacher and student as participants in the doctoral program. Then they created visual representations of their metaphors using a combination of text and images. Researchers used five levels of qualitative analysis as they studied each visual representation including, emergent analysis, analytic/traits coding, holistic coding, and metaphorical level of alignment. They found that the visual method took participants beyond the basic language often used during qualitative interviews to reveal a description of their professional identity that was

action oriented and rich with detail. The conclusion of the study was that visual research methods are useful for helping participants intentionally reflect on their experiences (Bessette & Paris, 2019).

Evaluating Media Literacy Programs

The National Association for Media Literacy Education (NAMLE) defines Media Literacy as “the ability to access, analyze, evaluate, create and act on all forms of communication both print and digital” (Hobbs & Tuzel, 2017). Support and rationale for teaching media literacy lies in the language of national standards across multiple content areas. National English Language Arts, Science, Social Studies and Common Core standards all call for teaching students how to access multiple types of information, to analyze texts in print and in digital formats while using critical thinking and inquiry skills (Rogow, 2011). Empirical studies reveal that including lessons that promote media literacy is a successful strategy for engaging learners (Hobbs & Tuzel, 2017). Students are naturally drawn to media messages in the form of video, audio, and images. Educators are finding that using popular media such as videos on YouTube or TikTok help them engage students in relevant discussion using platforms that interest them (Redmond, 2012). Media literate teachers are participants in media culture as they use digital tools and are comfortable taking risks integrating digital tools into their teaching settings (Hobbs & Tuzel, 2017). Educators with strong competency in media literacy education can analyze and evaluate digital information, as well as use media messages to communicate with students and parents. They are familiar with social media platforms and can communicate effectively using a variety of digital tools (Zhang et al., 2014). Research about professional learning for teachers who are developing their skills in media literacy indicates that allotting the appropriate amount

of time is incredibly important to helping teachers develop their skills (Ranieri et al., 2017). Research about teacher perceptions of media literacy professional development reveals that teachers feel they need longer periods of time over the span of many months to practice skills in analysis and production in order to transfer that learning to their classroom teaching (Weninger et al., 2017).

Evaluating Media Literacy programs for students and educators is largely done using experimental quantitative evaluations (Scull & Kupersmidt, 2011). A large number of program evaluations involve students who participate in programs where media literacy is used as a catalyst to reduce risky behaviors such as tobacco use (Kaestle et al., 2013), eating disorders (Wade et al., 2003) and early sexual behavior (T et al., 2019). In one study, a broadcast program called *Channel One* was used as daily teaching tool to develop media literacy skills in students (Austin et al., 2006). Students were given a pretest and a posttest to determine if exposure to the program changed their behaviors and preferences. Program evaluations of media literacy programs like *Channel One* often use experimental studies that involve control groups, treatment groups, and survey research. Quantitative analysis from these evaluations indicates that media literacy training for students leads to reflective thinking and a change in decision making (Austin et al., 2020). A program designed to improve nutrition education for families of children ages 9-14 conducted an evaluation of effectiveness and found that when families learn about media literacy skills-- such as reading the nutrition labels on food-- the food choices they make in the home and the children's ability to make healthier decisions improves. The goals of this program were to improve the decision making of children by teaching families how to read and talk about

healthy eating together. The evaluation found media literacy to be the vehicle for change in behavior (Austin et al., 2020).

Few programs for educators learning about media literacy have been evaluated in the literature. Most programs are focused on improving the skills and behaviors of students through direct implementation (Austin et al., 2006). One program for educators conducted an evaluation of a one-day teacher training for elementary teachers learning to use a Media Literacy curriculum called *Media Detectives* (Scull & Kupersmidt, 2011). This program was evaluated using pretests and posttests to determine if attitudes shifted and teacher knowledge increased (Scull & Kupersmidt, 2011). The evaluation revealed that after a one-day training about media literacy teacher knowledge about critical analysis and source evaluation was higher on the posttest after treatment and improved along with confidence to implement media literacy in the classroom.

Media Literacy Education experts Hobbs and Coiro (2016) host a workshop for teachers annually wherein teachers from all over the United States participate in a week of media production professional development. Teachers who participate in Hobbs' workshop collaborate with partners to create media projects to be shared with their peers and implemented with students when they return to their teaching settings. In an evaluation of this program, post surveys of participants reveal that teachers feel more confident in their ability to create and disseminate media after attending this collaborative professional development experience (Hobbs & Coiro, 2016). Feedback provided from participant surveys after their teacher workshops revealed that the personal confidence held by educators is transferred to the classroom into improved learning outcomes for students.

Evaluating Professional Learning Programs for Educators

When professional learning programs for teachers undergo evaluation, the impact of those programs is measured by how effective the program was in changing the professional knowledge or behaviors of a teacher (Widodo & Allamnakhrah, 2020). Leading experts in the field of professional learning, Linda Darling-Hammond (2009) and Thomas Guskey (2000), agree that effective professional learning for teachers is intensive and intentional, ongoing, connected to learning outcomes, and builds on the working relationship of teachers (Darling-Hammond et al., 2009). Guskey (2000) recommends teachers begin with clear goals that are worthwhile and determine how they will be assessed (Guskey, 2000). Aligned with the research about learning and teacher learning, effective professional learning provides teachers with experiences that provide opportunities to reflect and to make changes to their practice that will result in improved student performance (Bell et al., 2013). Empirical studies around teacher perceptions of their experience participating in professional learning programs indicates that teachers prefer opportunities to share stories, construct knowledge, and reflect on their practice with their peers (Christ & Wang, 2013). Most of the empirical studies about teacher perceptions about professional learning recommend that in-depth and rigorous research about the impact of professional learning on student outcomes be conducted (Korthagen, 2010).

The literature indicates that the most comprehensive and effective program evaluations of professional learning for educators directly involve educators (Corn et al., 2012), gather a variety of data (Landry et al., 2010) and are conducted with the program goals in mind (Mathison, 2005a). Evaluating professional learning programs for educators differs from research studies about professional learning in that evaluation involves finding merit or value in a specific

program, while research aims to yield results that can be generalized to other settings, increases knowledge in the field and fills gaps in understanding (Guskey, 2000). Thomas Guskey leads the research in developing evaluation tools for professional learning programs for educators. In his book, "Evaluating Professional Development" he identifies five levels of professional development evaluation (Guskey, 2000 p. 79) as follows: evaluating participant reaction, learning, organization support and change, use of new knowledge and skills, and student learning outcomes. Program evaluators who follow these levels design their evaluation plan to use tools and strategies that guide participants to provide their responses over time to capture evidence of impact at each of Guskey's five levels. Guskey recommends surveys and questionnaires to be used during the first levels of evaluation to gauge participant reaction and learning directly following program participation. Identifying organization supports and changes can be done by examining school records, conducting interviews or focus groups. To identify how participants used new knowledge and skills from the program, Guskey recommends using questionnaires, structured interviews, reflective summaries, or video observations. Finally, to study the student learning outcomes that may have resulted from a teacher's participation in the program Guskey's model suggests reviewing student records and portfolios, administering questionnaires, and conducting student interviews (Guskey, 2000 p. 81).

Professional learning programs for educators can be evaluated using a variety of methods that can be quantitative, qualitative, or mixed methods. Similar to media literacy programs, a quantitative pretest and posttest model with a control group is often used often to determine if a professional learning program has met its goals (Corn et al., 2012). However, other studies have found that the most robust program evaluations use both formative and summative methods and

design the evaluation to align with the program goals (Landry et al., 2010). For example, a program evaluation of a professional learning program implemented in Germany called TALK, for teachers learning about implementing a program aimed at fostering lifelong learning in students (Finsterwald et al., 2013), set out to determine how the program affected teacher competence and cooperation with other teachers. Using a control group design, evaluators used surveys with both closed and open-ended questions, conducted interviews, led focus groups, and analyzed portfolios. This comprehensive approach led to the confident conclusion that the TALK program was successful in changing the beliefs of teachers. Findings revealed that successful implementation of a program is more effective in changing teacher beliefs than the professional learning itself, yet quality professional learning must occur for implementation to be successful.

Another study, an evaluation of the collaboration between Library Media Specialists and Science teachers, found that student achievement was improved because of teacher collaboration. Collaboration is credited with developing and improving the science inquiry skills, communication skills and technology literacy skills of educators (Snyder & Roche, 2008). The evaluation aligned program goals and expectations to standards and the assessment tool. Key stakeholders were included in the development of the goals, agreed to them, and shared the vision for the program. The evaluation team used the application for an award as an annual report for their evaluation and created a chart of a variety of evidence to prove program effectiveness. Building the chart led to evaluation and improvement. The evidence collected included strategic plans and data about circulation and collaboration.

Another unique program evaluation set out to evaluate the goals of a professional learning program for physical education teachers by collecting data about student performance

(Miller et al., 2015). The Professional Learning for Understanding Games Education (PLUNGE) program found, after teachers participated in a teacher mentoring professional learning experience, students improved their movement skills while playing games in physical education class. This evaluation was conducted using a cluster randomized controlled trial of students.

Larger scale evaluations tend to be experimental and use control group evaluations over multiple years to evaluate the effectiveness of professional learning programs. An evaluation of early childhood educators serving over 200 teachers and nearly 4000 students used a multi-year evaluation plan to move teachers in and out of control groups as they participated in online professional learning, a mentoring program, using a research-based curriculum and technology driven progress monitoring (Landry et al., 2010). This evaluation was conducted using multiple quantitative tools to gather data about both teachers and students. Classroom observations were conducted and evaluated using a teacher behavior rating scale and pretests and posttests were administered to students to uncover an improvement in literacy skills. The outcomes of this evaluation found an improvement of teacher instructional practices relative to controls and greater gains in the language and literacy skills of students.

Summary

Inspired by the literature about program evaluation (Patton, 2019), professional development for teachers (Guskey, 2000) and media literacy education (Hobbs & Coiro, 2019), the collaborative program evaluation conducted for this study uses a qualitative approach to evaluate the TILT program. The design of the evaluation model was guided by the literature which indicates that the most comprehensive and effective program evaluations of professional learning for educators, directly involves educators (Corn et al., 2012) , gathers a wide variety of

data (Landry et al., 2010), and is conducted with the program goals in mind (Mathison, 2005a) . The model uses visual research methods because the literature revealed that these methods, such as concept maps, have been found to give participants opportunities to express their knowledge in simple and complex terms while encouraging participant agency (Johnson & Coleman, 2020).

CHAPTER 3

METHODOLOGY

Introduction

In professional learning programs for educators, program evaluations are conducted to examine the degree of participants' attainment of intended goals and desired program outcomes (Guskey, 2000). The choice to employ either a summative, formative or mixed methods approach to evaluation depends on the interests of program stakeholders, as well as the program's goals and intended outcomes (Patton, 2019). When evaluating programs in K-12 educational settings for students or for teachers, school officials need formative data to help students succeed while state and federal agencies need summative data to make long term decisions about programs (Corn et al., 2012). This case study investigated the efficacy of an evaluation model gathering summative data which would reveal if the self-reported media literacy skills of teachers were strengthened through collaboration and the shared goal of completing PBS Media Literacy Certification for Educators. To adequately evaluate whether this program met its goals and achieved the desired outcomes, a collaborative evaluation method was selected. The purpose of this study is to investigate the efficacy of collaborative evaluation as a method for understanding and describing how a collaborative professional learning program for educators might improve their self-reported skills in media literacy. This study utilized a qualitative case study approach as a means for gathering information about the process of the program rather than focusing on its outcomes (Tight, 2017). This chapter details the case study approach to research as well as collaborative evaluation as a strategy for evaluating programs. It

also describes the participants in the study, data collection, data analysis and my positionality as I acted in the role of researcher, program facilitator, participant, and evaluator.

Methods

As I set out to explore the efficacy of a collaborative evaluation model, I employed a qualitative case study approach to research. Case studies are a qualitative research approach that involve the study of a case within real life contexts. A case may be an individual or a small group who are studied over a designated period of time (Creswell, 2018). Studies taking a case study approach are often bounded to a single group or organization and focus on gathering a variety of data often using two or more forms (Hamilton & Corbett-Whittier, 2013). This study is bounded to a small group of secondary teachers who work within the same rural school district located in Southwest Montana and participate in a professional learning program designed to build their self-reported competency in media literacy. The program being evaluated took place over the course of a school year and the evaluation was conducted six months after the program concluded. I selected these teachers and this program as the case to study from a larger, grant funded, project focusing on professional learning models for teachers in rural schools. This study gathered data about the experiences of these teachers that could be generalized to teachers in other communities. As I implemented this case study, I conducted small scale research with deep meaning (Tight, 2017) about a shared experience while leveraging my position as a facilitator and evaluator to gather data from participants. As I set out to investigate the efficacy of a collaborative evaluation model in this case study, I was seeking to gather multiple types of data from a small group of participants that would provide me with detailed description revealing more about the process of the TILT program, rather than focusing entirely on the outcomes of

the program. As a researcher who facilitated the professional learning program and conducted the evaluation, I was immersed in the research setting with the participants for an extended time.

Intrinsic and Instrumental Case Studies

Robert Stake (Stake, 1995) divides case study into two main forms, intrinsic and instrumental. Intrinsic attempts to capture data about the case in its entirety, while instrumental focuses on an aspect or issue within the case. (Hamilton & Corbett-Whittier, 2013). This case study was an instrumental case study as it looked at a small group of teachers studying media literacy who had participated in a collaborative learning program over the course of a school year. I collected data that revealed insights about specific aspects of the program such as the self-reported changes in teachers' professional knowledge and beliefs and their perceptions about teaching media literacy. An instrumental case study like this one seeks to reveal self-reported changes in behavior and beliefs.

Some of the case study models that are used in educational research are reflective and longitudinal (Hamilton & Corbett-Whittier, 2013). Reflective case studies focus on a personal evaluative component in the study such as field notes, journals, and other reflection-based artifacts. A longitudinal study seeks to understand the process of the case study over an extended period. This case study employs attributes of reflective case study models because participants are guided to reflect on their experience as they create concept maps that summarize their thinking.

Program Evaluation Case Studies

Case studies are used frequently in program evaluation because they tend to provide real-time observation of a context garnering direct testimony from participants revealing change processes (Mills et al., 2009). Since case studies allow a researcher to work out what is unique about a case and what is transferrable across contexts, it aligns well to the focus this evaluation study which is focused on evaluating a program with the intention of finding attributes that may be replicable in other settings.

There are three main attributes of case study evaluation that help to describe how a study is bounded which are negotiation, contextualization, and democratization of inquiry (Mills et al., 2009). Negotiation describes how the researcher or evaluator gains access to the case and its participants. In this study, I sought permission from the administration of the rural school district in Southwest Montana where the TILT program was implemented. I was working in the district as part of a PBS grant funded project called The Teacher Community Program. I served that district and two others as a digital learning specialist over the course of four school years. The TILT program was one of the programs I was designing and carrying out with teachers in this specific district over the course of two school years. The evaluation for this study was bounded to the work that was done during a single school year and focused on the TILT model as a support system for teachers pursuing the PBS-MLC program. The teachers who participated in TILT applied to be a part of the program and were selected by me based on their prior participation in previous programs I had implemented through the Teacher Community Program grant. Their participation in the program and the evaluation was voluntary.

Contextualization is how the participants and the setting of the study mutually depend on one another and how they interrelate in different ways. A case study is largely dependent on

context (Mills et al., 2009). This case study took place in a small rural school district in Southwest Montana. The case being studied is a group of five secondary teachers who voluntarily participated in the TILT program over the course of two school years. They were drawn to the TILT program because it took place in the same building or near the building where they taught. They were motivated to participate in TILT for a variety of reasons including the opportunity to collaborate with peers and earn continuing education credit. All five teachers were interested in building their media literacy competency while working with a small group of their peers. While each teacher held different leadership positions in their schools by serving on various committees, their full-time responsibilities were devoted to classroom teaching. This group worked with me during all four years of the Teacher Community Program grant and helped me co-design programs for them and for their peers. I chose this group as the focus for this evaluation study because I hoped to gather data that might be generalizable to teachers in other contexts as I was particularly interested in the strong collegiality that grew among us as we worked together.

Democratization of inquiry describes the outside interests or obligations the evaluator, their colleagues and the participants may have in the data revealed in the study (Mills et al., 2009). I have a deep interest in the data of this study as the program designer, facilitator, and evaluator. The TILT program is a model I developed as part of my work within the PBS Teacher Community Program grant and the data from this study will inform future iterations of the program as I continue in my role. As an employee of a PBS station, my interests in the PBS-MLC program are significant. The data collected in this study have the potential to reveal insights about that program which will inform how it is implemented in other settings in

Montana as well as by other PBS stations. The participants in this study were interested in promoting change within their school culture about how digital learning and media literacy are taught. They hoped their participation in the TILT program earning the PBS-MLC and collaborating on the evaluation would provide them with tools and skills to support their peers to be more successful implementing digital learning and media literacy.

Research Design and Rationale

The research questions for this study are aligned with the problem and purpose and were guided by the literature and the Theory of Change framework.

1. What is the efficacy of a collaborative evaluation model to assess the impact of a professional learning program for educators?
2. What types of actionable data are generated through a collaborative evaluation model of a professional learning program for educators?
3. What preconditions and observable indicators are needed to achieve the desired intermediate and longer-term program outcomes of a collaborative evaluation model of a professional learning program for educators?

Theoretical Framework

Theory of Change (ToC) (Cooper, 2017) is the framework I used to identify preconditions and observable indicators that lead to greater understanding of the TILT program outcomes and is aligned to my third research question. ToC can be understood as the how and

why an initiative works and can be classified as both a process and a product. Unlike other evaluation theories, ToC does not focus on the impact of the intervention on the outcomes of the program. Rather, it seeks to capture the preconditions, both short and long term that connect the intervention to the program outcomes. While the outcome in a program is still measured, ToC combines outcome data with the understanding of the process of change that occurs during the program to identify significant learning about a program's impact. ToC guides the evaluation to identify preconditions, intermediate outcomes as well as longer term outcomes. I coded the data from the open-ended surveys and the first evaluation meeting with Group 1 by identifying preconditions and outcomes. I changed the word "preconditions" to "factors" because I thought that term would be more familiar to teachers. I made a list of these "factors and outcomes" (Table 5) to be discussed and coded with Group 2 during the second evaluation meeting.

Research Context and Participants

Five teachers from the same rural school district participated in this study with me (Table 1). All five teachers were female and had been teaching for nine years or more. Four of the teachers were high school teachers working in the same building. One teacher was a middle school teacher working in a different building but in the same district. All five teachers attended all TILT meetings and submitted work to eight earn micro-credentials toward PBS-MLC over the course of one school year. Four of the teachers completed PBS Media Literacy Certification. Two collaborative meetings were conducted during this study. The first meeting was attended by

three of the participants, Bertha, Frankie, and Lois. The second meeting was attended by two participants, Holly and Lando.

This study took place during the COVID-19 pandemic when gathering in groups could put people at risk for exposure to the virus. The guidelines for face-to-face meetings were ever changing, so I conducted this evaluation online in accordance with the current recommendations from the Center of Disease Control (CDC) and Montana State University. Instead of meeting in person, we used Zoom, a video conferencing program, to meet for this study. The TILT program took place over the course of a school year and due to scheduling challenges, this evaluation was conducted six months after the conclusion of that program.

Table 1. Participant Summary

Teacher's Pseudonym	Grade Level	Content Area	Years Teaching	Completed Certification
Bertha	9-12	English	14	Yes
Frankie	6-8	Media Arts	13	Yes
Lois	9-12	Library Media	17	Yes
Holly	9-12	Science	14	Yes
Lando	9-12	Science	9	No

Evaluation Design

I designed this study after a careful examination of the literature in which some evaluation studies employed multi-step evaluation designs. Lilian Rodrigues-Campos developed

a multi-step design to conduct collaborative evaluation. Her design uses six phases which are as follows: identify the situation, clarify expectations, establish a collective commitment, ensure open communication, encourage effective practices and follow specific guidelines (Rodríguez-Campos, 2012a) Campos' model provides an evaluator with a framework to guide a collaborative evaluation and helped me design the collaborative model for this study. The model I designed for this study had six phases and employed the use of surveys, collaborative discussion, and the creation of visual artifacts to gather descriptive data to answer my research questions (Appendix F). The phases in my design are summarized in Table 2 and are summative data collection, theme generation, description of themes, convergent discussion, and final reflection.

Table 2. Six Phases of the Collaborative Evaluation Model

Evaluation Phase	Activity	Goal	Type of Activity and Allotted Time
1	Summative Data Collection Using Digital Open-Ended Survey	Generate statements about the program	Independent work 20 minutes
2	Theme Identification Using Facilitated discussion	Extract common themes from the statements provided in the first survey	Group work 30 minutes
3	Describing the Themes Using a Concept Map Creation Activity	Describe and summarize the themes and their relationship to one another using shapes, text and images	Independent activity 30 minutes
4	Convergence of Ideas Using Group discussion	Discuss and share the concept maps. Write final statements about the program and seek to make final	Group activity 30 minutes

		recommendations for future implementation	
5	Gathering Final Thoughts Using Digital open-ended survey	Collect thoughts and ideas from participants that come up after the group activity	Independent Activity 10 minutes
6	Final Evaluation Report (Appendix E)	Use the artifacts, field notes, recording, and transcription to summarize the evaluation in a final report. Gather feedback and approval from participants.	Independent Activity As much time as is needed

Positionality

My role as the researcher, program facilitator, participant and evaluator provided me with a unique lens to conduct this study because I analyzed the data as a participant and as someone who plans to implement the program again in another setting. I developed TILT using my experience as a practitioner who develops professional learning programs and as a classroom teacher with sixteen years of experience in the elementary setting. In designing TILT, I was guided by the empirical research about professional learning for teachers and the importance of job embedded experiences that promote collaboration (Darling-Hammond et al., 2009). In my former position as the only kindergarten and first grade teacher in a small, rural school I craved the peer-to-peer learning experience of the TILT program which is why I enthusiastically played an active role and acted as both facilitator and as a participant. Inspired by the work of Renee Hobbs and the National Association for Media Literacy Education, I chose the PBS-MLC program to be the focus of the work of our cohort. I earned the certification alongside the

teachers I supported. It was important to me that I became media literacy certified because I believed it would give me more credibility as a public media educator and professional learning facilitator. My role in this study was that of researcher, evaluator, facilitator and of participant. As the facilitator of the group, I conducted the evaluation, participated in the discussion, took the surveys, and produced a concept map from my perspective of a participant and as facilitator.

Data Collection

The first part of the evaluation model required all participants to generate statements about the TILT program based on their perceptions and whether the goals were met. Surveys were anonymous and questions were aligned to the goals of the program (Table 2). I sought the advice of Traci Piltz, a teacher in Billings, MT who is familiar with the PBS-MLC program, to provide feedback about the survey and the questions. She granted me permission to use her real name for this study. Traci collaborated with a cohort of teachers in her district to earn the PBS-MLC earlier in the 2019-20 school year. She and the teachers in her cohort have all completed the certification. Traci helped me change the wording of several of the questions (Appendix C) so they were clearer for the teachers who would answer them. She provided answers to each question and shared her thinking with me as she completed the survey. As I was scheduling the collaborative meetings for the evaluation, two participants, Holly and Lando, were not able to attend. After reviewing data from the first meeting, I decided to host a second evaluation meeting so their experiences could be captured in the evaluation.

First Collaborative Evaluation Group Sequence

Evaluation Phase 1: First Open-Ended Survey

All five participants received the first survey (Appendix C) via email prior to the collaborative evaluation meeting. The questions on all surveys in this study were aligned to the program goals and research questions of the study (Appendix H). They were instructed to answer the survey questions before our meeting. I combined the survey responses into a spreadsheet for review during the collaborative evaluation and shared it with participants for their review before our meeting.

Evaluation Phase 2: Collaborative Meeting Review and Code First Survey Results

Three teachers, Bertha, Lois, and Frankie joined me in a Zoom meeting to participate in the first collaborative evaluation meeting. During the collaborative evaluation process, I introduced the activity by talking about the goals for TILT cohort and the plan for our collaborative evaluation. I used a Google Slide Deck to help me explain the goals. Participants were encouraged to follow along with the slide deck opened in a browser. Participants were asked to open the spreadsheet of responses from the first survey in a Google Sheet in a separate browser tab. I prompted the group to take time to read through the responses two or more times and to think about common themes that emerged from the responses. I also took the time to read responses and take notes in my field journal. After the teachers read through the statements, I invited them to join me in a discussion about themes by navigating to the Google slide presentation where each teacher listed the themes that emerged for them as they read the statements (Appendix B).

As theme ideas were generated, I facilitated discussion about the words that were being typed on the slide. I asked the group to come to a consensus about the themes they felt represented the work they did in TILT with the most accuracy. When the group came to an agreement on three themes, they felt best captured the TILT cohort, I gave them directions for the next part of the evaluation activity.

Evaluation Phase 3: Construct and Share Concept Maps

In this phase of the evaluation participants created digital concept maps (Appendix A) using the three themes determined by the group to guide their work. Each participant had an assigned slide in the Google Slide Deck where I had typed their name. They were asked to navigate to that slide. I provided prompts (Appendix D) to guide them as they created concept maps using shapes, text, colors, symbols, and images that conceptualized the themes generated by the group and their personal perception of their significance to the TILT cohort. I worked on an assigned slide to create a concept map that captured my thoughts and ideas about the themes. Participants were encouraged to “spy” on the work of their peers and talk to one another as they worked and were asked to present their own unique concept map for the final discussion.

As the group wrapped up their concept map creation, I asked each teacher to talk about their map encouraging them to describe their thinking as they were creating it. Discussion about the maps from the rest of the group was encouraged. I shared my map after everyone had a chance to share their work.

Evaluation Phase 4: Summary Statements

I asked the group to look for similarities and differences among the concept maps and then I challenged them to dictate two or three sentences to me that synthesized the concept maps

and illustrated key insights from the exercise. I prompted them by saying, “What are the key takeaways from this activity? What do we tell others about the TILT cohort based on our work today?” I typed those sentences on the final slide in the Google Slide Deck and confirmed with the group that those sentences represented a shared evaluation of the program (Appendix B).

Evaluation Phase 5: Final Open-Ended Survey

A week after our collaborative evaluation meeting, I emailed each teacher with the link to the final open-ended digital survey. This survey was anonymous and had two questions asking teachers to provide additional feedback about the program. By answering this survey, teachers had an opportunity to provide final thoughts and reflections about the TILT cohort experience that came up for them after the collaborative evaluation concluded. The responses to this survey were anonymous and were not directly shared with the other participants. This provided each teacher with an opportunity to offer insight they may have wished to express independently from the group. I explained to teachers that the responses to this final survey would be summarized in the final discussion of the study.

Evaluation Phase 6: Evaluator Generated Field Notes

After teachers logged out of the video conference, I did a think aloud about the entire collaboration and took reflective notes in my field journal. Think aloud protocols are used in research to capture the thinking of a participant while performing a task. This data provides insight into the experience of the participant (Hevey, 2010). I used retrospective think aloud protocols to help me synthesize the data collected after each collaborative evaluation meeting. While concurrent think aloud protocols have been found to be more effective because they provide more accurate recall of events, retrospective think aloud provided me with the flexibility

to facilitate the session and then use think-aloud to organize my thoughts after the meeting ended. I was able to carefully align my research methods with my research questions to increase reliability and validity, (Bohn-Gettler, 2019) as I reviewed the slide deck and made notes in my journal regarding observations I had about the concept maps each teacher created. It was during this think aloud exercise when I decided to conduct a second evaluation meeting with Holly and Lando.

Second Collaborative Evaluation Sequence

The second group was guided through an abbreviated version of the first model participating in phases 2-4 and 6 building on the data collected by the first group. The model for this collaboration was aligned to the Theory of Change framework and I facilitated discussion among participants about the factors and outcomes identified in the first group evaluation. Participants from the second group did not answer questions on the final survey. They were given the option but neither participant chose to return the survey.

Evaluation Phase 2: Collaborative Meeting Review and Code Data from First Evaluation

Before convening Group 2, I coded the data collected from the Group 1 evaluation to find factors and outcomes of the program as I looked for evidence of Theory of Change. To use language that would be more familiar to teachers, I used the term “factors” in place of “preconditions.” As I coded the data from the first evaluation group I identified the outcomes of the program, as well as the factors that may support the achievement of those outcomes. These factors and outcomes were summarized in a list that I shared with the teachers during the meeting with Group 2. I asked Holly and Lando to read through the Factors and Outcomes list

and rate them for their perceptions “short-term” effect (ST) on their teaching and the “long-term” effect (LT). Participants were invited to ask questions and discuss their ideas as they rated the factors and outcomes. We reviewed each list together and talked about the results (Appendix B).

Evaluation Phase 3: Construct and Share Concept Maps

Holly and Lando were instructed to think about the factors and the outcomes of the program they rated during the earlier part of our meeting. They were instructed to create a concept map (Appendix A) using text and visuals to describe their experiences in the TILT program. I used the same prompts (Appendix D) to guide them that I used with the first group. Participants were encouraged to “spy” on the work of their peers and talk to one another as they worked and were asked to present their own unique concept map for the final discussion. As the group wrapped up their concept map creation, I asked each teacher to talk about their map encouraging them to describe their thinking as they were creating it. Discussion about the maps from the rest of the group was encouraged.

Evaluation Phase 4: Summary Statements

I asked the group to look for similarities and differences among the concept maps and then I challenged them to dictate two or three sentences to me that synthesized the concept maps and illustrated key insights from the exercise. I prompted them by saying, “what could be omitted from the TILT program without changing the outcome?” I invited them to type their ideas on the Google Slide we were using (Appendix C).

Evaluation Phase 6: Evaluator Generated Field Notes

After teachers logged out of the video conference, I did a think aloud about the entire collaboration and took reflective notes in my field journal just as I did in the first meeting. I reviewed the meeting transcripts, the concept maps, and the Google Slides presentation to help me reflect on the experience in my field notes.

Ethical Considerations

All participants signed consent forms before they participated in this collaborative evaluation model. Each step of the evaluation plan was shared with participants prior to conducting the study. Each participant chose their own pseudonym during their evaluation meeting to protect their identity. The pseudonyms were applied to the Google Slide Deck as soon as the collaborative evaluation activity was completed. All data collected was only accessible to me and the five teachers participating in the program. It was kept in my Google Drive which is protected by a unique password. I did not set the links so that outside access can be granted to anyone outside of our group.

Data Analysis

Data analysis is the process of organizing the data, conducting an initial read-through of the data, coding and organizing themes, developing a process for representation of the data and forming interpretations (Creswell, 2018). Michael Quinn Patton recommends that all evaluation studies are treated as case studies (Saldaña, 2016) so the data analysis strategy for this dissertation followed the five step case study approach from *Qualitative Inquiry and Research Design* (Creswell, 2018). While descriptive coding is not always recommended for case study

research because noun based codes may not reveal as much about the thinking of participants, (Saldaña, 2016) I heeded the recommendations by Patton to employ descriptive coding as an evaluation method with the group as we analyzed the first survey. In this part of the evaluation, we were looking for keywords that would inspire participants to build their concept maps and descriptive coding provided a process for identifying those keywords. The steps in the data analysis are outlined in the following section.

Step 1: Create and Organize Data Files

The purpose of step one is to prepare the data by organizing the information for analysis. All data was collected using digital tools and saved in folders on Google Drive. Data were sorted and organized based on the different collection methods. All data were saved on a Google document or a Google Slide deck. I compiled all the text data from the surveys, transcriptions, and my field notes into one Google doc titled “clean data.” I made copies of this document and re-titled each copy with the topic I was using to code the data set. I chose topics that were aligned to the themes chosen during the group meetings.

Step 2: Read Through Data, Make Notes, and Form Initial Codes

I used the colored highlighting tools to highlight evidence of the themes. Then I transferred the highlighted words and phrases to another Google Doc and titled it with the code and the word “summary.” Each code has a separate summary document with words and phrases from the data listed. The data analyzed were responses from open ended surveys, collaborative evaluation meetings, digital concept maps created by participants, Google Slide deck used to capture data during the collaborative meetings and my own digital field notes. I examined the

underlying meaning of the data and made notes using the comments feature in Google docs. My notes identified themes and questions that emerged as I read the data.

Step 3: Describe the Case and its Context

A case study analysis consists of making a detailed description of the case and its setting (Creswell, 2018). The participants in the TILT program and their direct involvement with this study are crucial to answering the research questions. Therefore, I developed a detailed description of each participant and their role in the study. I created a table to compare the teachers, their content area, the numbers of years they have taught, and whether they completed the PBS-MLC program. I also created a table to show how each teacher participated in the study, the data they reviewed, and the coding methods they employed. These tables are included in the findings chapter.

Step 4: Use Categorical Aggregation to Establish Themes or Patterns

I noted emerging themes or key phrases and ideas that seemed to come up often in the data. For example, collegiality among teachers was a theme that appeared in both surveys and the meetings as a key attribute of the TILT program. I identified the presence of the themes in the data by highlighting and labeling within copies of the “clean data” document. After reading the “clean data” document with my notes I created a list of all the themes and organized responses based on those themes. I made a document for each theme and copied and pasted phrases from the “clean data” document into separate documents categorized by theme. I coded the data using descriptive coding, In Vivo and factors and outcomes of the program which are often used in evaluation studies and were recommended by Michael Quinn Patton in *The Coding Manual for Qualitative Researchers* (Saldaña, 2016).

Three participants in the study assisted with the first cycle of descriptive coding during the first of the two collaborative meetings. They used descriptive coding to identify themes that emerged from the first open ended survey. After the first collaborative meeting, I coded the transcripts, concept maps and the first open ended survey and identified the outcomes of the program and the factors that led to them. Guided by Theory of Change, I created a list of these factors and outcomes and prepared them for the second collaborative evaluation meeting with Group 2. The second evaluation group was comprised of two different teachers, Holly and Lando, who used magnitude coding to review and rate the list of factors and outcomes and identify their perceptions about whether they had short term or long-term effects on their teaching practice. I coded the data from both meetings using In Vivo coding to identify language that aligned to the themes determined by both groups, my research questions, the goals for the TILT program and Theory of Change (Appendix G).

Step 5: Use Direct Interpretation and Develop Naturalistic Generalizations About What was Learned

I described the themes by writing about them in a narrative format and used tables to present the findings. The narrative data includes an overview of the themes based on chronology of events and are represented by the perspectives of the participants. The findings also describe how the themes are connected to one another and how they are aligned with the research questions of the study. I captured description to describe the results of the collaborative evaluation and the key insights agreed upon by the group. I compiled this data into a comprehensive evaluation report and shared it with the participants for their review (Appendix E).

Achieving Trustworthiness, Authenticity and Credibility

I used the Praxis/Social approach (Cho & Trent, 2006) to ensure trustworthiness and credibility. This approach to ensuring trustworthiness aims to engage participants in critical reflection about how they learned and changed because of their participation in the program. I designed this collaborative evaluation model to engage the teachers by giving them opportunities to reflect on the program and share their feedback. I guided teachers to think critically and reflectively during our evaluation as we used consensus to agree upon the key themes that defined the impact of the TILT program. I conducted some of the coding, but the primary data analysis was done through collaborative discussion with our group. During the final analysis, I used member checking to ensure participants were given the opportunity to approve the final data analysis and how they were portrayed in the study. I used reflective journaling (Cho & Trent, 2006) and think aloud writing strategies to keep track of my thinking and learning as I conducted the evaluation. I created time and space within the evaluation plan to write in my field notes after the collaboration concluded.

CHAPTER 4

FINDINGS, DATA ANALYSIS AND RESULTS

In this study I sought to investigate the efficacy of a collaborative evaluation model evaluating a professional learning program for educators working together to build their self-reported skills in media literacy. I wanted to develop an evaluation model which provided teachers with opportunities to discuss their experiences and used concept maps as a discussion tool revealing description about the program and whether its goals were met. The evaluation model involved the teachers in the evaluation of the program through open-ended surveys, discussion, and the creation of concept maps. Teachers played a leading role in the evaluation as they collaborated to analyze data, discuss program goals, and make final recommendations for the future of the program. This evaluation was conducted with teachers rather than on them. The research questions which guided the investigation in this case study were:

1. What is the efficacy of a collaborative evaluation model to assess the impact of a professional learning program for educators?
2. What types of actionable data are generated through a collaborative evaluation model of a professional learning program for educators?
3. What preconditions and observable indicators are needed in order to achieve the desired intermediate and longer-term program outcomes of a collaborative evaluation model of a professional learning program for educators

Participants

The five teachers who participated in the TILT program also participated in the collaborative evaluation model with me to identify the merit of the program, to determine how the program goals were met, and then make recommendations for the future of the program. I guided the group through the collaborative evaluation process embedded into the regularly scheduled sequence of meetings and the final meeting of the program. I have worked with these teachers since 2017 when I first started supporting their school district in effective use of technology and media in the classroom. In our first school year working together I met with the teachers in small groups, or one on one, to plan lessons using technology. Their interest in collaborating with one another led to the development of the TILT program. In our second year working together we began to meet monthly, after school to explore Microsoft tools for education. The teachers wanted to learn how to use the tools in the Microsoft suite with more precision, so they could support their students and their peers to use them, too. After a year of collaborating in the TILT program the teachers expressed a desire to continue our collaborations during the next school year. I suggested exploring a new program developed by another PBS station, the PBS Media Literacy Certification for Educators by KQED program. All five teachers favored the idea and agreed to participate.

Participant Descriptions

The following paragraphs provide description about each teacher who participated in this study. Pseudonyms were chosen by the teachers and are used to identify each of them.

Bertha

Bertha recently stepped into a new role in her district as a technology integration specialist in charge of supporting the use of technology for instruction by teachers and parents. Bertha is married and the mother of two young children and grew up in a small, rural town in Northern Montana. She lives in the school community near the school. When I first met Bertha, she was just beginning to explore using technology with students in her high school English classes. She shared that she had taken an online course through the Montana Office of Public Instruction that inspired her to try using more technology in her lesson planning and delivery.

Bertha described herself as an “extreme extrovert” who thrives in a collaborative environment. She loves art and literature and trying new food. Bertha’s classrooms are student-led, and inquiry driven as students are empowered to find unique connections between literature and real life. Bertha had great success using digital tools to ignite creativity and curiosity in her students. Her students wrote and illustrated digital picture books about dinosaurs while reading *Jurassic Park* and interviewed local veterans to learn more about serving in the military while reading a book about the Viet Nam war.

Bertha was an enthusiastic supporter of the TILT group and helped me lead a “level 1” TILT group comprised of teachers emerging in their technology integration skills. In the years I have worked with her, Bertha has emerged as a leader in her district helping the administration and her peers improve and increase their use of technology for learning and teaching. Bertha completed the PBS Media Literacy certification within five months of starting the program, making her the first teacher in Montana to have earned the certification. When the COVID-19 pandemic caused the closure of schools and dictated the need to use off-site learning, Bertha led the way for her district to set up a digital learning environment using Microsoft Teams, Forms

and One Note—all tools we explored in our first year of TILT meetings. She quickly became a trusted voice in the administrative decision-making process. Her leadership during school closures and her leadership in the TILT program prompted the district to create a technology integration specialist position for Bertha, providing her an opportunity to serve the school district supporting teachers to use technology.

Holly

Holly recently accepted a position as the Dean of Students at the middle school in her district. Prior to stepping into this role, Holly taught Science at the High School. Deeply interested in leadership, she is currently pursuing a doctorate and superintendent's certification. Holly is married and is the proud owner of several dogs and cats. She came to this rural district from an urban area in another state. She lives outside of school community and commutes to the district for nearly an hour every day.

In our first year working together, Holly, Bertha and I met regularly to talk about the limited technology access in the school district. With some support and encouragement from me, Holly wrote a grant proposal to Donors Choose and quickly funded the purchase of five Chromebooks for her classroom. Holly's teaching style is influenced by project-based learning and inquiry. A visit to her classroom reveals a combination of group work, teacher led discussion and strong student-teacher relationships. Using technology and media have been part of Holly's teaching for as long as she's been in the classroom. She enjoys sharing video, graphics, and images with students to spark discussion, or to provide a creative alternative for students to share their learning. Digital communication with parents and students is embedded into Holly's school day as she keeps a website updated with the topics, assignments and resources students need to

be successful. Holly's classroom was always full of students, even when class was not in session. Teachers from multiple departments can often be found in Holly's space, seeking her advice and guidance about their work with students.

Holly's passion for collaborative learning is just as strong as Bertha's. She describes being a part of TILT as "getting her fix." She identifies TILT as meeting a need for collaboration and community that is integral to her role as a teacher leader. Holly has also participated in a summer professional learning program called "Partners in Science" wherein she has served as a research assistant in a laboratory on the campus of Montana State University. She studied microbiology and presented her research at a national conference in San Diego.

Lois

Lois is the library media specialist at the high school and teaches journalism classes. Lois is married to another teacher in the high school and is the mother of two school-aged children. She lives in the school community and her children attend the local elementary schools. Lois brings a strong interest in media literacy to the group. As the librarian and journalism teacher, she feels strongly that developing media literacy in students is important. As the librarian, Lois is called upon by her peers to support student research projects. Her library is home to a class set of computers and is visited by classes frequently. Lois supports teachers to plan classroom projects, often co-teaching with them to provide students with more support to use digital tools and conduct research.

While enthusiastic about the use of technology in classrooms, the librarian in Lois worries that technology often replaces reading for students. She was pleased when the school adopted a "no phone" policy because it meant students spent more time in her library reading

than scrolling through their social media feed. As a mother, Lois's interest in technology and media touches her at home as she is reflective about how to strike the right balance in technology use for her own children. As the journalism teacher, Lois supports high school students to study print, digital and broadcast media. She attended the national journalism conference in Washington DC and has brought her class to visit the Montana PBS studio to get hands-on experience in television production. Lois values the collaboration in our TILT group and enjoys learning from her peers. Her voice in the group is respected as she brings a great deal of knowledge and expertise about digital literacy.

Lando

Lando teaches Science at the high school and lives in the school community. She is married and enjoys spending time outside as much as she can. Lando is passionate about environmental education and conservation and aspires to leave the classroom to enter a job in the informal environmental education field at some point. Lando is politically active and often visits with policy makers about conservation and environmental issues. She also worked with Holly to participate in the Partners in Science program. She studied avalanche science and is actively working to educate the community about avalanche safety.

Lando's classroom is driven heavily by inquiry, problem-based learning, and strong student-teacher relationships. She uses informal discussion and student-led investigations to help students relate to the Science content. Many of her classes take place in the school's greenhouse where students grow plants and study hydroponics. She also collaborates with the industrial arts teacher to combine vocational education classes with physics. Students work in groups to design and build catapults. They use the gym to test their prototypes. For multiple years, Lando's

students have taken part in a state grant project called the “Smart Schools Challenge” where students work collaboratively to design, plan and implement a project that improves environmental sustainability in their community.

Lando has strong relationships with her peers and enjoys the social nature of our TILT meetings. Her sense of humor and her sense of empathy are two of her greatest assets and make her a valued member of the group. She is naturally inquisitive and enjoys exploring the use of new technology tools with her students. She believes strongly in offering students’ choice when it comes to the digital tools they use to learn.

Frankie

Frankie teaches media arts and STEM classes at the district middle school. She is originally from the school community and still lives there. Frankie is married and when she is not teaching students about media arts and coding, she plays in a local band and attends music festivals. Frankie is the “go-to Tech Person” in her building. She manages the Google domain for the middle school and is called upon to support teachers and students to use technology throughout the day.

As the only representative from the middle school in the TILT group, Frankie’s insights about students and how they learn before they enter the high school were valuable contributions to our group discussions. Frankie has participated in training with Code.org and uses their curriculum to teach the fundamentals of computer programming to middle school students. She also uses the PBS Newshour Student Reporting lab curriculum to teach students about digital media creation. Implementing media literacy with students is embedded into Frankie’s curriculum so her interest in pursuing the PBS Media Literacy Certification was strong. She is

always looking for new ways to inspire middle school students to make good choices as they engage in digital learning.

Frankie has valued the TILT experience as it has given her the opportunity to meet with like-minded peers to talk about using technology with students. She connected with me, our TILT group, and groups on Facebook to help her find valuable activities aligned to her curriculum.

Data Collection

The data collected (Table 3) for this study included: responses to two open-ended surveys shared with teachers through email (Appendix C); transcriptions from two collaborative meetings held using video conferencing software and transcribed using Otter software; digital concept maps created on Google slides by the participants during the collaborative meetings (Appendix A); the Google Slide presentations used to capture data and share information during the meetings (Appendix C); and the digital field notes I kept during the study. All data were collected and analyzed using digital tools (Appendix G).

Table 3. Data Collected and Coding Methods

Data	Coding Method	Coded By
First Survey	Descriptive Coding	Group 1, Bertha, Lois, Frankie
Final Survey	Descriptive Coding In Vivo Coding Factors and Outcomes	Researcher

Factors and Outcomes	Magnitude Coding	Group 2, Holly, Lando
Concept Maps	Descriptive Coding	Group 1, Bertha, Lois, Frankie Group 2, Holly, Lando Researcher
Slide Presentation Deck	In Vivo Coding Factors and Outcomes	Researcher
Meeting Transcripts	In Vivo Coding Factors and Outcomes	Researcher

Data Analysis

This evaluation model was developed to include the program participants in the data analysis. Both groups used different coding methods to identify key themes and insights from the survey data and concept maps created during the meetings. The coding methods (Table 4) for this evaluation were selected based on the recommendations of Michael Quinn Patton in *The Coding Manual for Qualitative Researchers* (Saldaña, 2016). Those methods were descriptive coding, magnitude coding, In Vivo, and Theory of Change. After some discussion, we used consensus to agree upon three themes that best described the data collected in the first survey. Those themes were “peer support is crucial for finishing the program,” “building confidence and expertise in media literacy through collaboration” and “integration of Media Literacy across content areas.” The concept of “peer support” was emphasized by all members of the group. One member placed a gold star next to the sticky note about peer support, while another outlined the entire note with a large red star. In the next phase of the meeting, participants were instructed to

use these themes to create a visual concept map that would communicate their personal experience with the TILT program (Appendix A). Some of the themes that were captured in the concept maps were the role of incentives, the importance of peer support, the powerful way that media literacy can be integrated across all content areas, and how self-reported teacher confidence in teaching media literacy grew because of their participation in the TILT program.

Table 4. Codes and the Coding Process

	First Coding Cycle	Second Cycle	Third Cycle	Fourth Cycle	Fifth Cycle
Evaluation Phase	During First Meeting	After First Meeting	During Second Meeting	After Second Meeting	After second meeting
Coding method	descriptive coding	Factors and Outcomes	Magnitude Coding	In Vivo based on themes	In Vivo based on themes
Codes Used for Themes	Peer support	Factors	Short term impact (ST)	Peer support	Application of new skills
	Building confidence and expertise in media literacy	Outcomes	Long term impact (LT)	Building confidence and expertise in media literacy	Incentives
	Integration of media literacy across			Integration of media literacy across	

content
areas

content
areas

Research
Questions

TILT
program
goals

The second evaluation group was comprised of two different teachers, Holly and Lando, who used magnitude coding to review and rate the list of factors and outcomes and identify their perceptions about whether they had short term or long-term effects on their teaching practice (Table 5). Some of the factors that were rated as having a short-term effect on their teaching practice were incentives and friendly competition among teachers as they earned micro-credentials. The factors that were rated to be more impactful for the long term were the collaboration and peer support teachers experienced participating in the program, the helpfulness of the facilitator, and the opportunities to co-teach lessons using media literacy teaching strategies (Appendix B).

After rating the factors and outcomes list (Table 5), each teacher worked on a concept map on their own and took turns sharing it with the group (Appendix A). Holly and Lando were asked to consider the role of the factors and outcomes as they reflected on their experience and developed their concept maps. Just as in the first group, the topics of collaboration and peer support were strong with phrases like, “we learned from each other” and “members of the cohort

made me feel like I had a valuable contribution to their projects.” Similarly, the role of incentives was discussed as a strong attribute of the program with statements like this one, “incentives definitely helped. It’s what kept me going.” Another strong theme that emerged from the collaborative meeting with Holly and Lando was a self-reported improved confidence in teaching Media Literacy described by statements such as “confidence boost for teachers and students” Holly and Lando also added the importance of the helpfulness of the facilitator using phrases like, “helpful facilitator” and “the facilitator made everything safe and comfortable.” The final theme that emerged from the collaboration with Holly and Lando was the benefit of having time to work on projects during TILT meetings. Both teachers used phrases like, “I need to have the time and space put aside to do it” and “it was a designated time that I worked.”

Table 5. List of Factors and Outcomes

Factors Contributing to Program Outcomes	Program Outcomes
Incentives	Completion of PBS Media Literacy Certification
Friendly competition	Earning stipends
Flexibility	Improved media literacy skills and confidence for teachers
Clarification of program criteria	Improved media literacy skills for students
Time given to work	Increased integration of media literacy across content areas
Food	Strong sense of collegiality with other participants
Collaboration and peer support	
Helpful Facilitator	

Opportunities to plan and teach together	Opportunity to apply learning to other settings
Opportunities to reflect on teaching practices	
Opportunities to implement media literacy principles in lessons	
Diversity of teaching content areas of participants	
Mutual appreciation of each group member	
Opportunities to see another teacher's work examples	

Results

In this section I have organized the results of the study by the research questions and then by the themes revealed during data analysis. I developed an advanced organizer (Table 6) to organize the themes, codes, and the research questions of my study.

Table 6. Themes, Codes and Research Questions

Themes	Codes	Research Questions
Teachers who participate in the TILT program feel they improved their skills and confidence in teaching media literacy	Building confidence and expertise in media literacy Build competency Helped Lesson Planning	RQ1, 2
The TILT program provides teachers with opportunities to integrate media literacy across multiple content areas	Integration across content areas All Subjects Increase Perspective	RQ1
Teachers who participate in TILT value the strong sense	Collegiality Motivated by Peer support	RQ1, 2

of collegiality that develops among members of the group	Better Together Collaboration opportunities Exchange of Ideas	
Teachers who participate in the TILT program were able to apply their new skills and knowledge in other settings	Application of New Skills Other Settings Foster Sustainability	RQ2
Incentives add short and long-term value to the program and can be both extrinsic and intrinsic but not all teachers are motivated by the same incentives	Incentives Kept me Going Friendly Competition Rewards and incentives to finish	RQ 1,2,3

RQ 1: What is the Efficacy of a Collaborative Evaluation Model to Assess the
Impact of a Professional Learning Program for Educators?

The first research question is about the efficacy of the evaluation model, and I have used the TILT program goals and the program themes to organize the findings in this section to demonstrate how the collaborative evaluation effectively captured data indicating the program goals were met. Most of the participants completed the PBS-MLC and in doing so self-report an increase in their confidence and skills teaching media literacy. Teachers agreed that collegiality and the self-reported growth in their confidence integrating media literacy in their lessons were the most valuable outcomes of the TILT program. A summary of each TILT program goal and the evidence supporting it is summarized and organized by the program themes.

Program Goal #1 Increase the Total Number of PBS Media Literacy Certified Teachers in Montana by Offering a Cohort Support Program and Incentives for Completing the Program

The first program goal of the TILT program was to increase the total number of teachers in Montana who completed the PBS-MLC by offering a cohort program with incentives. The

themes aligned to this program goal are the increase of teachers self-reported confidence in media literacy, the value of collegiality in the program and the role played by incentives for participating teachers. The first program goal describes the attributes of the program intended to support teachers to earn the PBS-MLC. Those attributes are a cohort model and the opportunity to earn incentives. Themes from the data analysis provide insight about how those attributes supported teachers to feel successful in the program.

PBS Media Literacy Certified Teachers: At the time of this study there are ten teachers in the state of Montana who have successfully completed the PBS-MLC program. Prior to this study, there were none. Five of the ten teachers who achieved PBS Media Literacy Certification were part of the TILT group which includes me. The other five teachers who completed the PBS-MLC program were part of a different cohort in other school districts and were not included in this evaluation. Table 7 displays the teachers who completed the PBS-MLC program during their collaboration with the TILT group.

Table 7. Teachers who completed PBS-MLC

Teacher	Completed PBS Media Literacy Certification
Bertha	yes
Lois	yes
Frankie	yes
Holly	yes
Lando	no
Nikki (researcher)	yes

Theme #1 Teachers Who Participate in the TILT Program

Feel They Improved Their Confidence Teaching Media Literacy Teachers described a

self-reported improvement in their confidence and their media literacy skills in each phase of the evaluation. In the first survey, statements like this one reflect the self-reported changes teachers observed in their teaching practices, “completing the program has really helped my lesson design and planning. Now I think about how I can incorporate the important ideas and skills I learned in the Media Literacy Program.” The first group evaluated the data from the first survey and identified “building confidence and expertise in media literacy through collaboration” as a key theme that emerged from the data. Phrases about a self-reported improvement in confidence adding value to the program could be found in the concept maps created by participants in both evaluation meetings. One teacher used this phrase to describe her thinking about this, “working through the micro-credentials, forces a teacher to reflect on current practices, research new ones, and practice these new ones.” The final survey asked participants to share additional thoughts or ideas they had about the TILT program and asked participants to write statements in response to the prompt, “please share your final thoughts and reflections about the PBS-MLC cohort experience.” Teachers used this space to anonymously comment on their feelings about completing the PBS-MLC program. One teacher wrote, “This was one of the best experiences in my career. I am grateful for the opportunity to complete this program. I have benefitted so much from this and the collegiality that was built during the process is something that so many teachers could benefit from.” This statement supports the program goal to increase the number of teachers who achieve PBS-MLC, and it demonstrates the perceived benefit of the program for teachers.

Theme #3 Teachers Who Participate in the TILT Program Value the Strong Sense of Collegiality that Developed Among Members of the Group The final

statements made by participants in the first survey captured their summative reflection about the program and reveal data that supports collegiality as a key factor in the completion of the PBS-MLC program. One teacher wrote, “This model offered the support I needed to complete the certification. I would not have made it through the process without my colleagues. This is an extremely relevant topic in our world right now, and more educators should be trained in media literacy.” This quote demonstrates the perceived effectiveness observed by the teacher of the TILT program in supporting her to improve her skills teaching media literacy. Another teacher generated this statement about the collegiality of the TILT program and how it led to her successful completion of the PBS-MLC program. “...it's a great way to be involved in a professional learning community. PLCs are very important to teacher growth because of the collaboration of ideas and the community created between teachers. I knew I had people I could rely on if I had questions or needed help with any of the criteria areas.” This quote provides clear evidence that this teacher believed participating in the TILT program and completing the PBS-MLC improved her teaching.

Theme # 5 Incentives Add Short and Long-Term Value to the Program and Can be Both Extrinsic and Intrinsic but not all Teachers are Motivated by the Same Incentives As

part of the TILT program goals, a variety of incentives were offered to teachers to encourage them to persevere through the PBS-MLC program. While some incentives were valued by some teachers more than others, the role of incentives emerged in both surveys as well as both evaluation meetings. During the first collaborative meeting Lois and Bertha shared that earning a stipend for completing the certification was a key factor to their motivation to continue when the

program became challenging. During the second evaluation meeting Holly shared that the promise of a stipend and the digital badges she earned as she worked through the micro-credentials helped her to stay motivated a little, but she did not feel they were as valuable as collegiality and growth in confidence and professional knowledge. Some teachers shared that the media literacy micro-credentials, the digital badges, and the certification itself were not needed to instill the collegiality among the group or improve their confidence in integrating media literacy in lessons. They also agreed that incentives only motivated some people to complete the program or continue participating. These statements were provided by participants during our collaborative meeting as I attempted to gather final recommendations and thoughts about the TILT program. One teacher wrote, “Could have achieved the outcomes of the program w/o the PBS-MLC program” while another stated “Some of MLC MCs were less meaningful--biggest outcomes came from the group” and finally other teachers shared that, “Incentive was needed to keep going on the MCs did not need an incentive to participate in TILT. TILT was enough incentive.”

While most of the teachers felt equally motivated to participate and complete the PBS-MLC, one member of the TILT group, Lando, who did not achieve the certification at the time of this writing, felt that the interaction with her peers in person each month was the most integral part of the program and that earning the micro-credentials was less important to her. As the other members of the group completed their certification, Lando felt less motivated to continue the work. She identified herself on the first survey and provided this statement to describe the impact of the TILT group on the overall completion of the program. “In a situation like this, completing something that is not required for my job, I definitely do better in a cohort. This can be

demonstrated by the fact that as soon as my peers finished, on their own, without me, I haven't worked on it since.” Lando’s motivation to finish earning micro-credentials was made more challenging when, after the March meeting, all schools went remote due to restrictions set forth by the state government as risk of contracting the COVID 19 virus became a threat. TILT meetings were conducted online for the remainder of the school year. This format was less effective some of the group members who were still working on earning the PBS-MLC, especially Lando.

Program Goal #2 Build Media Literacy Competency in Participating Teachers Through Pursuit of Media Literacy Certification and Collaboration with Peers

The second goal for the TILT program was to build media literacy competency in teachers as they worked together to earn the PBS-MLC. Findings aligned to this goal were found in the themes about self-reported improved skills and confidence in media literacy, opportunities to integrate media literacy across multiple content areas and the value of collegiality in the TILT program. These themes provide testimony from teachers about how they view their growth in media literacy as they participated in the TILT program.

Theme #1 Teachers Who Participate in the TILT Program Feel they Improved their Skills and Confidence Teaching Media Literacy Findings suggest that

teachers observed changes in their thinking and practice as they participated in the TILT program. They felt that the program gave them opportunities to develop and implement instructional plans designed to strengthen media literacy. Working with their peers to design and reflect on the teaching of these plans helped teachers feel more confident in their own media literacy skills. These statements from the first survey provide evidence that participating teachers felt that they gained more confidence by participating in the TILT program. For one teacher,

participating in TILT made her feel valued among her peers which improved her confidence and solidified her role within the group. She wrote, “As a librarian, I am at the mercy of classroom teachers who are willing to work with me in their classes. Members of the cohort made me feel like I had valuable contributions to make to their class projects because I was able to bring my media literacy skills to the table and help us both earn our certification.” Another teacher shared feelings about new knowledge and confidence acquired during the TILT program when she wrote, “Completing the certification definitely impacted my teaching in a positive way. It made me reexamine things I was already doing as a teacher and made me aware of areas where I was lacking knowledge and helped me become a well-rounded media educator.” Still another teacher described her increased confidence in her own expertise and teaching ability as she wrote, “I feel more confident in my own media literacy skills. I feel more confident teaching others to be more media literate. I find myself looking for bias in media messages more now than I did before.”

Theme #2 The TILT Program Provides Teachers with Opportunities

to Integrate Media Literacy Across Multiple Content Areas The TILT program provided

teachers with opportunities to collaborate on lesson planning and co-teach lessons with their students. The second theme that emerged from the data captured testimony from teachers about how integrating media literacy across multiple content areas helped them strengthen their practice as evidenced in this statement, “Media literacy is by its nature interdisciplinary and collaborating with teachers across multiple subject areas allowed me to see how these concepts applied in multiple disciplines. We learned from each other as we explored various aspects of media literacy.” Another statement supports the theme of collaborating to integrate media literacy across content areas. This teacher wrote, “Working and collaborating with other teachers while earning the certification greatly improved my media literacy competency because I was

able to see how others were interpreting the criteria, and the ideas they had for the artifacts in their subject. I wouldn't have gained nearly as much knowledge or understanding if I had done all the criteria all on my own.” One teacher wrote about how the TILT program provided her with opportunities to integrate media literacy across different content areas. She describes her thoughts about her growth in this way, “I am more aware of ways in which media literacy instruction can be integrated across the curriculum. I consider media literacy standards and skills when I approach a lesson. I look for opportunities to integrate media literacy in my teaching.” Another teacher wrote about some of the specific changes she made to her lesson delivery such as using a code of conduct and being more mindful of privacy laws that indicate a new appreciation for the way media literacy integrates across multiple content areas. She wrote, “I've observed a few changes in my teaching since participating in the cohort: I pay closer attention to certain criteria areas like code of conduct and student data privacy. I also find myself integrating things I learned from the cohort into my teaching on a regular basis.”

Theme #3 Teachers Who Participate in TILT Value the Strong Sense of Collegiality that Developed Among Members of the Group The second program

goal for the TILT program aimed to build self-reported competency for teachers in media literacy through collaboration which is aligned to the third theme which addresses the value of collegiality. Statements generated on the first survey provide evidence of the perceived value of collaboration to improve media literacy can be found in each statement. One teacher described how the TILT program provided an opportunity to collaborate with her peers which she felt was crucial to her success completing the PBS-MLC program. “The TILT framework allowed me to collaborate with my peers on projects in the classroom which ultimately earned me micro-credentials. Without the urging of the credentials, I probably wouldn't have had so many

collaboration opportunities as a librarian.” Another statement generated on the survey describes how working in a group to achieve PBS-MLC helped teachers to better understand the program criteria and to persevere when things were challenging. “It was very helpful to work with peers while obtaining the PBS Media Literacy Certification. It allowed for clarification of the certification criteria and the exchange of ideas. Working with others also encourages participation because I knew that others would be there working, and I wasn't doing it alone.”

Program Goal #3 Increase the Implementation of Media Literacy Experiences for Students in the Classrooms of Participating Teachers

The third program goal for the TILT program was to increase opportunities for students to learn more about media literacy. The themes connected to this program goal were about integrating media literacy across content areas and how as teachers developed lessons to earn the PBS-MLC they provided students with opportunities to learn more about media literacy.

Theme #2 The TILT Program Provides Teachers with Opportunities to Integrate Media Literacy across Multiple Content Areas The second

theme that emerged from the data was about opportunities to integrate media literacy across content areas which also provided students with more exposure to lessons about media literacy as teachers implemented their instructional plans from the PBS-MLC. Teachers felt that as they worked through the micro-credentials, students had more opportunities to learn media literacy skills than they had been prior to their work with TILT. One teacher wrote, “Students had richer experiences with their projects in science and English classes because their teachers were trying new things and integrating media literacy. Students gained exposure to the concepts of media literacy that could be applied across all subject areas and to their lives as citizens and consumers of media.” This statement describes the collaboration between Lois and Lando as they co-taught

a lesson together integrating science and Language Arts for one of their micro-credentials. Another teacher describes an increased improvement in the quality of student work as an indicator that her participation in TILT had a positive influence on her students. She wrote, “Several of my lessons have improved since completing the certification. I know because the quality of student work has improved, and students enjoy the projects more. I also think students are getting a broader and more well-rounded perspective on media literacy.” This statement describes how participating in TILT resulted in a more deliberate media literacy practice for the teacher resulting in higher quality lessons for her students. This teacher wrote, “My students were engaging more critically in their resources also. Because we were able to share materials and our process. The students were receiving more honed lessons and the research they were producing was better.”

Statements generated in response to the prompt on the first survey provide evidence of new understanding and implementation of media literacy skills across many content areas. One teacher describes new strategies she used while participating in the TILT program. “I implemented lessons in assessing online information, and in doing so, I came up with a research framework that will be useful to other classes and research projects. I implemented a variety of multimedia projects that gave me new options for student assignments, including video, infographics, blogs, and website creation.” Another teacher wrote a statement describing a new lesson she was motivated to implement as part of the PBS-MLC program and her opinion about how it supported the learning of her students in a new way, “I implemented a lesson that looked at determining bias in writing and critically analyzing sources. Students went through a process

to determine credibility. This set up better understanding and expectations for the sources that they found.”

The concept maps created during the evaluation meetings captured phrases that described the beliefs teachers held about their media literacy skills and how they improved because of participation in the TILT program. Teachers agreed that working through the micro-credentials together provided opportunities for deliberate focus on media literacy instruction as evidenced by this phrase, “Working through the micro-credentials, forces a teacher to reflect on current practices, research new ones, and practice these new ones.” The phrases used on the concept maps show that participating in TILT and working on the PBS-MLC program inspired self-reported confidence and greater integration across content areas which teachers believed had a positive impact on student learning. This statement from one concept map captures this idea, “When a teacher has integrated media literacy practices into lessons and increased their own perspectives, students experience new perspectives as well.”

As I investigated the efficacy of the collaborative evaluation model, I examined the findings indicating the goals of the TILT program were met. The number of teachers in Montana to earn the PBS-MLC grew from 0 to 5 during the implementation of the TILT program. Teachers self-reported an increase in their confidence and competency implementing media literacy lessons as they worked through the program together because the TILT program was designed to be collaborative. Teachers also self-reported an improvement in the quality of their lessons as they employed media literacy practices during their participating in the program. The collaborative evaluation model was effective in gathering data that revealed the merit of the TILT program.

RQ 2: What types of Actionable Data are Generated through a Collaborative
Evaluation Model of a Professional Learning Program for Educators?

Actionable data can be described as data that future program facilitators can employ to replicate the TILT program successfully with different participants and in other settings. Actionable data in this study was revealed in the recommendations participants made in different phases of the evaluation about the TILT program about providing time to work together, providing incentives, making efforts to partner with district leadership to support the program's sustainability, the role of the facilitator in the program, and the preference for in-person meetings instead of virtual. The themes that emerged from the data analysis that are aligned to this research question are those about how teachers reported an increase in their confidence and skills teaching media literacy, the value of collegiality in the TILT program and the role of incentives.

Theme #1 Teachers who Participate in the TILT Program Feel They
Improved their Skills and Confidence Teaching Media Literacy

Teachers who participated in the TILT program felt they improved their skills in media literacy and wanted to see their peers to have the opportunity to do the same. They identified sustainability plans as an important component to the success of the TILT program and recommended program facilitators secure buy-in from district leaders to build a program that lasts beyond the first year of implementation and recognizes teachers for their accomplishments when they finish. Many of the recommendations on the final survey were about the importance of sustainability of the TILT program. Teachers felt strongly that their peers would benefit from an opportunity to participate in the TILT program and pursue the PBS-MLC program. One teacher wrote, "As this program grows, I hope that earning this certification will be something that people recognize as a big deal. Finding a way to have the district recognize the completion

of the program would be a good idea too.” Another teacher completed this thought by writing, “I think having a system that allows for continuation after PBS has left would be very useful for sustainability.”

Theme #3 Teachers who Participate in TILT Value the Strong Sense of Collegiality that Developed Among Members of the Group.

My goal for sustaining the TILT program was to train one of the teachers to take over as the facilitator. Some of the dialogue captured during the meeting raised questions with this plan and whether it was realistic. Bertha’s new role as the district technology integration specialist created an opportunity to continue the TILT program in the following school year. Bertha and I worked together outside of the TILT program to create a plan that would support her in continuing the TILT model with a new group of teachers in the district. All members of the group were aware of this plan and this topic came up during the collaborative meeting with Lando and Holly as they discussed their future recommendations for TILT. Both teachers said they valued my role as an outsider as the facilitator of the program and questioned if another person could do it as effectively. They recognized that Bertha would bring strengths to the facilitator role but wondered if her direct relationship with teachers would change the experience for participants. Holly shared her perspective about the role of the facilitator and how she felt it leads to the sustainability of the program. Her comments indicate that my role as the facilitator brought value to the program because I did not work in the district and because of the unique facilitation style I used to implement the TILT program.

I'm trying to think about this experience if we had anyone but you leading us and I don't think it would have been the same...I think you as the facilitator have made everything...really safe and comfortable and..... I call it Nikki style....and I love it...Nikki, because you're just really great at what you do. And it was it was good that you were an outside figure as well...it wasn't someone that I saw every

day...but someone who I know was in the classroom for a really long time is good at what you did and like, all of this work, so you wouldn't have your job. But then at the same time, yeah, if it was one of my peers that I see on a day-to-day basis, and was telling me what to do, or guiding me what to do and how to do it...I don't think I would have responded the same. I know, you're a great mentor for other people who are taking on these roles and just seeing your influence. And maybe that's the key, is you as the mentor can really instill some of that and others.

Lando added her thoughts about the role of the facilitator shifting to someone who works in the district who is not an outsider as I was. Her comments suggest that she is unsure if someone within the district would be as successful leading the group.

And I would almost suggest...don't pick a teacher (in the district) to do it with other teachers. I think Holly and I would have been okay together. But I think we got more out of it having someone else lead.

These comments provide program facilitators with data to consider when choosing a facilitator to lead the TILT program. The transition from an outside facilitator to an on-site leader brings challenges that may need to be supported with strong mentorship as Holly suggested.

The TILT program was designed to bring teachers together once a month to meet in person, in a building in their district to collaborate and work together to earn PBS-MLC. The first seven meetings of the program took place onsite and in person. When the COVID-19 pandemic closed schools for on-site learning TILT meetings were conducted online using Zoom video conferencing. Lando and Holly discussed this shift during their collaborative meeting and recommended that all efforts be made to hold future TILT meetings in person rather than virtually. Holly said this during the collaborative evaluation meeting,

Doing TILT over zoom... it wasn't the same. A for effort. But coming together, having those times, I know that that all of this is out of anyone's control, it needs to be there and for it to be successful. Because as much as I still loved getting together on zoom and seeing you guys, it was just not the same.

I shared this story in a follow up discussion with Bertha after the second collaborative meeting had concluded. She shared this sentiment and felt strongly that TILT meetings needed to take place in person. For this reason, Bertha has put her plans to facilitate a new TILT group on hold until in-person gatherings were no longer restricted by COVID-19 guidelines.

Theme #5 Incentives add Short and Long-Term Value to the Program and can be both Extrinsic and Intrinsic but not all Teachers are Motivated by the Same Incentives

The incentives provided in the TILT program were stipends, digital badges after earning each micro-credential, and the friendly competition that emerged as teachers began to earn the micro-credentials. The concept maps created by two of the teachers, Holly and Lois, included images and text describing how they viewed the role of incentives in the TILT program. Both teachers found incentives to be an important part of the program and felt that they kept them motivated to finish the certification. Program facilitators implementing the TILT program in the future can look to this data to see how incentives add value to the program. Lois used an image of a person attempting to grab a carrot that is dangling from a rope. She labeled the text with the words, “incentives and time.” When she described her concept map to the rest of the group she said,

I started with that image of the carrot dangling on the stick. Whenever I think of incentives, I think of that. And I think, whether it was the competition between us to sort of keep up with our peers, you know, like Lando felt a little bit. And I felt certainly once Holly finished hers, and Bertha had finished, and Franky finished, I was like, I gotta finish this. So, I think there were a lot of things that were that carrot dangling for us. And also having time to work. And then obviously, that idea of supporting each other and how we work better when we're together.

Holly’s concept map included a bitmoji cartoon character fanning herself with dollar bills. An arrow with the word “plus” points to the word “INCENTIVES” in capital letters. This

image is part of a cycle that Holly used to describe her journey through the TILT program. The role of incentives appears in the middle of the cycle representing the way they kept Holly motivated as she worked through the program. She described this part of her concept map in this way, “I will say the incentives definitely helped.... it's what kept me motivated. I was like, Okay, I've already to come this far....I want to keep going.”

The final survey was intended to gather final recommendations for the TILT program from participants. This statement generated on that survey provided further insight and a call to action about how teachers viewed the role of incentives in the program, “This program should continue to offer incentives for teachers who earn their media literacy certification, because it is a long and arduous process that is made more enticing by that little carrot dangled at the end.” In addition to the statements provided on the concept maps and the final survey, some participants typed statements on the collaborative slide presentation during the evaluation meeting. I invited teachers to share any final recommendations for the program as we wrapped up that meeting and this statement which prompted a teacher to provide this piece of advice, “Keep incentives, if possible, whether that's food, a time set aside to work, friendly competition, or financial recognition.”

Discussions during the second collaborative evaluation meeting revealed a different perspective about incentives. Lando and Holly recognized the role of incentives as key to enticing them to join the TILT program but did not feel they needed them to stay involved or to grow as educators. These teachers described their feelings about incentives on one of the slides in the shared presentation. One of them wrote, “Needed the themes, the ideas, the “push” but didn't need the “badge” and the other said, “Incentive was needed to keep going on the MCs did

not need an incentive to participate in TILT. TILT was “enough incentive”” This conflicted with comments made by members from the first group in their slide presentation. One teacher wrote, “Having rewards and incentives for teachers to finish is really important.” This comment suggests that incentives are important to the detailed documentation portions of the program and to compelling teachers to begin the program, but they are not needed to stay motivated during the creative portion of the program when teachers are learning new skills and applying them in their lessons.

Actionable data about the TILT program was gathered that could inform the future of the program by way of final recommendations made by the program participants about the value of providing incentives, the need for more support from district leaders and the program leader to sustain the program and the importance of favoring in-person meetings over virtual interactions. Facilitators can use the actionable data revealed in this study to make decisions about future iterations of the TILT program.

RQ#3 What Preconditions and Observable Indicators are Needed in order to Achieve the Desired Intermediate and Longer-Term Program Outcomes of a Collaborative Evaluation Model of a Professional Learning Program for Educators

Preconditions of a program can be described as those factors that are needed to be cultivated to achieve program outcomes. Facilitators would be advised to design their programs to include preconditions such as providing adequate time for teachers to collaborate and consider providing incentives to participants to persevere and complete the program. The themes that emerged from that data analysis which are aligned to this research question are the value of collegiality in the TILT program and the role of incentives.

Theme #3 Teachers who Participate in TILT Value the Strong Sense of Collegiality that Developed Among Members of the Group

The text and images teachers used on their concept maps indicates participants valued the time to work together provided by the TILT program. The first sentence on Frankie's concept map was, "Teachers are happy and get work done when they are together." This sentence is a caption over an image of a group of people huddled around a computer and smiling. The fact that Frankie used this as the first image and sentence on her concept map indicates her strong feelings about having time to collaborate with her peers. Similarly, Lando created a collage of images that represented the most important program factors for her. One of those images was a clock. As she shared her concept map with the group, she indicated that the clock symbolized "time given to work." As program facilitators are developing future iterations of the TILT model, findings would indicate that providing time to work is a necessary precondition to the achievement of the TILT program outcomes.

The collegiality that grew among the group was viewed by participants as both a precondition that led them to be successful in the program as well as an outcome of the program that supported their future work. Lando's collage of images on her concept map listed two outcomes that were most important to her. One of those images was a group of three people lifting one person up. When Lando described this image she said, the picture was a "boost for collegiality." Lando and Lois planned and taught lessons together as they earned the micro-credentials and found it to be something they could do even after the TILT program completed. As a Librarian, Lois did not have a class of students she could teach directly as she worked her way through the PBS-MLC. Collaborating with Lando gave her the opportunity to meet the criteria of the program while building a strong relationship with a peer.

Theme #5 Incentives Add Short and Long-Term Value to the Program and can be both Extrinsic and Intrinsic but not all Teachers are Motivated by the Same Incentives

Incentives emerged as a key precondition that motivated teachers to complete the certification and stay the course in the program when things became challenging. I asked Holly and Lando to identify preconditions, or factors, that could be removed from the program without changing the outcome. After some thought and discussion both teachers agreed that the media literacy micro-credentials, the digital badges, and the certification itself were not needed to instill the collegiality among the group or improve their confidence in integrating media literacy in lessons which they regarded as the most important outcomes of the program. They also agreed that incentives only motivated some people to complete the program or to continue participating.

Intrinsic and Extrinsic Incentives Extrinsic incentives were part of the TILT program design and were used to motivate teachers to participate and persevere through the program. Teachers earned stipends from two different organizations for their participation in the TILT program. Montana PBS awarded \$500 stipends to each teacher for being a part of the TILT program and sharing their feedback with the research team following the Teacher Community Program grant. The Getting Better Foundation awarded each teacher who completed all eight micro-credentials in the PBS Media Literacy program \$500. Four of the five teachers earned this stipend from the Getting Better Foundation. Over the course of the two years that the TILT group met, teachers were given swag items from Montana PBS such as magnetic clips, stickers, and notebooks. They also got iPads after their first year working in the TILT program funded from the Montana PBS Teacher Community Program grant. These extrinsic incentives were discussed during both meetings with each group and could be found in the concept maps created by the groups, the survey responses as well as the text inserted into the slide deck participants

collaborated to create during each meeting. Some of the statements made about incentives indicate they held value for teachers and helped them persevere through the program, “I will say the incentives definitely helped. It’s what kept me motivated.” Both groups discussed how incentives motivated them as they worked to earn the micro-credentials and how there were intrinsic and extrinsic motivators that played significant roles in the program. Their discussion identified the extrinsic rewards listed above and described intrinsic rewards of the program to be friendly competition among peers, the role of collegiality, building new skills, and improving confidence. A comparison of the incentives of the TILT program can be seen in Table 8. Both groups agreed that the intrinsic incentives were just as motivating for them when it came to earning micro-credentials and completing certification.

Table 8. Incentives of the TILT program

Extrinsic Incentives	Intrinsic Incentives
Stipends	Collegiality
Micro-credentials	New knowledge
iPads	Greater confidence
Swag items	Improved Skills

The teachers in Group 2 used magnitude coding to rate the short term and long-term impact of the program factors and outcomes to their teaching practice. The results are summarized in Table 9. During this exercise Holly posed the question about whether the stipend should be considered a short-term factor leading to the outcomes of the program or a long-term

outcome that lasted beyond the program. As we discussed this, Lando and Holly agreed that the stipend served as a motivator that helped some teachers persevere through the program but may not have had a long-term impact on their teaching practice. Holly shared that at the time of our meeting, her stipend money was already spent, and she did not feel that the money had an impact on her learning, however she admitted that it did keep her motivated to persevere through the program. She said, “the incentives again, were really nice, like little treat at the end.” Lando did not feel that the stipend motivated her to complete the program. As the only member of the group who did not earn all eight of the micro-credentials, she had this to say about the extrinsic incentives, “For some reason, the incentive just didn't push me enough. Like I was more incentivized by you all. And if we wouldn't have had COVID I think I probably would have finished because I'm pretty sure I have everything I need to do. I just haven't submitted them. And so, I think I was more incentivized by the humans.”

Table 9. Results of Magnitude Coding

Short Term Factors (Preconditions)	Long Term Factors (Preconditions)	Short Term Outcomes	Long Term Outcomes
Incentives	Opportunities to plan and teach together	Completion of PBS	Improved media literacy skills
Friendly competition among peers	Opportunities to implement media literacy	Media Literacy Certification	Improved confidence
Flexibility in the program	Diversity in participant content areas	Earning digital badges	Improved skills for students
Clarification of program criteria			Increased integration across content areas
Time given to work	Opportunities to see work samples		Strong sense of collegiality with group
Food			Opportunity to apply learning to other professional development

Holly and Lando also discussed the micro-credentials they earned as incentives. As each teacher completed the criteria for a micro-credential, they were emailed a digital badge to represent their accomplishment. When they finished the program, they got another digital badge they could use in their email signature or on social media that identified them as a PBS Media Literacy Certified Educator. Holly and Lando agreed that earning the micro-credentials was not as motivating for them. They felt the knowledge they gained about media literacy through the discussion with the group to be more impactful. Holly explained her thinking in this way,

While the media literacy credentials, pushed me, I don't know that I needed those to get as much out of TILT, as I have, I think we probably could have used some of those as themes without actually having to earn those badges. Like it definitely feels great to have earned it and gone through it. But I don't know that we would have needed it, especially if it could have been a normal year last year, I think we probably all would have been pushed in similar ways. Because like, some of the literacy credentials, for me, were meaningless. Like, I just saw them. I was like, Okay, I'm doing it just to get the badge. But it was really difficult and frustrating. And the biggest outcomes for me, I think I could have achieved just within this group, with the themes in mind.

Lando agreed with Holly that she was not motivated to earn digital badges and added this to the conversation about her perceptions about the role of incentives,

Now, I'll echo that too, because I know like, once we were at home, instead of wanting to spend time working on those badges, I was like, No, I'm gonna make my lessons because they're all digital, that much better. And that stuff that I'm working on right now, too, with my kids being at home, half time and like, I'm working on making sure that my kids are learning more via, using technology and using media literacy and stuff, rather than being like, Oh, I really have to go get that sixth badge. Like, it's still just haven't brought me there to do it.

Lando and Holly were clear in their feelings about the digital badges being less of a motivator for them especially once they found themselves teaching classes from home due to the COVID-

19 school closures. They were more interested in completing the media literacy micro-credentials to improve their lesson plans rather than earning the digital badge.

A collaborative evaluation model was employed to determine the preconditions, or factors, that would support the outcomes of the TILT program. Preconditions that are connected to program outcomes were identified and rated as having a self-reported long or short-term effect on teacher learning. Teachers agreed that collegiality and the growth in confidence integrating media literacy in their lessons were the most valuable outcomes of the TILT program. The preconditions that were connected to those outcomes were time to work and plan together while sharing lesson examples. The evaluation model identified extrinsic incentives such as food and stipends, and intrinsic incentives such as friendly competition and peer support.

Summary

This chapter offers the results and findings from a qualitative case study evaluation using collaborative evaluation as a method to gather data about the TILT program and aligns that data to my research questions and the themes that emerged from the data analysis. The participants in the program played a unique role in this evaluation by participating in descriptive and magnitude coding of the data that was collected. Actionable data about the TILT program was gathered that could inform the future of the program by way of final recommendations made by the program participants about the value of providing incentives, the need for more support from district leaders and the program leader to sustain the program and the importance of favoring in-person meetings over virtual interactions. Preconditions that led to the program outcomes were identified and evaluated. Teachers agreed that collegiality and the growth in confidence integrating media literacy in their lessons were the most valuable outcomes of the TILT program.

The preconditions needed to achieve those outcomes were time to work and plan together while sharing lesson examples. Extrinsic incentives such as swag and stipends, and intrinsic incentives such as friendly competition and peer support were identified.

CHAPTER 5

DISCUSSION, CONCLUSIONS AND RECOMMENDATIONS

This dissertation research was designed to investigate the efficacy of a collaborative evaluation model for a professional learning program for teachers building their competency in media literacy. Specifically, I set out to design and test a collaborative model that would provide teachers with an opportunity to evaluate their own professional learning experience and to reflect upon their growth as media literate educators. The research questions investigated in this study focused on investigating the efficacy of the evaluation model and whether the program goals were met, studying the actionable data that emerged from the evaluation, and identifying the preconditions and outcomes that contributed to the success of the professional learning program. This chapter presents a summary and interpretation of the results of the investigation and provides an evaluation of the approach used to collect and analyze the data. Finally, this chapter describes the study's contributions to literature, its implications for professional practice and possible avenues for further study.

This study was conducted to investigate the efficacy of collaborative evaluation as a means for evaluating collaborative professional learning and self-reported media literacy skill acquisition by participating teachers. The research questions investigated in this study were:

1. What is the efficacy of a collaborative evaluation model to assess the impact of a professional learning program for educators?
2. What types of actionable data are generated through a collaborative evaluation model of a professional learning program for educators?

3. What preconditions and observable indicators are needed to achieve the desired intermediate and longer-term program outcomes of a collaborative evaluation model of a professional learning program for educators?

The five teachers who participated in the TILT program collaborated with me to identify the major themes that captured the value and impact of the program, how the program goals were met, and made recommendations for the future of the program. I guided the group through a collaborative evaluation model designed to be similar to the cohort's previous meeting format. It was embedded into the regularly scheduled sequence of meetings and was the final meeting of the program. Methods from quantitative concept mapping (Kane, 2007) and qualitative visual research methods (Bessette & Paris, 2019) were combined to gather data from teachers that provided detailed description about the experiences of participating teachers.

Summary and Interpretations of Findings

Investigating the Efficacy of the Collaborative Evaluation Model

My first research question investigated the efficacy of a collaborative evaluation model to gather unique data from teachers that would indicate the TILT program goals were met. Two themes emerged in the study that were aligned to this research question. First, the collaborative evaluation model gathered high quality feedback from all the teachers who participated in the program. This finding was an improvement to my previous attempts to capture data from teachers using single surveys wherein most answers provided were short and lacked detailed description and came from only a small number of program participants. Second, the variety of data collected was in the form of survey responses, discussion and the creation of digital media products which provided unique descriptions and captured the experiences of the program

participants. The concept maps created by teachers during the evaluation provided strong evidence indicating a self-reported increase in confidence in teachers' comfort making media to describe their learning. These findings are discussed in more detail in the following subsections.

High Quality Feedback and Teacher Participation in the Evaluation

The teachers who completed the first survey generated statements that were far more descriptive and specific than those I have seen on past surveys. It is possible that since the teachers knew they would be analyzing the data with their peers they were more intentional about the answers they provided and took their time to write longer, more complete statements than they might have if they were not planning to be involved in the evaluation process. The findings of this study suggest that including teachers in the evaluation process encouraged them to provide feedback that was more intentional and descriptive. This coincides with past studies of programs that involved teachers revealing that teachers who participated in the collaborative evaluation process used evidence to make teaching and learning more deliberate (Thomas, 2013) and helped plan future programs more successfully (Orsini et al., 2012). This statement from my study described how this teacher views her growth as an educator because of participating in the TILT program and serves as an example of the detailed feedback collected from participants in this evaluation. This teacher has provided a sound explanation for how the program impacted her practice and changed her thinking.

This program is valuable in so many ways! First, the content that we learned in the program is so important to today's classroom and is even more important now that most schools are doing increased schoolwork online. Second, it's a great way to be involved in a professional learning community. PLCs are very important to teacher growth because of the collaboration of ideas and the community created between teachers. I knew I had people I could rely on if I had questions or needed help with any of the criteria areas. Third, completing the program has really helped my lesson

design and planning. Now I think about how I can incorporate the important ideas and skills that I learned through completing the Media Literacy Program.

The last question on the final survey, in my experience, is rarely answered with so much detail and description suggesting that the participatory nature of the collaborative evaluation model motivated teachers to produce higher quality feedback about their experiences. For example, one question I often include in a closing survey is “Share any other feedback you have about the program.” Many teachers leave this question blank and those that do answer provide one- or two-word responses such as, “nothing” or “it was great” which do not provide the same detailed description that was captured using this multi-phase evaluation model.

An explanation for why the collaborative evaluation process was able to gather more descriptive data from teachers could be knowledge consolidation. Knowledge consolidation is the process of strengthening and stabilizing connections in the brain (Schunk, 2012) as a learner actively processes and rehearses new information which moves it from short-term to longer-term memory. Organization, rehearsal, and elaboration all play a part in the consolidation of knowledge. In this study, as teachers generated responses to the survey prompts which were aligned to the TILT program goals, they were provided with opportunities to rehearse and elaborate on their learning on their own. Later, as we discussed the survey results as a group teachers had the opportunity for further elaboration as they shared ideas and reflected on their experiences. As they engaged in speaking and listening about their learning, they began to realize what they learned as they participated in the TILT program (Hattie & Donoghue, 2016). Creating concept maps and sharing them with the group provided teachers with an opportunity to organize their ideas with images and text further consolidating knowledge and moving it from short-term to longer-term memory. Lois described the way she organized her thinking about the

skills she acquired in the TILT program and how the ideas shared by her peers in the evaluation meeting were connected to her concept map. As she verbalized her thinking to the group, she said,

That the arrow sort of shows that idea of flow and building those skills that you [Bertha and Frankie] both talked about. And then under that heading of media literacy, I envisioned some of those points that we thought were important as kind of building blocks are things that we took away from this, which everybody is already mentioned about the integration, building competence and expertise and the fact that we're integrating relevant and important skills. That's what we're integrating. And that's what we're building.

Findings suggest that the collaborative evaluation process provided teachers with an opportunity to consolidate their knowledge about media literacy teaching practices and how collaboration supported them to earn PBS-MLC. Each phase of the evaluation guided teachers to rehearse, elaborate and organize their learning as they participated in discussion, concept map creation and the completion of open-ended surveys.

Variety of Approaches to Capturing Participant Experiences

Teachers in the TILT program worked together to develop their media literacy skills as they designed and implemented lessons with students that were intended to meet the standards for effective media literacy instruction. Participating teachers reported an increase in their self-confidence as they used media to express themselves, which was evident in the digital concept maps, they created during the collaborative evaluation meetings. These maps helped teachers to organize and elaborate on their ideas as they reflected on their learning. After some discussion and consensus about the themes that emerged from the data, they used a combination of images, text, and symbols to describe their experience. For example, Lois wanted to communicate the way she thought about the growth she experienced in media literacy while participating in TILT.

She identified the phrases, “integration across content areas,” “confidence and expertise,” and “relevant and important skills” and placed them next to an image of Lego building blocks. She used a different font style and color for each phrase to make them stand out from one another. As she shared her concept map with the group, she noted that she thought of each of those phrases “building on one another” as the program progressed. Having access to images and different text types provided Lois with the tools she needed to organize and share her ideas clearly to the group. Findings from this study also suggest that creating concept maps provided teachers with a unique opportunity to demonstrate their skills in creating media messages as well as their feedback about their program experience. This coincides with findings from the literature in which teachers who participated in studies using concept mapping and visual research methods provided participants a way to share information that was not easy to access or express. It was also discovered that concept maps gave participants opportunities to express their knowledge in simple and in complex terms (Johnson & Coleman, 2020).

Similarly, the concept maps created by participants in my study were made even more useful to the evaluation results when teachers were invited to describe and discuss them with one another during the meeting. While the open-ended survey provided descriptive language about the program, the concept maps, and the discussion around them added even more details about the program experience that may not have been acquired with a single survey evaluation design. As they participated in the collaborative evaluation meetings, teachers had the opportunity to personalize their feedback about the program by using their own images and text to describe their experience. I believe the strong relationships that developed between the members of our group motivated teachers to be more deliberate and thoughtful as they completed their surveys

and participated in the evaluation meetings. Teachers felt a deep connection to the TILT program and wanted to see it continue to support teachers in their district. This connection to the program motivated them as they shared their experiences.

Actionable Data, Preconditions and Outcomes

The second and third research questions for this study were about the type of actionable data the evaluation model would gather as well as the preconditions and outcomes of the program. In this study, I use the term “actionable data” to describe the attributes of the program that program facilitators would be advised to consider including in future iterations of the program. Preconditions, or factors, can be described as the attributes of the program that need to be cultivated to achieve the program outcomes. The outcomes of the program are the changes teachers self-reported after their participation in the program.

There was overlap in some of the data which suggests some attributes of the program could be classified as actionable data as well as a precondition or outcome of the program. Earning incentives, for example, was strongly recommended by participants as an important factor or precondition in the program. Therefore, program facilitators would be advised to provide opportunities for participants to earn incentives in future professional learning programs for teachers. This quote from the final survey captures how incentives were valued by participants and calls future facilitators to consider including incentive opportunities in program designs. “This program should continue to offer incentives for teachers who earn their media literacy certification because it is a long and arduous process that is made more enticing by that little carrot dangled at the end.” Additionally, strong recommendations about earning incentives were made by participants who felt that they were needed to persevere through the program.

Many of the teachers relied on the digital badges to help them stay motivated to complete the PBS-MLC while others felt motivated by the promise of a stipend when they finished. Many participants viewed the stipend as a tangible reward for their efforts once the program was completed. For this reason, earning incentives is also a precondition supporting the achievement of the outcomes of the program for some participants.

Collegiality is another theme that emerged from the data as both a precondition and an outcome of the program. Participants recommended in the final survey that deliberate efforts be made to build community among group members with statements like this one, “This model offered the support I needed to complete the certification. I would not have made it through the process without my colleagues.” The friendly competition and peer support provided within the TILT program motivated teachers to persevere when the program became difficult. It also continued to help teachers feel supported by their peers in other contexts and after the program completed. Teachers valued the opportunity to build strong connections with their peers and identified it as a strong outcome of the TILT program that continued long after the program ended.

Factors and Outcomes for Successful Programs

My third research question investigated the specific factors and outcomes that were needed to meet the program goals. Aligned to my theoretical framework, Theory of Change, this research question was designed to help me identify the preconditions of the program that needed to be cultivated to achieve the outcomes of the program. During the study, I changed the word “preconditions” in the ToC framework to “factors” because I thought it would be easier for teachers to understand. A synthesis of the preconditions and their connection to the observable

indicators and each outcome of the program is presented in Table 10. In this study, “observable indicators” are the actions that participants described when they talked about how the factors of the program supported them to complete the PBS-MLC as they shared their experiences in this study. They were noted in the data from phrases such as “felt motivated,” “earn badges,” “work together,” and “keep going even when it’s hard.” Four preconditions emerged from the findings which had strong connections to the observable indicators that supported the program outcomes. They are opportunities to plan and teach together, strong peer support network, friendly competition among peers and extrinsic incentives such as swag, or stipends. A description of each precondition and their relationship to the observable indicators and program outcomes is in the following paragraphs.

Opportunities to Plan and Teach Together One precondition that teachers valued was the opportunity provided in the TILT program to plan and teach together. The observable indicator of this designated time led them to describe feelings of increased motivation to implement media literacy lessons in their classes. They also reported that having time to work together helped them practice using their new skills. Teachers felt that these experiences helped them to feel more valued by their peers, in the long term, which they felt improved their confidence in their role as teachers. This was believed to be a strong outcome of the program by all participants. The time to plan and teach together was also viewed by teachers as an opportunity for students to have more experiences learning about media literacy since teachers were deliberately devoting time to building their skills.

Strong Peer Support Network Teachers viewed a strong peer support network as the reason they felt motivated to persevere through the program even when things were challenging. They felt that they were able to forge ahead when things got hard because they had their peers helping them along. The encouragement from their peers and a willingness to persevere was an observable indicator of this peer support network. It connects to the longer-term program outcome of self-reported feelings of accomplishment in media literacy and the opportunity to apply their self-described new learning in other contexts.

Friendly Competition Among Peers Teachers felt motivated by their peers as they worked through the PBS-MLC to earn digital badges for each micro-credential. As everyone worked at their own pace some earned the micro-credentials faster than others. The micro-credentials and digital badges are an observable indicator of teacher's completion of the program criteria. Teachers shared that a friendly competition developed among the group, and they felt motivated to persevere through the program with more vigor. Participants reported they felt closer to their peers as they worked together. This friendly competition for micro-credentials and the relationships that developed around it were viewed as another strong outcome of the program for them.

Extrinsic Incentives Extrinsic incentives such as swag and stipends supported teachers to meet the criteria of the PBS-MLC program and are both a precondition and an outcome of the program. Teachers valued the opportunity to earn incentives and viewed earning them as tangible evidence of their hard work. For many, these incentives helped teachers to continue working toward the certification even when the program became challenging. Many teachers had to submit their work multiple times because they had not met the specific criteria needed to earn the

micro-credentials. Some teachers shared they were tempted to quit when this happened but kept the promise of the incentives in mind as a reminder to keep trying. This commitment to finishing is an observable indicator of how earning incentives was motivating for teachers. Earning the extrinsic incentive served as evidence of their accomplishment in the end. While most teachers valued their self-reported growth in media literacy and the collegiality of the group more than the incentives, they still viewed earning incentives to be an important outcome of the program.

Table 10. Theory of Change Preconditions, Intermediate and Long-Term Outcomes

	Observable Indicators	Longer Term Outcome
Precondition: Opportunities to plan and teach together	Motivated to implement media literacy lessons and practice using new knowledge	Feeling valued by the group leading to improved confidence in teaching role Improved student experiences developing media literacy skills
Precondition: Strong peer support network	Perseverance to finish program with encouragement from peers	Feelings of accomplishment leading to confidence in skills and implementation of media literacy Opportunity to apply new learning to another setting
Precondition: Friendly competition among peers	Motivated to make time for the work, finish program, earn micro-credentials	Stronger relationships with peers Feelings of trust in peers

		Commitment to learning community
		Confidence in role within the greater community
Precondition:	Motivated to persevere when the program criteria became challenging	Feelings of accomplishment leading to confidence in skills and implementation of media literacy
Extrinsic Incentives such as stipends and swag		

Unexpected Program Outcomes

As the program facilitator and evaluator, I set goals for the TILT program that were focused on building competency in media literacy through the participation in collaborative professional learning. The findings supporting these goals were strong, however, I was not expecting to see findings revealing the strong leadership skills that emerged in teachers during the TILT program. Teachers self-report that they used new skills acquired from participating in the TILT program to support their peers when schools were shut down during the COVID-19 Pandemic. The participants in this study found themselves mentoring their peers to implement digital learning and employ media literacy practices as they taught classes online and from home. They were called upon to help teachers plan lessons, learn to record video, create infographics, and navigate the Learning Management System. The TILT teachers volunteered to help their peers and said they felt confident doing it because of their work in our group. Additionally, the TILT teachers found themselves advising district leadership about the plans to support online learning. Two of them, Bertha and Holly, moved into leadership positions in the district after the

TILT program was completed. Both teachers reported that their work in TILT earning the PBS-MLC helped prepare them for their new leadership positions in the district. Holly talked about her work in another professional learning program and how she integrated her work in the TILT program to build a capstone project that summarized her growth as an educational leader. In her capstone project, she described her experiences supporting her peers when schools were shut down because of COVID-19 using what she learned in our TILT program. She described the focus of her capstone project when she said,

I did tech leadership of the district because of TILT. And I was just going to do the media literacy credentials. But then COVID happened. And we all had to, like, teach everyone, here's Microsoft Teams go, you know, and so I used all of that. And then me getting this role, [as dean of students] based off, my trajectory into leadership.

As the program facilitator and evaluator, when I set the goals for the TILT program I was focused more on the PBS-MLC program and how it might change the way teachers self-reported about their approach to lesson planning and delivery. I was not expecting that our collaborative efforts to build competency in media literacy would also motivate the teachers to apply their new learning as leaders in their district.

Implications of the Study

Teachers and Collaborative Evaluation

This study supported the literature about the effectiveness of including program stakeholders in evaluations and expands it to include a study about how teachers can play an instrumental role in evaluating the professional learning programs in which they participate. The key attributes for successful collaborative evaluation lie in the impact of participant driven nature of the evaluation design to make it more relevant to teachers because they can use the results of

the evaluation to improve their practice (O'Sullivan, 2012) and more democratic because they have a voice at the evaluation table (Lusky & Hayes, 2001). The collaborative evaluation model used in this study empowered teachers to evaluate survey data and to engage in discussion about the changes they observed in their teaching and professional knowledge. The model provided a framework for discussion and the creation of artifacts, so teachers could work together to identify the themes and the factors that were connected to the program outcomes. Another attribute supported in the literature about collaborative evaluation is the use of a variety of research methods including: quantitative surveys (Thomas, 2013) thematic qualitative content analysis, (D'Ostie-Racine et al., 2016) and mixed methods approaches to data collection (O'Sullivan, 2012) which led to the design of my collaborative model, including open response surveys, collaborative discussions and the creation of concept maps coded and analyzed by the participants in the evaluation. The literature indicates that the most comprehensive and effective program evaluations of professional learning for educators directly involve educators (Corn et al., 2012), gather a variety of data (Landry et al., 2010) and are conducted with the program goals in mind (Mathison, 2005a). The collaborative evaluation model in this study was aligned to these findings. The teachers who participated in this study played a key role in the collection and analysis of the data. Multiple types of data were collected as teachers filled out open ended surveys that were aligned to the program goals, participated in collaborative meetings about the program and its impact and created concept maps to describe their experiences. Through collaborative discussion they came to a consensus about the strengths of the program, the factors that were needed to achieve the outcomes and the short- and long-term effects of the program on their teaching practice. My role as the evaluator was to organize and interpret the data after the

teachers provided and analyzed it. Their participation in the process provided a unique description of the participant experience and actionable data that will inform the future of the TILT program.

Inside and Outside Approaches to Program Facilitation

While the findings in this study were aligned with literature about collaborative evaluation or media literacy programs for teachers, there were some insights shared by participants that were not as closely aligned with the results of studies devoted to the roles that digital learning specialists and technology coaches play in the professional learning of teachers. My role in the TILT program was that of a facilitator and of a participant and I used strategies of instructional coaching to support teachers as we worked together. Studies devoted to instructional coaching have focused on the success of coaches who are employees of the school district (Simmons, 2011). These studies found that teachers benefited from having regular access to a coach who can work with them onsite as needed. This differed from my experience providing professional learning to a school district as a non-employee of the district. While the literature would suggest that my role as an outsider could hinder my ability to support teachers in their professional learning since I was only onsite once a month and therefore not as available to teachers, the participants in this study shared that they felt more comfortable working with me than they thought they would if I were one of their district peers. Lando and Holly expressed this sentiment during their evaluation meeting as they contemplated my role in the TILT program. Both teachers agreed that my expertise and experience working outside of their district was valuable to them and helped them feel comfortable. As Holly stated during the evaluation meeting,

I think you as the facilitator have made everything really safe and comfortable. And it was it was good that you were an outside figure as well...it wasn't someone that I saw every day. But someone who I know was in the classroom for a really long time and is good at what you do. But then at the same time, if it was one of my peers that I see on a day-to-day basis, who was telling me what to do, or guiding me what to do and how to do it. I don't think I would have responded the same.

These comments indicate that if a program facilitator is experienced and skillfully builds community within the group, whether they work in or out of the district is not as important as some other studies might suggest.

Contributions to the Literature about Professional Learning Programs and Media Literacy

This study fills the gaps that exist in the literature about how professional learning programs for teachers engaged in media literacy education are evaluated. Few programs for educators learning about media literacy have been evaluated in the literature and most are focused on improving the skills and behaviors of students through direct implementation, (Austin et al., 2006) or using pre-tests and posttests to reveal an improvement in general knowledge of teachers after a one-day training event (Scull & Kupersmidt, 2011). The evaluation model used in this study provided data that described the self-reported changes in thinking and practice teachers experienced as they progressed through the TILT program which took place over the course of a school year. The open-ended surveys asked teachers to provide descriptions of the lessons they implemented with students, the changes they observed in their teaching and their perceptions of how their students benefitted from their intentional focus on media literacy skills when developing lessons. This is aligned to recommendations from experts in the field of media literacy education who recommend that learners are given multiple opportunities to build their skills over time, should be provided with regular feedback about their learning, and encouraged

to reflect on their learning process (Rogow, 2011). The answers provided to the questions on both surveys captured clear evidence of a self-reported change in practice that benefitted students. These responses describe the lessons taught while the teachers participated in the TILT program and how teachers perceived their impact on their practice and their students. By employing the concept mapping design and asking participants to generate statements about the program, (Kane, 2007) I was able to capture these detailed descriptions of the program. For example, one teacher reflected on her teaching in the final survey after participating in the collaborative evaluation. This quote describes the changes in thinking and practice this teacher observed in herself after participating in the TILT program. She wrote,

I've observed a few changes in my teaching since participating in the cohort: I pay closer attention to certain criteria areas like code of conduct and student data privacy. I also find myself integrating things I learned from the cohort into my teaching on a regular basis. Several of my lessons have improved since completing the certification. I know because the quality of student work has improved, and students enjoy the projects more. I also think students are getting a broader and more well-rounded perspective on media literacy.

Another teacher reflected on her experience by describing a lesson she taught differently based on her experience collaborating with her peers to earn the PBS-MLC micro-credentials. In this quote, provided on the first survey, she describes how she integrated media literacy practices into one of her science units and how working in the TILT program provided her with the motivation and the peer support to do it. She wrote, "I would have never created a document that had students identify the biases of a reference. I would have talked about it, but never would have made it part of the assignment." Another reflective statement provided by a teacher about how she felt her lessons changed as she worked through the PBS-MLC program specifies the media literacy principles she was able to implement because of her work in the program. This quote suggests this teacher made changes to her practice that will inform future instructional

decisions based on her participation in the program. She wrote, “I implemented lessons in assessing online information, and in doing so, I came up with a research framework that will be useful to other classes and research projects.”

Contributions to the Literature about Visual Research Methods

This study adds to the growing body of research about visual research methods and how they can be used with teachers to describe their experience participating in professional learning programs. Visual research methods can be paired with interviews and focus groups as researchers attempt to uncover detailed descriptions about how participant learning and perceptions. There has been increasing precedent for the use of visual methodologies for studying teachers and their thinking. When employing these methods researchers invite subjects to make drawings or photographs to reveal how they think, or feel about an experience or topic (Bessette & Paris, 2019). The evaluation model used in this study provided teachers with the opportunity to create concept maps to describe their experience in the TILT program as they developed their media literacy teaching practices. The concept maps created in this study provided a unique visual perspective about how each individual teacher perceived their experience in the TILT program. Teachers used a combination of text, symbols, and images to visualize their thinking. As teachers described their concept maps to the group, they found they could describe their experience with greater detail. They also discovered that as they created their concept map, they engaged in reflective thinking about their experience which helped them identify the strengths of the program and the areas for growth. Teachers were also able to better understand the growth and development experienced by their colleagues as they reviewed the work of their peers. The survey data alone may not have captured the unique interpretations

created by the teachers in their concept maps. For example, as Bertha describes the organization of her concept map and the thinking that inspired it, she reveals the components of the program that were most impactful to her to be collegiality with her peers and building a more sustainable practice in using media literacy to guide her lesson planning and delivery. These descriptive insights were captured because of the creation and communication of the concept map. Bertha shared her concept map with the group by describing her thought process and the themes that were most important to her. She used the visuals in her concept map to help her communicate her ideas to the group. Using the concept map as a guide to help her share ideas she elaborates on her experience in the TILT program when she says,

I just kind of saw these, these four pieces is like really kind of being connected. I didn't really give a good explanation under collegiality, but I felt like, because of collegiality....it made it possible to work through the certification, you weren't necessarily on your own, you could bounce ideas off of one another. In many of our cases, we worked with one another, you know, to earn the micro credentials. And really see different perspective. So, I think that collegiality was important, because without that, the certification wouldn't have been possible.....it's just really difficult on your own. And as a result of the collegiality, you were able to complete the certification, which moves you into an increase in expertise....even talking with other people, it kind of forced you to reflect on your own practices and research new ones, and then practice those new ones, so that you could then move into the integration piece, and integrate the practices, and then reflect on the results. And to, to basically offer you a sustainable practice and make, you know, a pretty important change. And then because of that change and your integration and that sustainable practice, you're increasing the perspective of students or you're even with your own increased perspective, you are able to use a practice that increases the perspectives of your students as well.

Future Recommendations

This collaborative evaluation model was designed to include teachers in the evaluation process while gathering a variety of data that would describe the experiences of teachers who

participated in a collaborative professional learning program to build competency in media literacy. Program facilitators interested in employing this model may wish to heed the following recommendations for replicating it in another setting. This was a summative evaluation that took place after the TILT program concluded. Future evaluators may wish to use a formative approach to collecting feedback from teachers during the implementation of the program.

The collaborative meetings for this study were conducted using Zoom video conferencing software, but participants in the study strongly recommended that efforts should be made to employ face to face meetings, when possible, as well as to provide both digital and non-digital tools for sharing experiences during the collaborative evaluation. The collegiality built within the group was identified as both a factor connected to the program's success, as well as a long-term outcome of the program. Participants in the evaluation recommended conducting future meetings in person if possible. Moreover, this model provided vivid description about the experiences of teachers who were building competency in media literacy but could also be used to evaluate programs devoted to other content areas where teachers must build their skills over time.

Additionally, this evaluation model was conducted using a small sample size with limited diversity among participants. Program facilitators may wish to explore using it with a larger, more diverse group. Finally, research suggests that professional learning programs for teachers developed based on the findings of a needs assessment make for the development of strong program goals and a more organized summative evaluation (Mathison, 2005b) The TILT program was developed based on an informal needs assessment that did not collect data from teachers about their perceived media literacy skills and practices prior to their participation in the

program. Program facilitators may wish to conduct a formal needs assessment of the needs and interests of teachers before setting program goals and implementing the program. The collaborative model would then include data from teachers about their knowledge and skills in media literacy before and after their participation in the program that could improve the overall quality of the feedback collected in the evaluation.

Summative and Formative Approaches to Collaborative Evaluation

The model of this evaluation took a summative approach by gathering feedback from teachers after the program had ended. This was mainly due to the timing of the program implementation and the development of the model. I began planning for the collaborative evaluation after the TILT program had been running for many months, so I made the decision to conduct a summative evaluation after the program concluded at the end of the school year. Another iteration of this model could explore a formative approach to evaluation that provided teachers with an opportunity to evaluate the program as they are participating in it. Since formative evaluations aim to make improvements and revisions to existing programs to improve upon it in a future iteration of the same model, (Patton, 2019) evaluators may learn more about the experiences of teachers by using a summative evaluation design. Facilitators and participants could make program adjustments during implementation that could enhance and improve the program for teachers and for their students. A formative approach could also employ the examination of student work samples during evaluation meetings. This might deepen the reflection for teachers and encourage them to make changes to their instruction based on the perceived needs of their students. I would have integrated student work samples into the evaluation process if I had not been concerned about the time it would add to the evaluation

meeting. Being mindful of teacher schedules and fatigue communicating over Zoom during the Pandemic, I designed the evaluation meetings to last just an hour.

Host Meetings in Person and Provide Time to Collaborate

While Zoom and other video conferencing platforms can provide teachers with opportunities to collaborate, the teachers in this group having experienced both in person and online interactions preferred the in-person model. While they recognized that video meetings can be more convenient, and certainly were much safer during the pandemic, they were adamant that future TILT programs and the evaluation of those programs needed to be conducted in person. They all identified the collegiality among the group as the key factor that led to a more satisfying experience in the program and credited our time meeting in person in establishing a community.

Digital Data Collection and Visual Research Methods

These results provide future participants and funders with actionable data to use for future programs. The impact of the program is evident when we review the concept maps and read the quotes taken from the collaborative discussion about the TILT experience. The TILT program was developed to support teachers over a longer period to develop their skills through collaboration. Using a multi-phase program with collaboration and media making replicated the program design and provided teachers with a unique opportunity to reflect on their experience and was far more effective than a single method evaluation design. This collaborative evaluation model was designed to use methods of concept mapping, visual research methods and collaborative discussion to test the efficacy of capturing rich description about the TILT program as well as actionable data that could describe the experiences of the participants and lead to more successful implementation of the program in other settings. This study took place during the

COVID-19 pandemic when in-person gatherings were restricted by due to the large numbers of active cases of the coronavirus across the state. For this reason, meetings were conducted using Zoom video conferencing software and data was collected using digital tools exclusively. At the time that the meetings were conducted the teachers had been using Zoom to interact with one another and with students daily. Many were feeling a sense of fatigue with that form of communication and were even reluctant to continue participating in the final months of the TILT program and the evaluation because of this fatigue. While the evidence indicates that we were still able to capture unique, actionable data about the TILT program under these circumstances, I would recommend implementing this same collaborative evaluation process in an in-person setting and allowing teachers to use a variety of non-digital and digital tools to create their concept maps. It would be valuable to see if the data collected during an in-person discussion provides different or even higher quality insights about the program and its impact on teachers and their learning. If teachers were given the opportunity to gather in-person, enjoy a meal together like the first seven TILT meetings, the results may have been more diverse. Teachers expressed their preference for face-to-face meetings during this evaluation and it stands to reason they could be more open and forthright if the collaborative evaluation meeting were conducted in person. Providing participants with a choice in the materials they use to create their concept maps such as markers, post-it notes, and other tangible items could lend itself to more creativity from some teachers.

Collaborative Evaluation and Professional Learning Programs Designed to Build Self-Reported Competency

While this model was developed specifically for teachers engaged in a collaborative professional learning experience about self-reported media literacy competency, I would

recommend it be used to evaluate programs for teachers engaged in other programs devoted to acquiring more advanced skills in competency-based content areas such as English Language Arts, Mathematics or Science. The evidence suggests that this method was effective for gathering high quality feedback from program participants in an area where competency is built over time through practice and collaboration with peers. The concept maps created by participants provided an opportunity for participants to reflect on their experiences and then use them to support their discussion with their peers during the evaluation. The exercise of creating a concept map to describe their experience is likely to transfer to other content areas with similar professional learning programs devoted to building self-reported competency.

Group Size and Diversity in Participants

This model was designed to evaluate a program with a small number of participants and because of this the collaborative meetings were effective in encouraging discourse among educators in smaller group. It would be beneficial to the expansion of the model to see it employed in a program with a larger number of participants to investigate whether it would capture similar unique and high-quality feedback. It may also be valuable if there are larger groups, to employ smaller, subgroups and then bring larger groups back to discuss smaller group findings, since the findings of this study suggest some difference in the views of incentives between two subgroups and this may not be seen in the conformity to larger group dynamics. The participants in this study were all white females working with middle and high school students within the same school district and with more than 9 years of teaching experience. A larger group size would lend itself to more diversity among participants. While the participants in this study were diverse in the content areas taught by each teacher, the group was homogenous

in gender and ethnicity. Employing the model with a more diverse sample size would further demonstrate its efficacy.

Enhance the Evaluation Model with a Needs Assessment

Research suggests that program facilitators use a formal needs assessment when designing programs that will help them develop clear goals (Frey, 2018). Past studies in Media Literacy professional development for teachers employed tests before and after a program to gather data about what teachers learned through their participation in the program (Ranieri, 2017). The TILT group chose to pursue the PBS-MLC program before a formal needs assessment could be conducted. The timing of the school calendar and when the teachers were available for meetings did not allow for a competency inventory to be taken prior to working on the program. For this reason, the evaluation done during this study was done using retrospective data from teachers as they shared their perceptions about what they learned and how their practice changed after the program concluded. It possible that since the program took place over the course of a school year, and during a Pandemic, the teachers may have struggled to recall their earlier experiences with the program. If there were artifacts from a needs assessment such as a concept map or self-assessment of skills teachers could use those results to reflect more deeply about their experience in the program. Program facilitators who wish to replicate the TILT program and support teachers to work through the PBS-MLC would be advised to conduct a needs assessment that includes an inventory of teacher's competency in media literacy instruction prior to implementing the program and integrating the results of the needs assessment into the collaborative evaluation model.

Reflexivity

My role in this study was that of researcher, evaluator, facilitator, and participant. My goals for the study varied depending on the role I was playing as the study progressed. Admittedly, it was challenging to keep these different roles and my goals from getting confused with one another. As the researcher conducting this study my goal was to investigate the efficacy of a collaborative evaluation model. The metacognitive work of evaluating an evaluation gave me reason to pause many times during this process. As the evaluator of the program my goal was to employ the collaborative model and gather data about the TILT program. As the facilitator of the TILT program my goal was to guide the group through the collaborative process and support teachers as they worked through the PBS-MLC program. As a participant in the TILT program my goal was to learn with and from my peers as I strengthened my own media literacy skills and completed the PBS-MLC. My roles often overlapped as I implemented this study and I found myself confusing my goals with my roles more than once. As the evaluator and facilitator, this study provided me with the opportunity to study program evaluation and to use my new knowledge to launch a full evaluation of one of the programs I designed.

As I implemented this study, I began to infuse evaluative thinking across all the programs I design and implement. One of the advantages to having program stakeholders participate in the evaluation process is the opportunity to promote evaluative thinking within the organization (D'Ostie-Racine et al., 2016). Bertha facilitates the TILT program for her district now. I shared the program evaluation report I created from this study (Appendix E) with her, and she used it to guide the design, implementation, and on-going evaluation of her cohort group. We talk

frequently about her role as the facilitator and how this study supported her to redesign the TILT program and make it her own.

Despite the challenges of serving in multiple roles, this insider approach to research and program evaluation provided me with unique access to the participants and allowed me the opportunity to build strong relationships with each of them. I believe these relationships were the primary reason that I was able to collect data from all five of the participants. I also believe that their trust in me persuaded them to deliberately describe their experiences and fully participate in the evaluation process. As a facilitator of professional learning for teachers, my intent was always to use the findings of this study to further my work with teachers. I hoped the data collected in this study would inform the design and implementation of programs that support teachers to build their self-reported competency in media literacy and lesson design using digital tools. The findings from this study have compelled me to approach professional learning programs for teachers in a new way by providing teachers with time to collaborate and share their knowledge. The teachers who participated in this study unanimously agreed that the collegiality within our group was the most impactful attribute of the program. The community developed among the six of us was both an incentive to persevere through the program as well as an outcome of the program that continues to support the professional growth of each of us. As I continue to design professional learning programs for teachers, I am deliberate about building time in for collaboration, discussion, and knowledge-sharing. I also learned that the collegiality that grew among our group did not occur overnight, rather it was built over time as we worked together toward a shared goal to complete the PBS-MLC. This has helped me to be patient with the process of building community among teachers.

I began this study searching for an evaluation model that would be a better alternative than the single survey method I had used to evaluate programs in the past. I wanted to use a collaborative evaluation model to gather experiences from teachers that captured their self-reported growth over time using their written statements, discussion, and digital concept maps. Having teachers use digital media to describe their self-reported learning about media literacy was important to me because it required teachers to put their new learning into practice. As the program facilitator, I knew that if I were to replicate this program in a different setting that I would need compelling testimony and unique artifacts from past participants that would persuade new teachers to pursue the program and new donors to fund the continuation of the work. An unanticipated outcome of this program and my evaluation was that other PBS stations reached out for stories of success about my work with teachers. Sharing the testimony and lessons learned from this study has motivated other PBS stations to develop cohorts to support teachers to earn the PBS-MLC.

Conclusion

In this qualitative case study, I investigated the efficacy of a collaborative evaluation model employing strategies from concept mapping and visual research methods to gather high quality feedback from teachers about their experience in a collaborative professional learning program, TILT, devoted to developing self-reported competency in media literacy. The findings from this study suggest that the model was effective in capturing data that proved that the program goals were met by gathering feedback from participants on surveys, in collaborative meetings, on participant created concept maps, and within a Google Slide deck that was used to facilitate the discussion in group meetings. Actionable data were gathered that supported the

implementation of the program in future settings. Those recommendations are program facilitators looking to implement TILT would be wise to heed the stakeholder recommendations to include incentives in the program model, to partner with district leadership to develop a strong plan for program sustainability, while developing scaffolds to support the transition of leadership of the TILT program to an on-site facilitator. Several factors such as providing incentives, time to work together, and opportunities to reflect on their practice were identified as crucial to achieving the program outcomes. The program outcomes identified with the collaborative evaluation model that were of the most value to participants were the collegiality that developed among members of the group and the growth in confidence and expertise in media literacy integration.

This collaborative evaluation model provided detailed description about the TILT program and how the PBS-MLC program supported the perceived growth of media literacy competency for teachers. My role as the researcher, evaluator and program facilitator allowed me to leverage the collegiality and strong relationships developed over time to gather compelling data about the TILT program and the growth in self-reported media literacy competency of the teachers. Facilitators of professional learning for teachers can employ a collaborative evaluation model to gather testimony from participants describing their experiences that will inform the design of future programs for teachers. Findings suggest that including teachers in the evaluation of the programs in which they participate is an effective evaluation strategy that increases the chances that the data collected will inform the future professional learning programs for teachers. This model is recommended for programs that are meant to support teachers in building their

self-reported competency in a specific content area, such as media literacy, over time through collaboration with peers.

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APPENDICES

APPENDIX A

CONCEPT MAPS

Bertha

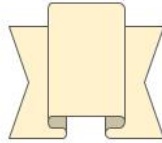
Collegiality

Working together made this certification possible because you had support.



Increase in Expertise

Working through the microcredentials, forces a teacher to reflect on current practices, research new ones, and practice these new ones.



Integration

The integration of new practices and reflecting on the results offers a sustainable practice and powerful change.



Increased Perspective

When a teacher has integrated media literacy practices into lessons and increased their own perspectives, students experience new perspectives as well.



Lois

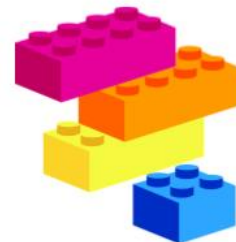


MEDIA LITERACY

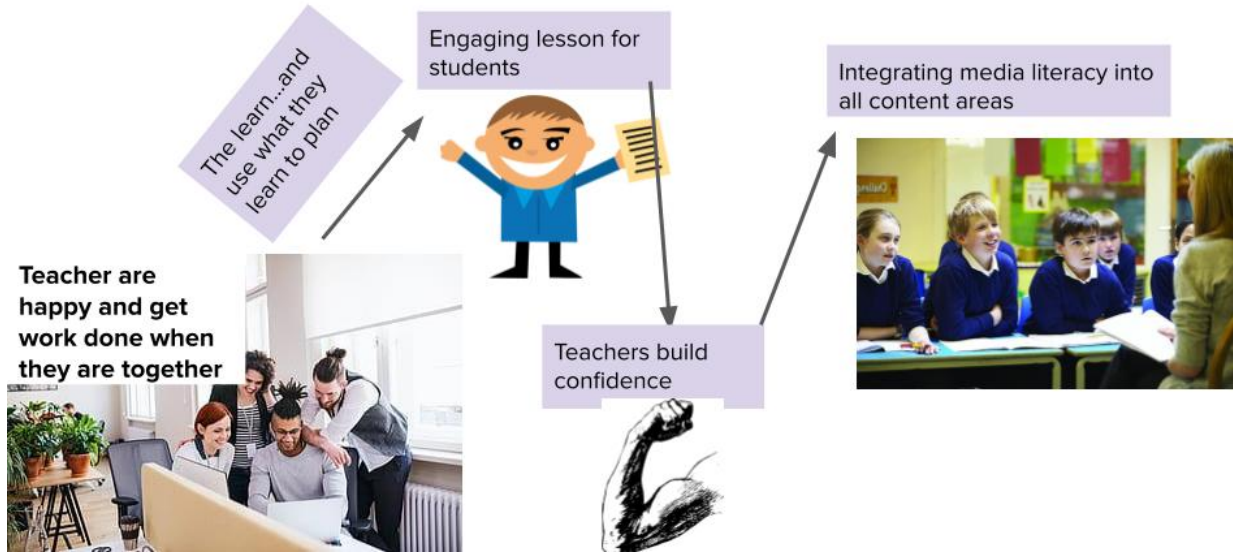
Integration across content areas

Confidence and expertise

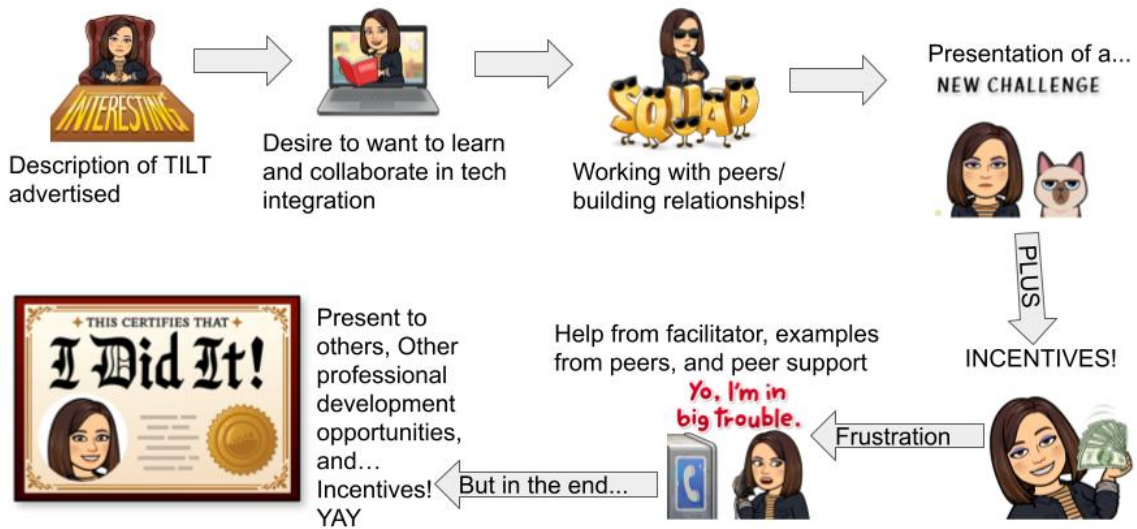
Relevant and important skills



Franky



Holly



Lando Calrissian



APPENDIX B

COLLABORATIVE CODING RESULTS

Theme Generation from First Meeting



Final Recommendations from the First Meeting**Final Recommendations from the Group**

Keep incentives if possible, whether that's food, a time set aside to work, friendly competition, or financial recognition

Representation of teachers from a wide variety of subject areas and grade levels if possible

Foster sustainability of the program--provide supports for accountability

Magnitude Coding from Second Meeting**Lando Calrissian: Rate the Factors and the Outcomes****Factors that lead to Outcomes**

Incentives ST
 Friendly competition ST
 Collaboration and peer support ST
 Helpful Facilitator ST
 Clarification of program criteria ST
 Flexibility ST
 Time given to work ST
 Opportunities to plan and teach together LT
 Food ST
 Opportunities to reflect on teaching practices LT
 Opportunities to implement media literacy principles in lessons LT
 Diversity among teaching content areas of participants LT
 Mutual appreciation for contributions of each group member ST/LT (building relationships with colleagues: ST = quality time spent, LT = existing relationship)
 Opportunities to see other's examples LT

Outcomes

Improved media literacy skills and confidence for teachers LT
 Improved media literacy skills and confidence for students LT
 Increased integration of media literacy across content areas LT
 Completion of PBS Media Literacy Certification ST
 Earning stipends ST
 Strong sense of collegiality with other participants ST/LT (building relationships with colleagues: ST = quality time spent, LT = existing relationship)

Holly: Rate the Factors and the Outcomes

Factors that lead to Outcomes

Incentives ST
 Friendly competition ST
 Collaboration and peer support LT
 Helpful Facilitator LT
 Clarification of program criteria ST
 Flexibility ST
 Time given to work ST
 Opportunities to plan and teach together LT
 Food ST
 Opportunities to reflect on teaching practices LT
 Opportunities to implement media literacy principles in lessons LT
 Diversity among teaching content areas of participants LT
 Mutual appreciation for contributions of each group member LT

Opportunities to see other's examples
 LT

Outcomes

Improved media literacy skills and confidence for teachers LT
 Improved media literacy skills and confidence for students LT
 Increased integration of media literacy across content areas LT
 Completion of PBS Media Literacy Certification ST
 Earning stipends ST
 Strong sense of collegiality with other participants LT

Opportunity to apply learning to other professional development LT

F

What could be omitted from the TILT program without changing the outcomes?

Could have achieved the outcomes of the program w/o the PBS-MLC program
 Some of MLC MC's were less meaningful--biggest outcomes came from the group
 Lesson design was more important than earning the MCs
 Needed the themes, the ideas, the "push" but didn't need the "badge"
 Incentive was needed to keeping going on the MCs did not need an incentive to participate in TILT
 TILT was "enough incentive"

APPENDIX C

SURVEY PROMPTS

First Open-Ended Survey Questions

Did you complete the PBS Media Literacy Certification? If not, explain where you are in the process.

Write statements about your perceived impact as an educator because you participated in the MLC cohort

Write statements about how collaboration among teachers can improve media literacy competency in teachers.

Write statements about changes you observe in your teaching related to participation in the MLC cohort.

Write statements about how students benefited from your participation in the MLC cohort.

Write statements about the types of lessons you implemented with students while pursuing MLC.

Write statements about how collaboration among teachers can improve media literacy competency in teachers.

Write additional statements about the MLC cohort that you feel would help us to understand the value of this program

Write statements about measures that could be taken to improve the PBS MLC TILT program

Final Survey Questions

Question

Please share your final thoughts and reflections about the PBS Media Literacy cohort experience.

What recommendations do you have for anyone facilitating a PBS Media Literacy cohort in the future?

APPENDIX D

EVALUATION DISCUSSION PROMPTS

Prompts for Teachers as they Begin Concept Mapping Activity

Prompt

Use text, shapes, colors, and images to represent the themes and their value to this program

Think about the relationships that may exist between each theme

Think about your personal feelings about each theme and its significance to the program

Think about the goals you had for yourself when you began this program

Think about your students and how these themes align with their learning

Think about the goals of this program and how these themes align to those goals

APPENDIX E

PROGRAM EVALUATION FINAL REPORT

Program Evaluation Final Report

Executive Summary

In this study I investigated the efficacy of a collaborative evaluation model employing strategies from concept mapping and visual research methods to gather high quality feedback from teachers about their experience in a collaborative professional learning program, TILT, devoted to developing competency in media literacy. The model was effective in capturing data that proved that the program goals were met by gathering feedback from participants on surveys, in collaborative meetings, on participant created concept maps and within a Google Slide deck that was used to facilitate the discussion in group meetings. Actionable data was gathered that would support the implementation of the program in future settings. Program facilitators looking to implement TILT would be wise to heed the stakeholder recommendations to include incentives in the program model, partner with district leadership to develop a strong plan for program sustainability while developing scaffolds to support the transition of leadership of the TILT program to an on-site facilitator. Several factors such as incentives, time to work together, and opportunities to reflect on their practice were identified as crucial to achieving the program outcomes. The program outcomes that were of the most value to participants were the collegiality that developed among members of the group and the growth in confidence and expertise in media literacy integration.

Introduction

Involving program stakeholders, such as teachers, in the evaluation process is known as collaborative evaluation and is a method that can be used to ensure the results of an evaluation

are used to improve a program (O'Sullivan, 2012). Collaborative evaluation has been utilized in the fields of medicine, business and in some international schools for nearly two decades but has been under studied in American educational settings. The few studies that exist have fallen under scrutiny for taking many years to complete (Lake et al., 2017).

Concept mapping is a specific evaluation and planning strategy that can take many forms. In quantitative studies, shapes are used to organize data revealing key relationships between statements generated in surveys filled out by participants (Kane, 2007). Evaluators can study these shapes and the relationships between the data points as they make recommendations for the planning and implementation of a program. Qualitative studies use concept maps as an artifact created by participants to share their thinking (Kuzmin, 2012). These participant-generated concept maps can be powerful discussion and reflection tools for participants as well as program evaluators and designers. Regardless of the type of evaluation, concept maps serve as a visual representation of a program and the impact it may have had on participants. Gathering artifacts, such as concept maps, is an evaluation strategy intended to reveal deeper understanding of a program and its value (Sutherland & Katz, 2005).

Description of the project

I facilitate professional learning programs for teachers who are interested in building their skills using technology and expanding their competency in media literacy. I developed a model for professional learning to be evaluated in this study called Teachers Innovating and Learning Together (TILT). The teachers who participate in TILT have worked with me throughout two school years to study the use of technology and digital media tools in the classroom. The 2019-20 school year was spent collaborating to earn eight micro-credentials as part of the PBS Media

Literacy Certification for Educators by KQED (PBS-MLC) program. PBS-MLC was developed by KQED, the PBS station in San Francisco, CA in 2019 in collaboration with the National Association for Media Literacy Education (NAMLE) in an effort to provide educators with a free, research based and self-paced program for developing competency in Media Literacy Education. This program is free and available to any teacher who wishes to build their expertise in media literacy. It can be found online and was developed to be self-paced for teachers to pursue on their own as they work with students during the school year. As a public media educator, I admired this program for its quality and unique delivery. My experiences working with teachers as a facilitator of professional learning led me to believe there could be merit in providing support to teachers as they participated in the program. I developed TILT as a collaborative model to support teachers in earning this rigorous online certification. The group met monthly to develop instructional plans and interpret the requirements of the program. As teachers began to earn micro-credentials, I could see the cohort model was working. I wanted to look closer at the impact of the collaboration between the teachers so that I might be able to replicate and improve upon it in another setting with different teachers. I designed an evaluation of the TILT model to include collaboration and concept map building as a method for measuring the impact of this cohort.

Evaluation Purpose and Methodology

Media Literacy and collaboration are both topics that researchers have attempted to study using both qualitative and quantitative methods yet have struggled to truly capture their impact (Ranieri et al., 2017). Research shows that Media literacy skills are developed over time and require regular maintenance (Rogow, 2011). Attending a single workshop is not likely to inspire

the change in thinking and behavior needed to impact a teacher's overall competency in media literacy (Ranieri et al., 2017). Teachers require ongoing, embedded professional learning experiences that provide time for practice and reflection in order to improve their practice (Darling-Hammond, 2009b). Similarly, assessing teacher learning through a single survey may not reveal growth or a change in practice caused by the professional learning experience (Darling-Hammond, 2009a). Evaluations conducted at a distance by evaluators who are not engaged with the stakeholders in the program result in findings that are not used or taken seriously by program stakeholders (O'Sullivan, 2004b). The purpose of conducting evaluations is to improve programs for future participants (Shaw et al., 2006). By implementing this evaluation model, I attempted to investigate collaborative evaluation as a method for understanding and describing the impact of collaborative professional learning programs for educators working together to build their skills in media literacy. This model is unique because it involved the teachers in the evaluation of the program through open ended surveys, discussion, and the creation of concept maps. It replicated the TILT model using the same collaborative format to build knowledge among participants and was embedded into the TILT program as the final gathering of the group. Teachers played a leading role in the evaluation as they collaborated to analyze data, discuss program goals, and make recommendations for the future of the program.

Program Goals for the TILT Program

The goals of the TILT program are to:

- Increase the total number of PBS Media Literacy Certified teachers in Montana by offering a cohort support program and incentives for completing the program;

- Build media literacy competency in participating teachers through pursuit of media literacy certification and collaboration with peers;
- Increase the implementation of media literacy experiences for students in the classrooms of participating teachers.

Participants

Five teachers from the same rural school district helped me conduct this program evaluation study. I have worked with these teachers since 2017 when I first started supporting their school district in effective use of technology and media in the classroom. In our first school year working together I met with the teachers in small groups or one on one to plan lessons using technology. Their interest in collaborating with one another led to the development of the TILT program. In our second year working together we began to meet monthly, after school to explore Microsoft tools for education. The teachers wanted to learn how to use the tools in the Microsoft suite with more precision so they could support their students and their peers to use them too. After a year of collaborating in the TILT program the teachers expressed a desire to continue our collaborations during the next school year. I suggested exploring a new program developed by another PBS station, the PBS Media Literacy Certification for Educators by KQED program. All five teachers favored the idea and agreed to participate.

Data Analysis

Evaluation coding methods (Saldaña, 2016) were used to identify themes and align data to the TILT program goals, research questions and the Theory of Change framework. The coding methods were descriptive coding, magnitude coding, In Vivo and Theory of Change which is

specific to the evaluation study as recommended by Michael Quinn Patton in *The Coding Manual for Qualitative Researchers* by Johnny Saldaña (Saldaña, 2016). The evaluation method I used for this study was designed to be collaborative which meant that the program participants assisted with a portion of the coding. Due to scheduling challenges with all five participants, there were two collaborative evaluation meetings, each with a different group of teachers. Three participants in the study assisted with the first cycle of descriptive coding during the first of the two collaborative meetings while two teachers assisted with the second meeting and conducted magnitude coding.

Findings, Conclusions and Recommendations

The five themes that emerged from the data collected and analyzed during this evaluation.

They are,

1. Teachers who participate in the TILT program feel they improved their skills and confidence teaching media literacy
2. The TILT program provides teachers with opportunities to integrate media literacy across multiple content areas
3. Teachers who participate in TILT value the strong sense of collegiality that developed among members of the group.
4. Teachers who participated in the TILT program were able to apply their new skills and knowledge in new settings
5. Incentives add short and long-term value to the program and can be both extrinsic and intrinsic but not all teachers are motivated by the same incentives

Theme 1: Teachers who participate in the TILT program feel they improved their media literacy skills and confidence teaching

The first theme was agreed upon by Group 1 during their collaborative meeting after reviewing the statements shared on the first survey. These are statements from the first survey indicate participants feel their skills and confidence in media literacy have improved,

- I consider media literacy standards and skills when I approach a lesson.
- I look for opportunities to integrate media literacy in my teaching.
- Students had richer experiences with their projects in science and English classes because their teachers were trying new things and integrating media literacy.
- It made me reexamine things I was already doing as a teacher and made me aware of areas where I was lacking knowledge and helped me become a well-rounded media educator.
- Working and collaborating with other teachers while earning the certification greatly improved my media literacy competency because I was able to see how others were interpreting the criteria, and the ideas they had for the artifacts.
- I wouldn't have gained nearly as much knowledge or understanding if I had done all the criteria all on my own.
- I've observed a few changes in my teaching since participating in the cohort: I pay closer attention to certain criteria areas like code of conduct and student data privacy.

- I also find myself integrating things I learned from the cohort into my teaching on a regular basis.
- Several of my lessons have improved since completing the certification. I know because the quality of student work has improved, and students enjoy the projects more. I also think students are getting a broader and more well-rounded perspective on media literacy.
- I highlighted the following statements in my field notes during the first evaluation as participants discussed them,
- Deliberate integration
- Richer/broader/well rounded student experiences b/c of integration
- Sharing knowledge/exchange of ideas supports interdisciplinary learning of ML

The concept maps created by the teachers in Group 1 and 2 identify improved skills and confidence in media literacy education as a key outcome of the TILT program. Participants in both groups used statements on their concept maps about improved skills and confidence in Media Literacy. Bertha identified the new skills teachers acquire in the TILT program in the concept map she created during the first evaluation meeting, “Working through the micro credentials, forces a teacher to reflect on current practices, research new ones, and practice these new ones.” Another key statement from Bertha’s concept map was, “When a teacher has integrated media literacy practices into lessons and increased their own perspectives, students experience new perspectives as well.” Frankie used a similar phrase to describe the outcome of the program from her perspective, “Teachers are happy and get work done when they are

together. They learn...and use what they learn to plan engaging lesson for students” Lando used this phrase to summarize her thinking about the TILT program. She wrote a statement in the notes section of the slide where she created her concept map and then reiterated when she shared her map with the group “Outcomes: Confidence boost for both teachers & students, Collegiality” Both groups made statements about improved skills and confidence in media literacy during the collaborative discussion. Lando and Holly agreed that collaborating with their peers to explore “Lesson design was more important than earning the MCs” and felt that they “needed the themes, the ideas, the “push” but didn’t need the “badge” (micro-credential)” to acquire the new skills and confidence in media literacy.

Theme 2: The TILT program provides teachers with opportunities to integrate media literacy across multiple content areas

Group 1 identified integration as a key outcome after reviewing the data from the first survey. These statements were included in the results to the first survey and led the group to discuss the impact of exploring integration during the TILT program.

- Media literacy is by its nature interdisciplinary and collaborating with teachers across multiple subject areas allowed me to see how these concepts applied in multiple disciplines.
- I am more aware of ways in which media literacy instruction can be integrated across the curriculum.
- I look for opportunities to integrate media literacy in my teaching.

- Students gained exposure to the concepts of media literacy that could be applied across all subject areas and to their lives as citizens and consumers of media.

Teachers in both groups identified value in engaging in discussions with one another about how media literacy skills can be employed across different content areas. They agreed that working in a group where each teacher covers a different content area with students added more opportunities to discuss the concept of integration. Evidence of the impact of integration across content areas was found in concept maps and within the discussion among group members. Bertha used this phrase in her concept map, “The integration of new practices and reflecting on the results offers a sustainable practice and powerful change.” Frankie describes how the TILT program provides opportunities to integrate media literacy across content areas and the confidence that grows as a result on her concept map with the statement, “Teachers build confidence integrating media literacy into all content areas” The teachers in group 1 devoted time to discussing the idea of integration as they shared their completed concept maps with one another. As Bertha described her concept map to the group, she used this phrase to explain how she viewed the presence of integration in the TILT program, “And then because of that change [in teaching with media literacy] and your integration and that sustainable practice, you're increasing the perspective of students..... you are able to use a practice that increases the perspectives of your students as well.” Frankie identified integration as an outcome of the TILT program when she describes her concept map to the group, “all teachers work together, and then they learn and then they find ways that are new, that are making new ways to engage students, and they're building competence, and they're more likely to integrate the media literacy components into their content areas.” Lois felt that the members of the group and their teaching

experience led to greater integration. One of the final recommendations she made at the end of the first meeting with Group 1 was, “Representation of teachers from a wide variety of subject areas and grade levels if possible.”

Holly and Lando identified integration as both a short-term factor needed for the success of the program as well as a long-term outcome of the program during the magnitude coding exercise. They did not elaborate on its significance during the discussion as Group 1 did.

Theme 3: Teachers who participate in TILT value the strong sense of collegiality that developed among members of the group

Group 1 identified collegiality and peer support as a key theme that emerged from the first survey. They incorporated that theme into their concept maps. These are some of the phrases identifying collegiality as a strong theme in the TILT program were captured from the first survey,

- The TILT framework allowed me to collaborate with my peers on projects in the classroom which ultimately earned me micro-credentials.
- Without the urging of the credentials, I probably wouldn't have had so many collaboration opportunities as a librarian.
- This model offered the support I needed to complete the certification. I would not have made it through the process without my colleagues.
- Working and collaborating with other teachers while earning the certification greatly improved my media literacy competency because I was able to see how others were interpreting the criteria, and the ideas they had for the artifacts.

All participants in Group 1 incorporated phrases, images, or graphics about collegiality in their concept maps. Most of them identified collegiality as the most important and impactful part of the program. This is evidenced by the position of statements about collegiality in each concept map. All participants in Group 1 started their map by describing the impact of collegiality and how it guided their success in the TILT program. Most of them used images of people working together to symbolize collaboration and collegiality. Bertha describes collegiality as the first theme on her concept map using this statement, “Working together made this certification possible because you had support.” When she described her concept map to the group, she stated that for her, the collegiality was the most important part of the program. She says, “it made it possible to work through the certification, you weren't necessarily on your own, you could bounce ideas off of one another. In many of our cases, we worked with one another, you know, to earn the micro credentials” Franky and Lois also started their maps with images and statements about collegiality indicating that for them, this was a key factor in their satisfaction with the program. Franky used the phrase, “Teachers are happy and get work done when they are together” to caption a photograph of adults standing in a huddle around a computer while Lois prominently placed silhouetted graphic of people standing together with the statement “better together...supporting each other” on the top righthand corner of her slide.

Participants in Group 2 also used images and statements to describe the role of collegiality in the program by prominently placing them in the top right section of their slides. Both Holly and Lando describe collegiality and collaboration opportunities with their peers as important components of the program. Lando used a colorful image of two people with speech bubbles above their heads. The speech bubbles overlap to look like a Venn Diagram with a

lightbulb between them. Holly describes her concept map to be a flow chart that describes her personal journey participating in the TILT program. She uses Bitmoji cartoon images of herself captioned by short phrases connected to one another with arrows. Three of the seven images and captions on Holly's concept map are about the importance of collaboration with peers. Early in the process Holly identified "Desire to want to learn and collaborate in tech integration" as one of the factors that attracted her to the TILT program. The third image on Holly's concept map is a cartoon image of her hovering over the word "squad" and she used the following explanation during our meeting to describe the importance of the image, working with the peers, building those relationships, all of that was really, like awesome and great. And like I said, favorite part of the month." The final image describing collaboration and collegiality appears toward the end of Holly's flow chart. She uses an arrow with the word "frustration" to point to a Bitmoji image of her on the phone saying "Yo, I'm in big trouble" into the receiver. She captions this image with the phrase, "help from facilitator, examples from peers and peer support." In her description of her concept map Holly describes this image "And to get that (micro-credential) I definitely hit points of frustration, but the help from facilitator, my peers, and the examples from peers really helped me push through to the finish line."

During the Group 2 evaluation I asked Holly and Lando to use magnitude coding to rate the factors and outcomes of the TILT program with either a short term or long-term effect for their teaching and professional learning. Both teachers listed collaborating with peers to be a key factor in their success in the program as well as a positive outcome for them after the program ended. They described how their collaboration with the TILT group continued and helped them as they worked with other teachers in the building and their students. Lando explained her

thinking and how she viewed collaboration as both a short-term factor and a long-term outcome when she stated, “Oh, I get to go hang out with Holly and, and Nikki and all those guys after school, you know, like, that's like the short term like part of it. But then the long term is like, we've all been through this together. Like we have built those relationships.” Holly agreed with Lando and described her thinking about the TILT program and collaborating with her peers by saying, “I really agree with that. It was always one of my favorite things to look forward to. Um, it was never something that I felt like I hate like had to go to, you know, it was, yeah, one of my favorite parts. And yeah, now we have these awesome bonds with these people.”

The teachers who completed the second survey provided powerful statements about their learning and the impact of the TILT program on their teaching.

- This model of peers working together to accomplish individual certifications worked so well that I think it could and should be applied to other areas of our professional development as educators.
- This was one of the best experiences in my career. I am grateful for the opportunity to complete this program. I have benefitted so much from this and the collegiality that was built during the process is something that so many teachers could benefit from.

Theme 4: Teachers who participated in the TILT program were able to apply their new skills and knowledge in new settings

The teachers in Group 2 identified the application of skills as a long-term outcome of the TILT program as they worked through the magnitude coding activity. Evidence of this theme emerged from the In Vivo coding I conducted of the two meeting transcripts and the statements generated on the first survey. Two key examples of this theme emerged from the data. The first

is Bertha's new role as a technology integration specialist and Holly's new position as the Dean of Students at the middle school. Both teachers indicate that their work in the TILT program helped them move into these new roles with more confidence. Bertha describes the content of the TILT program as "useful in her new role." She wrote, "This has been so impactful as I really started to approach media in a different way and with a different lens. It has also helped me with my new job. I feel like more of an expert in technology because I went through a reflection process." Lando describes how she benefited from her collaboration with Bertha and how Bertha's new role impacts her when she says, "It was nice to have built that relationship with Bertha particularly now that she's in the role that she's in. Because anytime anything goes wrong with technology in the science dorm, and I can't figure it out. They're like, well, you call Bertha and I'm like, Yes, I will."

Holly was appreciative of the relationship she developed with Frankie during TILT because Frankie was the only teacher in the group working at the middle school. When Holly moved to the Dean of Students position, she began working more closely with her. Holly describes it this way, "honestly, coming over here, I had a friend already. And it felt so nice to know that I already had worked with someone, you know." Holly also noted that she used the work she did in TILT to develop her professional portfolio for another professional learning program she participated in during the same time, The Teacher Leadership Institute. She describes how she used her TILT experience in this way, "I did the whole tech leadership of the district thing just because I was going to do TILT. And I was just going to do the media literacy credentials. But then COVID happened. And we all had to, like, teach everyone,' here's

Microsoft Teams go,' you know, and so I used all of that. And then me getting this role based off, like my trajectory into leadership” for the final portfolio required for that program.

While some teachers did not shift into new roles, they did find that they applied their new learning from the TILT program into their teaching. Statements from the first survey indicated a shift in practice and a change in thinking,

- I implemented lessons in assessing online information, and in doing so, I came up with a research framework that will be useful to other classes and research projects.
- I implemented a variety of multimedia projects that gave me new options for student assignments, including video, infographics, blogs, and website creation.
- I've observed a few changes in my teaching since participating in the cohort: I pay closer attention to certain criteria areas like code of conduct and student data privacy.
- I find myself looking for bias in media messages more now than I did before.
- I check terms of service and fair use agreements now--I never did that before!
- I only use images I know are free and I am better about citing sources.
- I spend more time vetting sources than I did before.

At the conclusion of the TILT program, all five teachers shared their journey to Media Literacy Certification with members of Montana PBS and the Getting Better Foundation in a Zoom video conference. This summative event was meant to give teachers an opportunity to reflect on their learning and showcase the skills they developed while participating in the program. Each teacher shared a lesson they taught with students while working toward certification and answered questions from the two organizations about their experience. Holly said this about participating in this sharing session, “I really liked that we presented, I felt like

that gave a lot of merit, I think, all the hard work that we did. I think that was actually a really important piece of it. For me, even though I was kind of secretly dreading it. It made me really proud in the end that of the work that we did, and how excited the folks from the Getting Better Foundation were there it was cool to do that”

Theme 5: Incentives add short- and long-term value to the program and can be both extrinsic and intrinsic

Extrinsic incentives were part of the TILT program design and were used to motivate teachers to participate and persevere through the program. Teachers earned stipends from two different organizations for their participation in the TILT program. Montana PBS awarded \$500 stipends to each teacher for being a part of the TILT program and sharing their feedback with the research team following the Teacher Community Program grant. The Getting Better Foundation awarded each teacher who completed all eight micro-credentials in the PBS Media Literacy program \$500. Four of the five teachers earned this stipend from the Getting Better Foundation. In addition to stipends, teachers who attended TILT meetings each month were treated to a buffet of snack foods and drinks to enjoy during the meeting provided by the Montana PBS Teacher Community Program grant. Over the course of the two years that the TILT group met teachers were given swag items from Montana PBS such as magnetic clips, stickers, and notebooks. They also got iPads after their first year working in the TILT program funded from the Montana PBS Teacher Community Program grant. These extrinsic incentives were discussed during both meetings with each group and could be found in the concept maps created by the groups, the survey responses as well as the text inserted into the slide deck participants collaborated to create during each meeting. Some of the statements made about incentives are as follow,

- This program should continue to offer incentives for teachers who earn their media literacy certification, because it is a long and arduous process that is made more enticing by that little carrot dangled at the end.
- Keep incentives if possible, whether that's food, a time set aside to work, friendly competition, or financial recognition
- I will say the incentives helped. It's what kept me motivated.

Both groups discussed how incentives motivated them as they worked to earn the micro-credentials and how there were intrinsic and extrinsic motivators that played significant roles in the program. Their discussion identified the extrinsic rewards listed above and described intrinsic rewards of the program to be friendly competition among peers, the role of collegiality, building new skills, and improving confidence. A comparison of the incentives of the TILT program can be read in table XYZ. Both groups agreed that the intrinsic incentives were just as motivating for them when it came to earning micro-credentials and completing certification. In Group 1, Lois used the image of a carrot dangling from a stick to describe the role incentives played for her. As she shared her thinking with the group about incentives she said, "So I sort of started with that image of the carrot dangling on the stick. Whenever I think of incentives, I think of that. And I think, whether it was the competition between us to sort of keep up with our peers, you know, like Lando felt a little bit. And I felt certainly once Holly finished hers, and Bertha had finished, and Frankie finished, I was like, I gotta finish this. So, I think there were a lot of things that were that carrot dangling for us."

Incentives of the TILT program

Extrinsic Incentives	Intrinsic Incentives
Stipends	Collegiality
Food	New knowledge
Micro-credentials	Greater confidence
iPads	Improved Skills
Swag items	

The teachers in Group 2 used magnitude coding to rate the short term and long-term impact of the program factors and outcomes to their teaching practice. During this exercise Holly posed the question about whether the stipend should be considered a short-term factor leading to the outcomes of the program or a long-term outcome that lasted beyond the program. During the discussion, Lando and Holly agreed that the stipend served as a motivator that helped some teachers persevere through the program but may not have had a long-term impact on their teaching practice. Holly shared that at the time of our meeting her stipend money was already spent, and she did not feel that the money had an impact on her learning but admitted that it did keep her motivated to persevere through the program. She said, “the incentives again, were really nice, like little treat at the end.” Lando did not feel that the stipend motivated her to complete the program. As the only member of the group who did not earn all eight of the micro-credentials, she had this to say about the extrinsic incentives, “For some reason, the incentive just didn't push me enough. Like I was more incentivized by you all. And if we wouldn't have had COVID I think I probably would have finished because I'm pretty sure I have everything I need to do. I

just haven't submitted them. And so, I think I was more incentivized by like the humans.” Holly and Lando also discussed the micro-credentials they earned as incentives. As each teacher completed the criteria for a micro-credential, they were emailed a digital badge to represent their accomplishment. When they finished the program, they got another digital badge they could use in their digital space such as their email signature. Holly and Lando agreed that earning the micro-credentials was not as motivating for them. They felt the knowledge they gained about media literacy through the discussion with the group to be more impactful. Holly explained her thinking in this way,

While the media literacy credentials, pushed me, I don't know that I needed those to get as much out of TILT, as I have, I think we probably could have used some of those as themes without actually having to earn those badges. Like it definitely feels great t, have earned it and gone through it. But I don't know that we would have needed it, especially if it could have been a normal year last year, I think we probably all would have been pushed in similar ways. Because like, some of the literacy credentials, for me, were meaningless. Like, I just saw them. I was like, Okay, I'm doing it just to get the badge. But it was really difficult and frustrating. And the biggest outcomes for me, I think I could have achieved just within this group, with the themes in mind.

Lando agreed with Holly and added this to the conversation,

Now, I'll echo that too, because I know like, once we were at home, instead of wanting to spend time working on those badges, I was like, No, I'm gonna make my lessons like because they're all digital, that much better. And like that stuff that I'm working on right now, too, with my kids being at home, half time and like, I'm working on making sure that my kids are learning more via like, using technology and using like media literacy and stuff, rather than being like, Oh, I really have to go get that sixth badge. Like, it's still just haven't brought me there to do it.

Final Recommendations

Teachers were asked to make final recommendations about the TILT program on both surveys and at the end of both collaborative meetings. The recommendations were about the importance of providing incentives, the value of partnering with district leadership to support the program's sustainability and the preference for in-person meetings instead of virtual. These recommendations are the actionable data that program facilitators can apply when replicating the program in future settings.

APPENDIX F

EVALUATION PHASES ALIGNED TO RESEARCH QUESTIONS

<i>Evaluation Phase</i>	<i>Data Collected</i>	<i>Program Goal Alignment</i>
<i>Phase 1</i>	First Open-Ended Digital Survey Responses	<p>Goal #1 Increase the total number of PBS Media Literacy Certified teachers in Montana by offering a cohort support program and incentives for completing the program</p> <p>Goal #2 Build media literacy competency in participating teachers through pursuit of media literacy certification and collaboration with peers</p> <p>Goal #3 Increase the implementation of media literacy experiences for students in the classrooms of participating teachers</p>
<i>Phase 2</i>	Transcription of Video Recording of Collaborative Evaluation	<p>Goal #2 Build media literacy competency in participating teachers through pursuit of media literacy certification and collaboration with peers</p> <p>Goal #3 Increase the implementation of media literacy experiences for students in the classrooms of participating teachers</p>
<i>Phase 3</i>	Participant Created Concept Maps	<p>Goal #2 Build media literacy competency in participating teachers through pursuit of media</p>

		literacy certification and collaboration with peers
		Goal # 3 Increase the implementation of media literacy experiences for students in the classrooms of participating teachers
<i>Phase 4</i>	Group Dictated Evaluation Summary Statements	Goal #2 Build media literacy competency in participating teachers through pursuit of media literacy certification and collaboration with peers
		Goal # 3 Increase the implementation of media literacy experiences for students in the classrooms of participating teachers
<i>Phase 5</i>	Final Open-Ended Survey Responses	Goal #1 Increase the total number of PBS Media Literacy Certified teachers in Montana by offering a cohort support program and incentives for completing the program
		Goal #2 Build media literacy competency in participating teachers through pursuit of media literacy certification and collaboration with peers
		Goal #3 Increase the implementation of media literacy

experiences for students in the classrooms of participating teachers

Phase 6

Evaluator Generated Field Notes

Goal #1 Increase the total number of PBS Media Literacy Certified teachers in Montana by offering a cohort support program and incentives for completing the program

Goal #2 Build media literacy competency in participating teachers through pursuit of media literacy certification and collaboration with peers

Goal #3 Increase the implementation of media literacy experiences for students in the classrooms of participating teachers

APPENDIX G

DATA ALIGNED TO EVALUATION
PHASE AND RESEARCH QUESTIONS

Data Collected Aligned to Evaluation Phase and Research Questions

Evaluation Phase	Data Collected	Research Question
Phase 1	First Open-Ended Digital Survey Responses	<p>RQ#1 What is the efficacy of a collaborative evaluation model used to evaluate the TILT program?</p> <p>RQ#2 Does the use of a collaborative evaluation model produce actionable data about the TILT program?</p> <p>RQ #3 What preconditions and observable indicators are needed in order to achieve the desired intermediate and longer-term program outcomes?</p>
Phase 2	Transcription of Video Recording of Collaborative Evaluation	<p>RQ #1 What is the efficacy of a collaborative evaluation model used to evaluate the TILT program?</p> <p>RQ #2 Does the use of a collaborative evaluation model produce actionable data about the TILT program?</p>
Phase 3	Participant Created Concept Maps	<p>RQ #1 What is the efficacy of a collaborative evaluation model used to evaluate the TILT program?</p> <p>RQ #2 Does the use of a collaborative evaluation model produce actionable data about the TILT program?</p>
Phase 4	Group Dictated Evaluation Summary Statements	<p>RQ #1 What is the efficacy of a collaborative evaluation model used to evaluate the TILT program?</p> <p>RQ #2 Does the use of a collaborative evaluation model produce actionable data about the TILT program?</p>
Phase 5	Final Open-Ended Survey Responses	<p>RQ#1 What is the efficacy of a collaborative evaluation model used to evaluate the TILT program?</p>

RQ #3 What preconditions and observable indicators are needed in order to achieve the desired intermediate and longer-term program outcomes?

APPENDIX H

SURVEY QUESTIONS ALIGNED TO
PROGRAM GOALS AND RESEARCH QUESTIONS

First Open-Ended Survey Questions Aligned to Program Goals and Research Questions

Question	Program Goal and RQ Alignment
Did you complete the PBS Media Literacy Certification? If not, explain where you are in the process.	Program Goal #1 Increase the total number of PBS Media Literacy Certified teachers in Montana by offering a cohort support program and incentives for completing the program
Write statements about your perceived impact as an educator because you participated in the MLC cohort	Program Goal #2 Build media literacy competency in participating teachers through pursuit of media literacy certification and collaboration with peers RQ #1 What is the efficacy of a collaborative evaluation model used to evaluate the TILT program?
Write statements about how collaboration among teachers can improve media literacy competency in teachers.	Program Goal #2 Build media literacy competency in participating teachers through pursuit of media literacy certification and collaboration with peers RQ #2 Does the use of a collaborative evaluation model produce actionable data about the TILT program?
Write statements about changes you observe in your teaching related to participation in the MLC cohort.	Program Goal #2 Build media literacy competency in participating teachers through pursuit of media literacy certification and collaboration with peers RQ #2 Does the use of a collaborative evaluation model produce actionable data about the TILT program?
Write statements about how students benefited from your participation in the MLC cohort.	Program Goal #3 Increase the implementation of media literacy experiences for students in the classrooms of participating teachers RQ #2 Does the use of a collaborative evaluation model produce actionable data about the TILT program?
Write statements about the types of lessons you implemented with students while pursuing MLC.	Program Goal #3 Increase the implementation of media literacy experiences for students in the classrooms of participating teachers

	RQ #2 Does the use of a collaborative evaluation model produce actionable data about the TILT program?
Write additional statements about the MLC cohort that you feel would help us to understand the value of this program	Program Goal #3 Increase the implementation of media literacy experiences for students in the classrooms of participating teachers
	RQ #1 What is the efficacy of a collaborative evaluation model used to evaluate the TILT program?
Write statements about measures that could be taken to improve the PBS MLC TILT program	Program Goal #3 Increase the implementation of media literacy experiences for students in the classrooms of participating teachers
	RQ#2 Does the use of a collaborative evaluation model produce actionable data about the TILT program?
