



Year One Evaluation Report

December, 2021

Preferred Citation:

Accessible Teaching, Learning, and Assessment Systems (ATLAS). (2021).
SETTT for Success Year One Evaluation Report.

This project is supported by the Office of Special Education programs, U.S. Department of Education, through Grant H327S200015 to University of Kansas. The opinions expressed are those of the authors and do not represent views of the U.S. Department of Education.

© 2021 Accessible Teaching, Learning, and Assessment Systems (ATLAS), the University of Kansas

CONTENTS

- Introduction 4
- Year One Project Activities.....5
- Year One Participants 6
 - Participant Characteristics..... 6
 - CDG and TAG Member Participation7
- Year One Evaluation Questions 9
- Year One Evaluation Results..... 10
 - Question 1.1: To what extent are the SETTT resource collection, professional learning approach, SETTT Technology, and implementation plans developed to ensure maximum learning usability and flexibility and increase likely adoption?..... 10
 - Question 1.2: To what extent are the SETTT components developed to meet individual site needs and target populations?..... 14
 - Question 2.1: What are trainers’ reactions to the SETTT Technology and implementation components? 14
- Piloting of Year Two Measures17
 - CDG Members’ Impressions of the Co-Design Process.....18
- Conclusions and Next Steps.....19
 - Acceptance.....19
 - Usability and Flexibility19
 - Facilitators and Barriers to Implementation and Sustainability19
 - Next Steps 20
- Appendix A.....22
 - CDG Member Background Survey Results.....22
- Appendix B..... 34
 - SETTT Site Implementation Guide Template..... 34
- Appendix C..... 43
 - TPACK+ Knowledge Survey Pilot Test Results..... 43

INTRODUCTION

The purpose of SETTT (Special Educator Technology-Based Training of Trainers) for Success is to improve trainers' design and delivery of professional development (PD) for teachers so that teachers can design and deliver more effective academic instruction for students with significant cognitive disabilities (SCD). Since academic expectations for students have increased dramatically in the last decade, effective PD for inservice educators is critical for developing the knowledge necessary to adopt and implement new instructional strategies. The SETTT for Success approach provides trainers with the professional learning (PL), resources, and supports they need in order to address the needs of inservice teachers who work with students with SCD. The SETTT approach leverages Universal Design for Learning (UDL) principles, evidence-based technology, and PD practices to implement effective online PL for trainers as they design and deliver PD for teachers.

The SETTT for Success Model includes three components:

- A. A resource collection that supports the design and delivery of PL for trainers and teachers, as well as resources teachers may use with their own students
- B. An online PL approach that incorporates (1) modules on how to plan, design, implement, evaluate, and sustain innovation in instruction; (2) virtual coaching; and (3) a community of practice (COP) to support trainers as they develop their skills throughout the project
- C. An online trainer dashboard that houses the SETTT components

The SETTT conceptual framework, TPACK+, is a blend of the Technological, Pedagogical and Content Knowledge (TPACK) and UDL frameworks. The overall SETTT PD approach is designed for trainers to adapt for their local learner contexts. See figure 1 for a screenshot of the SETTT Dashboard.

Figure 1
SETTT Dashboard Components



The purpose of this Year One evaluation report is to describe findings from formative evaluation activities and their implications for refinement of the SETTT PD approach and SETTT Dashboard technology. The report may be of broad interest to SETTT stakeholders as well as researchers and practitioners in the areas of professional learning, special education, and educational technology.

YEAR ONE PROJECT ACTIVITIES

Year One of SETTT was a development year where ATLAS worked with educators from Rhode Island in a co-design process to develop alpha-prototype versions of project components. The first year also included exploration of effective site implementation as well as planning for Year Two implementation at future sites. The Rhode Island site was led by state leads from the Rhode Island Department of Education (RIDE) and involved two local RI school districts. Project activities included four meetings from December 2020 through February 2021 involving state and district leadership, an educator participant kickoff in March 2021, monthly meetings with a Core Development Group (CDG) from April through October 2021, and one meeting with a Teacher Advisory Group (TAG) in September 2021. The CDG and TAG were comprised of teachers and trainers and provided iterative, formative feedback on project components. The 11-member CDG met monthly, reviewed all project components from the perspective of teacher trainers, and piloted six evaluation instruments targeted for use in Year Two. The two-member TAG provided feedback from the perspective of teachers-as-learners on the SETTT alpha-prototype dashboard and on the first PL

module. Feedback from both groups generally indicated that the dashboard and module were engaging, user-friendly, and useful to them as teachers of students with SCD.

YEAR ONE PARTICIPANTS

Initial participants included educators (trainers and teachers) from two school districts which comprised the Year One statewide implementation site. After the project launched, the RIDE state leads invited additional participation from a state parent organization and two private education organizations in an advisory capacity and in anticipation of their full participation during Year Two. After participants were recruited and selected by the state leads and local district leadership, ATLAS staff and the Rhode Island state leads realized that some participants were not able to fully meet the expectations of being CDG members since they did not have experience as trainers. Therefore, project leads decided to form a teacher advisory group that would require less time for participation and would allow for additional input from a teacher-learner perspective. This addition also provided participants the option of choosing to participate in either the CDG or the TAG at the level most comfortable for them.

Participant Characteristics

A trainer background survey collected information about educators' demographics, educational background, and prior experiences with delivering PD. Ten CDG members completed the survey; one member declined. Researchers did not request that TAG members complete the survey. Appendix A lists the full survey results.

The majority of the CDG members were female and all were white. Most were from urban districts. Thus, the CDG members were a homogenous group with little gender, racial, or ethnic diversity.

About half of the members were currently serving as classroom teachers. Other roles represented were teacher leader (one), building administrator (one), district staff (one), special education coordinator (one), special education director (one), and transition coordinator (one).

CDG members were generally experienced as teachers and as teachers of students with disabilities. Slightly more than half of the CDG members had 11 to 15 years of teaching experience, with slightly less than half having over 16 years of experience. No members had less than six years of experience. Grade band experience was distributed fairly evenly from Pre-K to grade 12.

Educators had experience in English language arts (26%), mathematics (26%), science (18%), and social studies (18%). All CDG members had previous classroom experience with students with disabilities, including students representing a wide variety of disability categories. Slightly less than half of

the CDG members had 11 to over 21 years of experience working with students, half had 1 to 10 years of experience, and one had less than one year of experience.

CDG members generally had limited experience as trainers. About half of the CDG members had less than one year or no experience, and about a third had one to five years of experience. One member had six to ten years of experience, and one had 11 to 15 years of experience. The majority of CDG members had received prior PD on supporting teacher/adult learning; however, 30% had received none. One CDG member had previous experience designing and delivering online PD. Other educators had previous experience with instructional coaching (20%), mentoring (28%), supervising/evaluating other teachers (12%), and co-teaching (28%). Experience with data coaching (one trainer) and teaching courses for college or CEU credit (one trainer) were also represented. Five of the members had a goal of increasing their confidence and comfort with delivering PD to other educators through their participation in SETTT.

CDG and TAG Member Participation

CDG members attended monthly meetings either synchronously through Zoom or asynchronously through virtual structured activities. Synchronous meetings required participants to review products beforehand, turn in written feedback, and then attend the meetings for further discussion and input. Asynchronous meetings required participants to review SETTT materials and turn in written feedback.

The majority of CDG members completed all meeting requirements and attended each meeting. One participant withdrew prior to the June meeting. Project staff reported that member participation during the meetings was limited at the beginning of the year but increased in quality and frequency as the project continued.

Table 1 describes the meeting experiences by month, including the topics, percent of participants completing meeting preparation activities, and percent attending each meeting.

Table 1

CDG Monthly Meeting Topics and Participation Percentages

Month	Meeting Type	Topic	Percent Completing Preparation	Percent Attending
March	Synchronous	Took Teacher Background survey; reviewed Professional Learning Plan; edited Trainer Profile; reviewed dashboard design; reviewed resource collection search and tags/filters	100%	100%
April	Synchronous	Reviewed roles and participation responsibilities; reviewed overview of TPACK; reviewed definitions of TPACK elements; identified areas where trainers need support for PD planning	100%	90%
May	Synchronous	Reviewed locating PD resources (ELA connection to TPACK as example); identified support needed in design phase of PD planning from coaches and from COP; explored understanding and use of UDL in their classrooms	90%	80%

Month	Meeting Type	Topic	Percent Completing Preparation	Percent Attending
June*	Synchronous	Reviewed preliminary Coaching Guide; reviewed module development plan, Coaching Satisfaction Survey, TPACK knowledge test	80%	80%
July	Asynchronous	Reviewed resource collection, SETTT module, Resource Collection Evaluation Survey	80%	N/A
August	Synchronous	Reviewed COP Guide, Trainer PD Evaluation Survey	90%	90%
September	Asynchronous	Reviewed Usability Survey for SETTT Dashboard, COP Satisfaction Survey, SETTT Dashboard Review, Dashboard Feedback survey	70%	N/A
October	Synchronous	Reviewed SETTT module	90%	40%

Note: One participant withdrew prior to the June meeting and is not included in the remaining participation percentages.

TAG members participated in one asynchronous meeting in September. Both TAG members reviewed the SETTT Dashboard and completed the dashboard feedback survey.

YEAR ONE EVALUATION QUESTIONS

Year One evaluation activities encompassed a collection of formative data to inform development of the SETTT Dashboard components and the SETTT approach as a whole. Evaluation activities explored (1) acceptance and general impressions, (2) facilitators and barriers to implementation, (3) factors that might influence sustainability, and (4) advice for prospective sites and trainers. Activities also included pilot testing of evaluation instruments and

exploring options for learning analytics, both for Year Two. Table 2 shows the evaluation questions and data sources.

Table 2

SETTT for Success Evaluation Questions and Data Sources

Evaluation Question	Data Sources
1.1—To what extent are the SETTT resource collection, professional learning approach, SETTT Technology, and implementation plans developed to ensure maximum learning usability and flexibility and increase likely adoption?	CDG meetings Trainer focus groups State lead interviews
1.2—To what extent are the SETTT components developed to meet individual site needs and target populations?	CDG meetings Site implementation plans Trainer Background Survey
2.1—What are trainers’ reactions to the SETTT Technology and implementation components?	Trainer focus groups State lead interview

YEAR ONE EVALUATION RESULTS

Question 1.1: To what extent are the SETTT resource collection, professional learning approach, SETTT Technology, and implementation plans developed to ensure maximum learning usability and flexibility and increase likely adoption?

ATLAS staff sought formative feedback from the CDG and TAG members throughout the year to ensure that they developed the SETTT approach and technologies with maximum usability, feasibility, and likelihood of adoption in mind. Members asynchronously reviewed program components, often based on structured review activities, and shared their perspectives during monthly meetings. Additionally, SETTT evaluators invited CDG members to participate in a focus group at the end of the project year. Evaluators also conducted an interview with the Rhode Island state lead. The following sections describe findings related to each component of SETTT.

SETTT Resource Collection

CDG members completed two structured activities to inform development of the SETTT resource collection. In the first activity, ATLAS staff asked members to explore the oercommons.org website, known for its search features and overall usability, using a structured protocol. Two members completed the

structured protocol, and six members discussed the activity during the meeting. CDG members noted the search functionality they preferred and submitted their responses via email. ATLAS staff then developed key takeaways and implications for the resource collection design and made decisions based on the feedback. For example, one user indicated that they liked a feature that allowed them to use multiple filters at once. From this detail, SETTT designers decided to explore multi-filter options in Moodle for Year One and then explore other platforms that could offer more filter options in Year Two.

In the second activity, ATLAS staff shared a sample resource collection consisting of 10 different resources with CDG members. ATLAS staff asked members to explore the collection using a structured protocol and then complete a feedback survey. Six CDG members completed the activity. ATLAS staff reflected on the responses and suggested possible actions. The CDG member feedback was mostly positive. When asked which resources would be most likely to be used to increase personal knowledge or for PD, some members indicated that the same resources would be useful for both purposes. They also indicated that registering for free accounts in order to access some resources (as required by certain websites) was not a problem for them. Members suggested some improvements, such as more subject-oriented resources and more videos that show concepts used in the classroom or with students. They also suggested that resources be more up-to-date and engaging. ATLAS staff determined that adding additional resources aligned to trainers' learning needs into the collection would resolve this issue.

In focus group sessions, participants liked the resources that were in the collection, especially the writing resources. They also liked that the resources were targeted and specific to the population of students. While some encountered issues with searching and navigating through the collection, they also realized that the collection was in an early stage with only 11 resources. They thought that using and searching the resource collection would get easier as the collection continued to grow. One participant stated that My Library, a feature that allows saving of resources into a personal collection, would probably be the feature they would use most often. Another participant thought that they would search the resource collection to help a teacher or support staff member find a resource or answer a question.

Professional Learning Approach

CDG members provided feedback on the SETTT PD Planning Cycle (Diagnose, Design, and Analyze) during a regular meeting. The group thought that the cycle represented the SETTT model well and that it allowed

for trainers to plan and consider their own personal learning and goals in planning for effective teacher PD.

CDG members also provided feedback on two prototype PL modules. The members reviewed the modules asynchronously, inserting their comments directly into the module review software. They also discussed the modules during two regular meetings.

For the first module, *Instructional Considerations for Students with Significant Cognitive Disabilities*, members liked the ease of navigation and thought that there was a good balance of interactive features and videos. In their module comments, members mentioned liking the module progress meter, interactive features, images and media, examples, resources, and quiz feedback. Very few dislikes were mentioned in the review comments; two members mentioned disliking two different images. Members also offered suggestions for module improvements, including adding text narration, different image choices, additional concept definitions, and suggestions for additional videos.

During the regular meeting discussion for the first module, members requested that (1) users receive feedback from wrong answers to the end-of-module quiz, (2) the order or presentation be kept consistent throughout, and (3) certain ideas be made clearer.

ATLAS staff responded to the module one feedback by adding specific feedback for wrong answers, checking consistency of topic presentations, making edits to vocabulary and language use, and making some concepts clearer.

In the comments for the second module, *Students as Learners—Presuming Competence*, members continued to like the module's ease of navigation, content structure, interactivity, use of media, and module length. They also liked that the module balanced text and media. One member commented that they liked receiving correct answers to the knowledge check questions. Two members were not able to access the module, one due to an individual computer configuration issue. One member offered a suggestion for a slight change in one module screen. Otherwise, members did not offer ideas for significant changes to the module content or structure.

Speaking generally about the modules during focus group sessions, one participant liked how the system told users how far along they were in the module: "I really do enjoy that because it kind of was engaging in the sense where you can look and say, okay, I'm 10% through it. I'm 20% through."

Participants did not comment further on the modules during the focus groups.

Coaching

CDG members reviewed a draft of the *SETTT Coaching Guide*, which describes SETTT's coaching model, timing, and frequency. The members liked the suggested coaching prompts that were included in the guide. They also recommended that more coaching hours be provided in the Diagnose phase over later phases, especially the first time trainers complete a PD planning cycle. Members thought that more hours in the beginning would provide more support and flexibility to trainers as they are learning the SETTT process and going through the Diagnose phase for the first time. They thought that trainers might need less time for coaching in later phases since the process would be more familiar. Based on the CDG feedback, SETTT will add more coaching time for the Diagnose phase in the *SETTT Coaching Guide* for Year Two.

Community of Practice

During meeting discussions, CDG members suggested that the requirements for posting to the COP should be created with flexibility in mind. For example, because trainers will be entering the COP with varying levels of experience, the COP could support connections among trainers by offering different posting prompts based on experience level. Trainers also emphasized the importance of scheduling. Trainers will need to know the COP requirements in advance so that they can plan and schedule time to post. Also during meeting discussions, the CDG members expressed enthusiasm for being part of a COP that crosses district, regional, and state boundaries, providing a broader perspective than from just their local area. During focus groups, several participants reflected on the usefulness and potential impact of the COP. Participants thought that the COP could support teachers who have similar teaching roles but do not often have opportunities to share or connect with each other. Another participant noted that if teachers share information through the community, it could save them "time and aggravation" when trying to find resources and also save teachers from "reinventing the wheel." Participants liked that the COP would allow them to see different perspectives, find people who are doing the same thing, and allow them to be a part of a community that knows what they are going through. One participant summed up by saying, "I think everybody needs a support group." Participants did encounter some technical problems with the COP, including difficulty with replying to a post, unexpected email notifications, and determining how to create a post. SETTT evaluators shared the technical feedback with the SETTT design team for further action.

Question 1.2: To what extent are the SETTT components developed to meet individual site needs and target populations?

ATLAS staff used information gathered from early site meetings to plan an approach to the development of project components. For example, after learning that participants were not all trainers currently, staff focused early resource collection development efforts on resources that would be particularly useful for new trainers (adult learning principles, existing learning modules that they could use or adapt with teacher learners, etc.). In another example, participant feedback in early meetings indicated that they wanted more information about students as learners, specifically students with SCD. As a result, the project team shifted their intended development focus of the first SETTT learning modules away from a PD planning cycle and towards the concepts of how the targeted student population learns. These early meetings also led project staff to form an additional committee for input on project components. The result was a more robust feedback loop involving the perspectives of both trainers and teachers as learners.

ATLAS staff also pivoted and took a unique approach while working with Rhode Island as the first development site. By request from RIDE, project staff sought and received permission from OSEP to combine two districts into one "site" due to the way RIDE and Rhode Island local districts were accustomed to working together. State leads had shared that they wanted to shift toward more of a statewide network and COP model, so project staff made accommodations to start working in support of that foundational work. Additionally, to support development of SETTT components to meet individual site needs, ATLAS staff worked with the Rhode Island state leads and district leads to create a comprehensive *Site Implementation Guide*.

Additionally, the CDG members provided feedback on the appropriateness of the SETTT components for the population of students with SCD. At a regular meeting, after reviewing the TPACK+ framework and UDL, the CDG requested more information around students with SCD as learners. Based on this feedback, the SETTT design team developed a bundle of short modules addressing the topic. The decision was a diversion from the prior plan, which was to design the next module to address the PD Planning Cycle. During the focus groups, CDG members liked that the resources in the resource collection were targeted and specific to the population of students with SCD.

Question 2.1: What are trainers' reactions to the SETTT Technology and implementation components?

This section presents findings related to trainers' reactions to the SETTT system as a whole, including barriers and facilitators for implementation. See question 1.1 for CDG members reactions to each SETTT component.

During focus groups and interviews, evaluators asked participants to reflect on the SETTT system as a whole and the extent to which the system components worked together and supported each other. Evaluators also asked which components participants would change, eliminate, or recommend and if the system was usable and flexible. Trainers also provided general feedback on the SETTT system during regular meetings.

During focus groups, participants agreed that the components fit together, supported each other, and were a “one stop shop.” They did not recommend eliminating any components. One participant noted that they were nervous about delivering PD in front of peers but thought that the dashboard components and coaching would help them feel more comfortable. Another participant stated that even if they did not understand something, they could post a question in the COP and get support.

In terms of usability and flexibility, participants noted that even though they had encountered some little things that needed to be fixed, the system was “pretty easy to use,” not complicated, and would even be flexible for users who were less tech savvy. “There is something for everyone,” one participant stated.

The Rhode Island state lead thought that even though the system seemed to be coming together very slowly, the components fit together and supported each other. The leader could not think of anything she would change or eliminate. The state lead was not sure about usability at this point, noting that “it is hard to know about usability as things are being built.” The state lead expected that usability would increase in the second year. The state lead also stated that once the system is more fully developed, coaching begins, and trainers build PD, that it is “going to work beautifully.”

Barriers and Facilitators

Evaluators asked participants to reflect on potential barriers to using the SETTT system. Interviewers also asked what might help alleviate those barriers.

For their personal system use, participants mentioned lack of time, competing school-based initiatives and commitments (e.g., new curricula, Right to Read Act, PD, supervising student teachers), as well as personal and family commitments as possible barriers. One teacher said, “People don't have time to do stuff so they're only grabbing what they can, that they know they need, and they're not actually diving deep into things because they don't have the time to do it.” During a regular meeting, however, participants said SETTT would support trainers in work that they would already be engaged with (training teachers) versus another add-on, thus saving time.

One focus group participant also noted that interacting with the system was overwhelming at first, but as the system components were becoming more concrete, it was getting easier to understand how components would work together. To alleviate barriers in general, the program could communicate what teachers might gain from using the system and provide concrete, real-life examples of its benefits.

During the interview, the Rhode Island state lead noted that it they did not have a clear picture of what SETTT would ultimately look like since the implementation model and project components evolved throughout the first year based on site needs and iterative component updates. The state lead also offered that monthly check-in meetings during Year Two would help them stay on track with the things they need to do to support the program and implementation at various sites.

The state lead offered that one approach that may alleviate other implementation barriers is giving districts a set number of “slots” for trainers. This approach would help districts commit to supporting teacher participation in the project and attract people who are really motivated. Districts will also need to give trainers extra time in their schedule, which is easier with a smaller number of trainers.

The state lead reflected on what might stand in the way of trainers using the SETTT system in the future. The state lead suggested that local district leadership not giving trainers the latitude or flexibility to deliver needed or intended PD, especially for small districts, may be a barrier. Having trainers train across districts is an option, but this option is more of a coordination issue at the state level than at the SETTT program level. The state lead thought the program would receive a lot of interest once coaching begins and trainers start to develop their PD. The state lead also thought that trainers will need time to develop trainings and that time may be the biggest issue.

Advice for Future Adoption

When asked what advice they would give other prospective trainers about using or adopting the SETTT Dashboard, one CDG member commented that meeting with people who had already been trained would be helpful for reducing the initial overwhelm of getting started. Another member stated they would advise new teachers to come with an open mind and not to think of SETTT as “another thing” but instead as a system that will help them become better teachers for the population. Other participants stated that since they were so new to the system, they did not yet have advice to share.

The Rhode Island state lead did not have advice related to the technology yet. The state lead thought that having a group of trainers that could go from district to district would be key to future adoption since many districts have small numbers of teachers who work with students who take alternate assessments and/or have no trainers of their own. Also, the state lead thought that it will be important for district leadership to commit to the project and be very clear about what the program looks like for their teacher trainers.

Finally, the state lead suggested that districts should be clear on whether they are recruiting existing trainers or recruiting teachers who want to become trainers. During the first year, recruiting language indicated that existing trainers were being sought for participation. However, many participants were either interested in becoming trainers or were interested enough in the project as teachers to participate. Therefore, many had no experience designing and delivering teacher training. As noted earlier, ATLAS staff and the state lead adapted the intended model in the first year to allow for input from a teacher perspective, which became a valuable data source. For future years, the state lead suggested that expectations for recruiting current experienced trainers be made clear.

Piloting of Year Two Measures

Between June and August 2021, CDG members piloted six instruments that SETTT will use during Year Two evaluation activities. SETTT evaluators asked members to complete each instrument and provide their opinions on the clarity and understandability of the questions as well as any recommended improvements. Table 3 lists the measures and a brief description of each.

Table 3
Measures Developed and Piloted in Year One

Measure	Description
TPACK+ Knowledge Survey	Slightly adapted from an instrument published in the literature. Measures participant self-reported knowledge of TPACK as well as components of UDL.
Coaching Satisfaction Survey	Probes impressions of the quality and perceived impact of the coaching received through SETTT.
Resource Collection Satisfaction Survey	Probes opinions related to content relevance and ease of use for the SETTT resource collection.
Trainer PL Module Evaluation Survey	Gathers trainers' opinions about the quality and applicability of the module.

Measure	Description
COP Satisfaction Survey	Probes general satisfaction with impressions of the trainers' experiences with the SETTT COP.
SETTT Dashboard Usability Survey	Probes general impressions, usability, and ease of use of the SETTT Dashboard.

CDG members generally found all of the measures to be clear and understandable. Members suggested minor wording changes to the TPACK+ Knowledge, Coaching Satisfaction, and Trainer PL Module Evaluation surveys. ATLAS staff reviewed each wording suggestion, and most were adopted. Researchers did not make revisions to the TPACK+ Knowledge survey since those questions were derived from an existing instrument. Members did not suggest revisions for the Resource Collection Satisfaction, COP Satisfaction, or SETTT Dashboard Usability surveys.

Results from the TPACK+ Knowledge survey are shown in Appendix C. A total of nine CDG members completed the survey. The results show that the majority of CDG members rated their knowledge/skills in all areas at the higher end of the rating scale (between a 3 and a 5).

CDG Members' Impressions of the Co-Design Process

Since engaging the CDG in a co-design process was a key strategy to designing a usable and flexible SETTT solution, evaluators asked focus group participants about their experiences as CDG members. Specifically, evaluators asked CDG members about their level of comfort in providing feedback to ATLAS staff and the extent to which the team received and took action based on the feedback.

Participants unanimously thought that their feedback was heard and acted upon by ATLAS staff. For example, if staff was unsure about what a participant meant by a comment, staff asked for clarification so that they could understand. One participant commented, "Everything was really taken in and I feel like things that we're suggesting are happening and I think that's really important too." In another example, a participant noted that after providing feedback, by the next meeting, they could see that staff had made edits: "...I knew that my feedback was wanted and that they were actually reading it."

Participants also thought that being a CDG member was worth their time. One participant stated, "It's such exciting work. It's so necessary so it feels good to be a part of it for sure." Another member liked working with other people who knew what they were going through and had students like theirs. They also thought that it was nice to be feel needed.

Some participants stated that it was difficult for them to meet deadlines or find time to do assignments because of other things coming up in their work. While they wanted to give the project more time, ATLAS staff were understanding and accommodating, and that made the work more enjoyable.

In sum, the members enjoyed the opportunity to participate and contribute to the CDG. They also believe that the SETTT Dashboard will be beneficial to a variety of teachers and sites in the future as development on the project continues in the next year.

CONCLUSIONS AND NEXT STEPS

Evaluation activities in Year One were formative in nature and designed to inform development of the SETTT professional learning approach and SETTT Dashboard technology. Based on the results of formative Year One evaluation activities, ATLAS staff have initial evidence regarding (1) stakeholder acceptance of the SETTT system, (2) the extent to which the intervention was developed to be usable and flexible, and (3) the extent to which the implementation planning process supports successful implementation and adoption by future sites. The following section presents the major findings and lessons learned in each area of the evaluation.

Acceptance

The CDG members and Rhode Island state lead, through their participation in meetings, surveys, focus groups, and an interview, held positive impressions of the SETTT approach, components, and technology. They saw potential for SETTT to connect educators who are in similar roles but may not have access to resources that are designed specifically for the target population of students. They enjoyed contributing to SETTT development in Year One and are looking forward to the system developing further in the future.

Usability and Flexibility

The CDG members provided examples of minor dashboard usability concerns, such as with the My Notebook and the Resource Collection search features. However, the members thought that the system was user-friendly overall and would improve with continued development and addition of more resources. They thought that the system would be flexible in meeting the needs of a variety of trainers with different levels of experience.

Facilitators and Barriers to Implementation and Sustainability

The most consistent barrier to implementation mentioned by the CDG members and Rhode Island state lead was lack of time. CDG members mentioned competition for educators' time from factors both inside and

outside of school. They thought that commitment from school and district leadership would be essential to support ongoing implementation of the SETTT approach and use of the technology. The state lead thought that leadership would need to commit to allowing the teacher trainers time to deliver training.

The CDG members also mentioned experiencing some overwhelm when learning about the various components of SETTT. They thought that new trainers would benefit from seeing concrete examples of SETTT's benefits and receiving guidance from educators that were already trained in and familiar with the system.

The state lead suggested that new sites consider whom they invite to become trainers and be clear whether they are recruiting existing trainers or educators who want to become trainers. The CDG members suggested that new trainers and teachers view the system as a way for them to become better teachers rather than another demand on their time. Also, members thought SETTT could save time by supporting work they would already be doing with teachers.

Next Steps

In Year Two of the project, ATLAS staff will implement the SETTT PD approach and SETTT Dashboard with two additional sites for a total of three sites. Rhode Island will participate as a statewide site with participation from multiple schools. ATLAS staff will incorporate feedback received during Year One. Rather than iterative development and feedback from a CDG, participation will involve each trainer implementing a full cycle of PD planning, implementation, and evaluation with one group of teachers. Year Two will only include trainer-level participation; the project will not continue with teacher-level participation via the TAG.

ATLAS staff will also implement the Year Two Evaluation Plan. The plan adds evaluation questions related to SETTT implementation and trainer outcomes. Data sources will include the measures piloted in Year One, as well as trainer focus groups and site lead interviews. Staff will also conduct a think aloud study, which will collect trainers' impressions of the SETTT Dashboard.

Also, as part of the evaluation plan, ATLAS staff will develop and pilot new measures that will be launched Year Three. The measures include rubrics to evaluate trainers' course plans, trainers' implementation of PD, and trainers' PD evaluation approaches, as well as a measure of teacher pedagogical and content knowledge. Fidelity of implementation measures for site implementation, coaching, trainer PL, and trainer development of educator PD will also be developed and piloted.

Finally, learning analytics reports will be piloted as part of Year Two evaluation activities. The learning management system that SETTT utilizes for its dashboard technology offers options for reporting user-system interaction data. For example, report options include the number of PL modules viewed and completed, as well as the number of COP posts viewed and created. The system can also report Community of Inquiry indicators such as cognitive depth and social breadth. For evaluation purposes, user-system interaction reports will provide evidence related to the extent to which participants use the SETTT Dashboard as intended as well as their fidelity of implementation.

APPENDIX A

CDG Member Background Survey Results

Question	Response option	Number of Trainers
What is your current official role? Check all that apply.	<ul style="list-style-type: none"> • Classroom teacher • Teacher leader • Building administrator • District staff • Instructional coach • District representative • Regional education agency staff • State education agency staff • Higher education faculty • Other • Other open response items included: special education coordinator, transition coordinator, and special education director 	<ul style="list-style-type: none"> 7 1 1 1 0 0 0 0 0 3
In your current position, which types of adult learners do you support? Check all that apply.	<ul style="list-style-type: none"> • Special education teachers • Parents • General education teachers • Related service providers (e.g., SLT, OT) • Building staff • Community leaders • District administrators 	<ul style="list-style-type: none"> 9 5 4 3 3 2 0

Question	Response option	Number of Trainers
In your current position, approximately how many adult learners do you support?	• <5	3
	• 6–10	5
	• 11–20	0
	• 21–30	1
	• 31–40	0
	• 40+	1
How many years of classroom teaching experience do you have?	• None	0
	• Less than 1 year	0
	• 1–5 years	0
	• 6–10 years	3
	• 11–15 years	3
	• 16–20 years	3
	• 21+ years	1
In your classroom teaching experience, what grades did you teach? Check all grade bands that apply.	• Pre-K	3
	• Kindergarten–Grade 2	5
	• Grade 3–Grade 5	4
	• Grade 6–Grade 8	2
	• Grade 9–Grade 12	4

Question	Response option	Number of Trainers
In your classroom teaching experience, what academic subjects did you teach? Check all that apply.	<ul style="list-style-type: none"> • English language arts • Mathematics • Science • Social studies • Arts or music • Physical education • Other (please specify) • Other open responses included: social emotional, vocational, special education severe and profound (medically fragile), life skills/pre-vocational 	<ul style="list-style-type: none"> 9 9 6 6 0 0 4
In previous classroom experience, did you work with students with disabilities?	<ul style="list-style-type: none"> • Yes • No 	<ul style="list-style-type: none"> 10 0
Which students with disabilities did you support? (Check all that apply.)	<ul style="list-style-type: none"> • Autism spectrum disorder • Multiple disabilities • Intellectual disability • Other health impairment • Emotional disability • Speech impairment • Specific learning disability • Blind/low vision • Deaf/Hard of Hearing • Orthopedic impairment • Traumatic brain injury • Non-categorical • Deafblindness 	<ul style="list-style-type: none"> 10 9 9 8 8 7 4 3 3 3 2 1 0

Question	Response option	Number of Trainers
Before becoming a teacher trainer, how many years of experience did you have working with students with significant cognitive disabilities?	<ul style="list-style-type: none"> • None • Less than 1 year • 1–5 years • 6–10 years • 11–15 years • 16–20 years • 21+ years 	<p>0</p> <p>1</p> <p>2</p> <p>3</p> <p>2</p> <p>1</p> <p>1</p>
For the teachers with whom you work, what types of students with disabilities do they support? (Select all that apply.)	<ul style="list-style-type: none"> • Autism spectrum disorder • Intellectual disability • Emotional disability • Multiple disabilities • Other health impairment • Specific learning disability • Speech impairment • Traumatic brain injury • Orthopedic impairment • Blind/low vision • Deaf/Hard of Hearing • Non-categorical • Deafblindness 	<p>8</p> <p>7</p> <p>7</p> <p>6</p> <p>6</p> <p>6</p> <p>4</p> <p>4</p> <p>3</p> <p>2</p> <p>2</p> <p>2</p> <p>0</p>
For the teachers with whom you work, in what types of settings do they teach students with disabilities? (Check all that apply.)	<ul style="list-style-type: none"> • Self-contained class 	<p>7</p>

Question	Response option	Number of Trainers
	<ul style="list-style-type: none"> • Inclusion consultant/specialist • Resource • Separate school • Homebound/hospital • Other • Other open responses included: students on distance learning 	<p>6</p> <p>5</p> <p>2</p> <p>0</p> <p>1</p>
<p>In what formats do you typically deliver professional development on academics for students with significant cognitive disabilities?</p>	<ul style="list-style-type: none"> • Classroom observation and follow-up—Face-to-face • Classroom observation and follow-up—Virtual • Classroom observation and follow-up—Hybrid (blend of face-to-face and virtual) • Presentation (less than 90 minutes)—Face-to-face • Presentation (less than 90 minutes)—Virtual • Presentation (less than 90 minutes)—Hybrid (blend of face-to-face and virtual) • Workshop (more than 90 minutes)—Face-to-face • Workshop (more than 90 minutes)—Virtual • Workshop (more than 90 minutes)—Hybrid (blend of face-to-face and virtual) 	<p>6</p> <p>0</p> <p>1</p> <p>3</p> <p>0</p> <p>3</p> <p>1</p> <p>1</p> <p>2</p>

Question	Response option	Number of Trainers
	• Multi-day workshop— Face-to-face	1
	• Multi-day workshop— Virtual	0
	• Multi-day workshop— Hybrid (blend of face-to- face and virtual)	1
	• For-credit course— Face-to-face	0
	• For-credit course— Virtual	0
	• For-credit course— Hybrid (blend of face-to- face and virtual)	0
	• Non-credit course— Face-to-face	2
	• Non-credit course— Virtual	0
	• Non-credit course— Hybrid (blend of face-to- face and virtual)	0
	• Other open responses included: sharing lessons with fellow teachers, haven't delivered face-to-face this year, have never given PD	
How many total years of experience do you have providing professional development to educators?	• None	3
	• Less than 1 year	2
	• 1–5 years	3
	• 6–10 years	1
	• 11–15 years	1
	• 16–20 years	0
	• 21+ years	0

Question	Response option	Number of Trainers
What types of experience have you had in supporting educator/adult learners? Check all that apply.	• Mentoring	7
	• Co-teaching	7
	• Instructional coaching	5
	• Supervisory role which included teacher evaluation	3
	• Design and deliver online professional development	1
	• Teaching courses for college or CEU credit	1
	• Data coaching	1
How confident are you with implementing training that supports teachers' academic instruction of students with significant cognitive disabilities in each subject?	• Reading—Not at all	0
	• Reading—A little	2
	• Reading—Somewhat	6
	• Reading—Very	1
	• Reading—Extremely	1
	• Writing—Not at all	0
	• Writing—A little	3
	• Writing—Somewhat	5
	• Writing—Very	2
	• Writing—Extremely	0
	• Mathematics—Not at all	0
	• Mathematics—A little	2
	• Mathematics—Somewhat	6
	• Mathematics—Very	2

Question	Response option	Number of Trainers
	<ul style="list-style-type: none"> • Mathematics—Extremely • Science—Not at all • Science—A little • Science—Somewhat • Science—Very • Science—Extremely 	<p>0</p> <p>0</p> <p>4</p> <p>4</p> <p>1</p> <p>1</p>
<p>Please list two or three main goals related to your own professional growth with which you feel the SETTT project will be able to assist</p>	<ul style="list-style-type: none"> • Open responses included such themes as: provide guidance or help to other teachers (6); increase confidence/comfort in delivering PD (5); gaining leadership skills (2); adapt materials/create opportunities for students with disabilities (2) 	
<p>Please list any educational technology-related coursework or in-service professional development opportunities that you have completed in the last 3 years.</p>	<ul style="list-style-type: none"> • Assistance technology PD • None • PD from the district (Google resources, other ed tech) 	<p>4</p> <p>3</p> <p>2</p>

Question	Response option	Number of Trainers
How many hours of professional development have you had in the past five years on academic expectations for students with significant cognitive disabilities in each subject?	• Reading—0	0
	• Reading—1-5 hours	4
	• Reading—6-10 hours	4
	• Reading—11-15 hours	1
	• Reading—16-20 hours	0
	• Reading—21+ hours	1
	• Writing—0	0
	• Writing—1-5 hours	4
	• Writing—6-10 hours	5
	• Writing—11-15 hours	0
	• Writing—16-20 hours	0
	• Writing—21+ hours	1
	• Mathematics—0	0
	• Mathematics—1-5 hours	4
	• Mathematics—6-10 hours	5
	• Mathematics—11-15 hours	1
	• Mathematics—16-20 hours	0
	• Mathematics—21+ hours	0
	• Science—0	1
	• Science—1-5 hours	5
• Science—6-10 hours	4	
• Science—11-15 hours	0	
• Science—16-20 hours	0	
• Science—21+ hours	0	

Question	Response option	Number of Trainers
Please describe briefly the professional development for alternate content standards in which you participated	<ul style="list-style-type: none"> • Open responses included: online modules, DLM training, alternate assessment, Unique Learning System modules, whole group instruction discussion, adapting materials for different subjects, training from RIDE 	
How many hours of professional development have you had in the past five years on supporting teacher/adult learning?	<ul style="list-style-type: none"> • 0 hours • 1–5 hours • 6–10 hours • 11–15 hours • 16–20 hours • 21+ hours 	<p style="text-align: center;">3</p> <p style="text-align: center;">1</p> <p style="text-align: center;">4</p> <p style="text-align: center;">1</p> <p style="text-align: center;">1</p> <p style="text-align: center;">0</p>
Please describe briefly the professional development for supporting teacher/adult learning in which you participated.	<ul style="list-style-type: none"> • Open responses included: team building, communication, ethics, PD at school, reflective teaching practices, SEL, co-teacher seminar, coach training 	

Question	Response option	Number of Trainers
<p>Please briefly describe any building, district, regional, or state-level teacher learning initiatives that you are currently supporting (if any). If none, please write none.</p>	<ul style="list-style-type: none"> • Open responses included: none (7), transition to Kindergarten grant, supporting including of SEL curriculum, Best Buddies, implementation of RI SEL standards, formative assessment training, teacher evaluation system 	
<p>Please list all licensures/certifications you hold. (Open response)</p>	<p>Open responses included:</p> <ul style="list-style-type: none"> • General education elementary (5) • Special education mild/moderate elementary (4) • Severe/profound (4) • Early childhood (3) • Special education mild/moderate secondary (2) • English as a second language—elementary (1) • CGS Autism Studies (1) • Special education administrator (1) • FIELDS-9 domains (1) • Certified nursing assistant (1) • General education (1) • Special education (1) 	
<p>Please indicate your highest level of degree obtained.</p>	<ul style="list-style-type: none"> • Bachelors • Masters • Specialist 	<p>6</p> <p>4</p> <p>0</p>

Question	Response option	Number of Trainers
	<ul style="list-style-type: none"> • Doctorate 	2
In what subject area did you obtain your degree?	<ul style="list-style-type: none"> • Open responses included: psychology, human development, elementary education, special education, education, education with language arts concentration, early childhood special education, multicultural and urban studies 	
What is your gender?	<ul style="list-style-type: none"> • Female • Male 	9 1
What is your ethnicity?	<ul style="list-style-type: none"> • Hispanic/Latino • Non-Hispanic/Latino 	0 10
What is your race?	<ul style="list-style-type: none"> • White • Black/African-American • American Indian/Alaska Native • Asian • Native Hawaiian/Other Pacific Islander • Choose not to disclose 	10 0 0 0 0 0
Which best describes the location where your school is located?	<ul style="list-style-type: none"> • Urban • Suburban • Rural 	8 2 0

APPENDIX B

SETTT Site Implementation Guide Template

Purpose and Background

This guide supports action planning using Implementation Drivers. The goal is to help SETTT project staff and site staff develop a common understanding of plans for each year's implementation. Implementation Drivers are the components of infrastructure needed to develop, improve, and sustain teachers' and leaders' ability to implement an intervention as intended and to create an enabling context for the new ways of work. This guide addresses competency, organization, and leadership drivers.

This is a living document, last updated XXX.

Site Implementation Stakeholders

Implementation Team and Roles: *List names and positions of team leads here.*

List names of all participants in the chart below:

Name	Title	Role	Organization

Current Additional Stakeholders:

Possible Future Stakeholders:

Year X Scope and High-Level Timeline

Describe here expectations for the year and general timeline for when the work will take place.

Goals and Reasons for Site Involvement

List site motivators, description of context, overview of site characteristics that indicate fit, readiness, and capacity to implement.

Communication Plan

List expectations of the SETTT team and those of the site team for communication re: logistics, expectations, project activities, progress of the work, etc. Use this [NIRN Communication Guide](#) for reference.

SETTT Implementation Drivers

Competency Drivers

Competency Drivers are mechanisms to develop, improve, and sustain a site's ability to implement an intervention as intended in order to benefit teachers and students. These drivers include methods for performance assessment, recruitment and selection, and training and coaching.

Driver Name	Questions	Responses
Performance Assessment: Designed to develop and assess trainer confidence in the competent use of the skills required for full and effective use of the SETTT Trainer Learning Model and SETTT Technology	What performance assessments will provide us with feedback on the level of trainer confidence in their use of the SETTT Trainer Learning Model and SETTT Technology?	

Driver Name	Questions	Responses
<p>Recruitment and Selection: Selection of trainers aligns with the background and dispositions necessary to learn how to deliver the SETTT model with fidelity</p>	<ol style="list-style-type: none"> 1. What types of backgrounds and dispositions are needed to learn how to deliver the SETTT model with fidelity? 2. Who will be responsible for recruiting and selecting the educators, classrooms, or schools that will be involved? 3. What are the responsibilities of the Implementation Team related to supporting the quality of the recruitment and selection process? 	

Driver Name	Questions	Responses
<p>Training: Used to provide knowledge about the effective program or practice related to</p> <ul style="list-style-type: none"> - SETTT’s underlying theory of change - intervention or instructional components - rationales related to key practices <p>Training also increases “buy-in” as trainers and teachers gain more knowledge; provides opportunities to practice new skills before being asked to use them in the educational setting</p>	<ol style="list-style-type: none"> 1. What are the most important training needs in year 1? 2. Who is responsible for providing training experiences for the innovation? 3. What are the responsibilities of the Implementation Team related to supporting the timeliness, access to, and quality of the training process? 4. Who else plays a role? What other teams at which level (e.g., building implementation team, district, regional, state)? 	

<p>Coaching: Skilled coaches are able to provide the craft or practice knowledge that is needed to supplement the formal knowledge and basic skill development that is offered in training. This feedback enables trainers and teachers to apply what they have learned in their day-to-day work with learners. Coaches assure that trainers implement the model with fidelity. The SETTT COP is designed to provide a forum for Trainers to interact and share experiences, successes, resources, and challenges with one another for ongoing support during implementation; it provides opportunities to receive feedback in a “safe” and supportive</p>	<ol style="list-style-type: none"> 1. Who is responsible for providing coaching? Internal to the school or District? External? Both? How well do they know the practice? 2. What are the Implementation Team’s responsibilities related to supporting the quality of the coaching process (e.g., support, guidance, oversight)? 3. What are the Implementation Team’s responsibilities related to supporting the COP? 4. Who else plays a role? What other teams at which level (e.g., building implementation team, district, regional, state)? 	
--	--	--

Driver Name	Questions	Responses
peer-interactive environment.		

Organization Drivers

Organization Drivers are mechanisms to create and sustain hospitable organizational and system environments for effective educational services – the “enabling context.”

Driver Name	Questions	Responses
<p>Decision Support Data System: System and procedures to assess key aspects of the overall performance of the organization to help ensure continuing implementation and improved teacher and student outcomes</p>	<ol style="list-style-type: none"> 1. Who will be responsible for collecting and analyzing performance assessment data? Student or teacher outcome data? 2. What will be your Leadership and your Implementation Team’s responsibilities related to supporting the quality of the data collection, analysis, and report preparation processes (support, guidance, oversight)? 3. Who else plays a role? What other teams at which level (e.g., building implementation team, district, regional, state)? 	
<p>Facilitative Administration: Policies and practices to support new ways of work required by SETTT, reduce</p>	<ol style="list-style-type: none"> 1. Who is responsible for ensuring that guidelines, policies, and procedures support SETTT implementation with fidelity? 	

Driver Name	Questions	Responses
<p>implementation barriers, and create hospitable environments to implement SETTT with fidelity</p>	<p>2. What are your Implementation Team's responsibilities related to determining how the necessary supports, guidelines, policies, and procedures will support SETTT implementation and promote Trainer, teacher, and student outcomes?</p> <p>3. Who else plays a role? What other teams at which level (e.g., building implementation team, district, regional, state)? What is your team's role in communicating barriers and facilitators to others?</p>	
<p>Systems Intervention Addresses</p> <ul style="list-style-type: none"> - clearing systems issues outside of the Implementation team's immediate influence or direct control that could impact implementation fidelity - strengthening system facilitators 	<p>1. Who has the lead responsibility for ensuring that there are processes in place to identify barriers to implementation that are outside your team's immediate influence and control?</p> <p>2. What are your Implementation Team's responsibilities related to ensuring that barriers are identified, solutions proposed, and/or issues</p>	

Driver Name	Questions	Responses
	<p>raised at the appropriate level (e.g., school, district, region, state)?</p> <p>3. Who else plays a role? What other teams at which level (e.g., building implementation team, district, regional, state)? What needs to happen to encourage their participation in receiving information and resolving challenges?</p>	

Adapted from [NIRN Implementation Drivers: Team Review and Planning, 2013](#).

Leadership Drivers

Leadership Drivers focus on providing the right leadership strategies for different types of leadership challenges. These leadership challenges often emerge as part of the change management process needed to make decisions, provide guidance, and support organization funding.

Driver Name	Questions	Responses
<p>Leadership: Focuses on utilizing the right leadership strategies for different types of leadership challenges (technical or adaptive). Technical challenges are those characterized by clear agreement about the problem at hand and clearer solution pathways. Adaptive challenges often involve legitimate yet competing perspectives where the definition of the problem and solution pathways are unclear.</p>	<ol style="list-style-type: none"> 1. What are the sites' technical and adaptive leadership strengths? 2. What are the sites' technical and adaptive leadership challenges (current and anticipated)? 3. What strategies for change management (technical or adaptive) are the best fit to support the ongoing functioning of the project? 	

APPENDIX C

TPACK+ Knowledge Survey Pilot Test Results

Survey Item	1 (Poor)	2	3	4	5 (Excellent)
Pedagogical Knowledge					
My ability to determine a particular strategy best suited to teach a specific concept.	0	0	3	5	1
My ability to use a variety of professional development teaching strategies to relate various concepts to teachers.	0	0	5	2	2
My ability to adjust teaching methodology based on teacher performance/feedback.	0	0	4	4	1
Technological Knowledge					
My ability to troubleshoot technical problems associated with hardware (e.g., network connections).	0	1	3	3	2
My ability to address various computer issues related to software (e.g., downloading appropriate plug-ins, installing programs).	1	0	3	4	1
My ability to assist teachers with troubleshooting technical problems with their personal computers.	0	1	3	4	1
Content Knowledge					
My ability to create materials that map to specific district/state standards.	0	0	3	5	1
My ability to decide on the scope of concepts (ELA, mathematics, science, social studies) taught within my professional development (PD).	0	0	4	4	1
My ability to plan the sequence of concepts (ELA, mathematics, science, social studies) taught within my PD.	0	0	4	4	1
Technological Content Knowledge					

Survey Item	1 (Poor)	2	3	4	5 (Excellent)
My ability to use technological representations (i.e., multimedia, visual demonstrations, etc.) to demonstrate content-area concepts (ELA, mathematics, science, social studies) in my PD.	0	0	2	5	1
[UDL] My ability to suggest technologies (including assistive) in my PD that provide challenge and access for students relative to the content being taught (ELA, mathematics, science, social studies).	0	0	3	5	1
My ability to implement district-adopted curriculum in an online environment.	0	0	3	5	1
My ability to use the SETTT technology to deliver my PD.	0	0	4	4	1
Pedagogical Content Knowledge					
My ability to distinguish between effective and ineffective instructional strategies used by teachers.	0	0	3	5	1
My ability to anticipate likely teacher misconceptions within a particular topic.	0	0	3	5	1
My ability to comfortably produce professional development plans with an appreciation for a topic.	0	0	3	5	1
My ability to assist teachers in noticing connections between various concepts in curriculum.	0	0	4	4	1
My ability to assist teachers in instructing students with significant cognitive disabilities.	0	0	3	4	2

Survey Item	1 (Poor)	2	3	4	5 (Excellent)
[UDL] My ability to comfortably produce professional development that allows for multiple means of representation (e.g., text, text-to-speech, audio, captioned video).	0	2	1	5	1
[UDL] My ability to comfortably produce professional development that allows for multiple means of expression (e.g., varied formats for teachers to complete assigned work or communicating).	0	1	3	4	1
[UDL] My ability to comfortably produce professional development that allows for multiple means of engagement (e.g., provide teacher choice in options for activities and varied means of feedback).	0	1	2	5	1
Technological Pedagogical Knowledge					
My ability to create an online environment which allows teachers to build new knowledge and skills.	0	0	4	4	1
My ability to implement the SETTT three-part professional development cycle to teach online.	0	1	3	4	1
My ability to moderate online interactivity among teachers.	0	0	5	3	1
My ability to encourage online interactivity among teachers.	0	0	3	4	2
[UDL] My ability to suggest technologies (assistive or other) in my PD that support specific instructional approaches (e.g., academic routines, practices, activities).	0	0	3	5	1
Technological Pedagogical Content Knowledge					
My ability to use online assessment to modify my PD.	0	0	4	4	1

Survey Item	1 (Poor)	2	3	4	5 (Excellent)
My ability to use technology to predict teachers' skill/understanding of a particular topic.	0	0	6	2	1
My ability to use technology to create effective representations of content that depart from textbook knowledge.	0	0	5	2	1
My ability to meet the overall demands of delivery of online PD.	0	0	4	4	1

Note: This survey was adapted from two sources.

Archambault, L., & Crippen, K. (2009). Examining TPACK among K-12 online distance educators in the United States. *Contemporary Issues in Technology and Teacher Education*, 9(1), 71-88.

Benton-Borghgi, B. H. (2013). A Universally Designed for Learning (UDL) infused Technological Pedagogical Content Knowledge (TPACK) practitioners' model essential for teacher preparation in the 21st Century. *Journal of Educational Computing Research*, 48(2), 245-265.