

Technology in the K-5 Classroom to Enhance Student Learning

Instructional Systems Design

Spring 2020

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| | | |
|--------------|-------------|---|
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Executive Summary

In this 3-day training, teachers will gain strategies and tools to immediately incorporate meaningful technology into their classrooms. Teachers will be exposed to new websites, ready to use lessons utilizing cutting edge technology, and strategies that illustrate best practices in utilizing technology for student learning. The focus will be on technology that isn't just a substitute for paper and pencil work but enhances student learning with relevant and meaningful technology.

Instruction will be delivered to staff members through three one-hour sessions utilizing a Google Slides Presentation with specific topics covered during different sessions. Activity prompts, graphics, websites, etc. will all be included so that it is an interactive presentation that participants can refer to and use/explore as we discuss it in the training.

The intended audience is any teacher in a K-5 classroom who is interested in enhancing student learning by better utilizing technology.

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SECTION 1: DESIRED RESULTS

A. Broad Goals and Big Ideas

K-5 students have grown up utilizing technology in both their personal lives and in their educational lives. However, the teachers who instruct these students often don't have the same ease with technology. When faced with using technology in the classroom, teachers are often expected to make the time and to find resources on their own. These trainings will bridge the gap in experience to enable teachers to be successful in their technology implementation.

The focus will be on technology that isn't just a substitute for paper and pencil work but enhances and redefines student learning with relevant and meaningful technology. This instruction will give teachers the tools to adapt to an ever-evolving technological world.

After completing the training sessions, teachers will successfully meet the following goals:

- **GOAL 1:** Teachers will understand the benefits of implementing online tools to use with students in their classes.
- **GOAL 2:** Teachers will be introduced to a variety of resources to help increase engagement with technology in the classroom.
- **GOAL 3:** Teachers will create one authentic, 30-minute lesson or activity involving assessment, discussion, or assignments using the online tools presented to implement.

The intended audience are teachers in K-5 classrooms who are interested in building on their existing technology skills and backgrounds by discovering new resources to enhance their classroom instruction.

Instruction will be delivered through face-to-face training spread over three, one-hour sessions. Each hour will include a Google slides presentation, a toolbox of resources, and time for individual implementation and exploration.

B. Learning Objectives

GOAL 1: Teachers will understand the benefits of implementing online tools to use with students in their classes.

- 1.1 Given a list of online tools/resources, teachers will explore three websites and identify at least two benefits of implementing each resource in the classroom.
- 1.2 After instruction, teachers will compare their prior practices to newly acquired practices using technology in the classroom by sharing one or more ways that they have or will benefit.

GOAL 2: Teachers will be introduced to a variety of resources to help increase engagement with technology in the classroom.

- 2.1 After viewing each google slides presentation, teachers will rate various technology resources based on how they can effectively use the tools in their classroom.
- 2.2 After exploring various resources from the presentation, teachers will cooperatively compile a list of creative ways to use the resources in their classrooms to increase student engagement.

GOAL 3: Teachers will create one authentic, 30-minute lesson or activity involving assessment, discussion, or assignments using the online tools presented to implement.

- 3.1 After instruction, teachers will design an authentic learning experience that meets all the criteria for using technology in a relevant and meaningful way.
- 3.2 After instruction, teachers will implement the technology lesson they have created at least one time in their own classroom.
- 3.3 After implementation, teachers will evaluate their experience by listing at least two strengths and two opportunities for improvement for each learning experience.

C. Needs Assessment

To create a training session that meets the needs of learners, a needs assessment is conducted in regard to technology in the K-5 classroom. Technology has become a source of learning and information across cultural and societal demands, which now means students can gain effective skills during its use in the classroom. Teachers in grades K-5 are expected to implement technology into their teaching. This is evident in the computer science state standards requiring technology to be incorporated into lessons across all curricula. Because of constant technological advancements, the tools teachers use are continually changing. As a result, teachers need knowledge about a variety of tools currently available. Time constraints often make it difficult to find quality tools to learn and use to enhance student learning.

This needs assessment addresses the stakeholders: teachers, district technology leaders, and administrators. Surveys make clear the level of teacher knowledge, current usage of classroom technology and resources, and depth of student learning while using technology tools. In addition to the actual assessment, interviews will also be conducted. Interviews of district leaders and administrators make clear the amount of time available for training, budget for cost, and the direction of the district that includes questions regarding technical constraints and technology resources locally available. Consequently, these workshops will help to bridge the gap in experience to enable teachers to be successful in their technology implementation. They will provide an avenue to relevant and meaningful technology use by students while allowing for more than just a substitute for paper and pencil tasks. Workshops will address the needs to improve instruction and transfer skills to their own classroom as teachers collaborate with colleagues.

See [Appendix A.1](#) for both surveys and the interview questionnaire.

| Needs Analysis | | |
|--|---|---|
| Topic | What we need to know | Source of Information |
| Level of teacher knowledge | Awareness of benefits of using technology in the classroom | Teacher and administration survey |
| Current use of classroom technology | Tools, software and equipment used by teachers for assessment, discussions, and assignments. Online resources and fun tech tools with checklist of software currently used (ie: mindmeister, padlet, Flipgrid) | Teacher and administration survey |
| Current depth of student learning while using technology | Ways teachers use technology in classrooms. Depth of knowledge and engagement in technology related activity | Teacher and administration survey |
| Technology skills where teachers feel they need growth | List of areas teachers feel they are not competent | Teacher and administration survey |
| Time available for training | Time constraints in number of hours and days available | Administration interview |
| Budget | Cost of this training and budget allowances | Administration interview |
| Technical constraints | Availability of internet and wifi, equipment, projector, ability to use Google live in learning during training | District technology leaders interview |
| Technology resources locally available | List of subscription services currently and in the future, equipment in classrooms | Teacher and administrator survey District technology leaders interview |

D. Task Analysis

Prerequisite Analysis

This training is for K-5 teachers who already have basic background knowledge of using online technology, such as using email and an online gradebook. The ideal audience would be teachers with some experience in teaching and who want to take the next steps to integrate technology into their classrooms. They may feel overwhelmed with the numerous websites available and don't know how to select the right tools. To gauge their level of comfort, a survey will be administered to participants that will assess their background knowledge and current resources. This training will involve whole group learning but with individualized attention for those with specific needs.

Topic Analysis

GOAL 1: Teachers will understand the benefits of implementing online tools to use with students in their classes.

- 1.1 Given a list of online tools/resources, teachers will explore three websites and identify at least two benefits of implementing each resource in the classroom.
 - 1.1.1 Following procedures for creating accounts for the websites
 - 1.1.2 Distinguishing the benefits and drawbacks of each website
- 1.2 After instruction, teachers will compare their prior practices to newly acquired practices using technology in the classroom by sharing one or more ways that they have or will benefit.
 - 1.2.1 Determining attitudes about the possibilities for engagement with the use of technology

GOAL 2: Teachers will be introduced to a variety of resources to help increase engagement with technology in the classroom.

- 2.1 After viewing each google slides presentation, teachers will rate various technology resources based on how they can effectively use the tools in their classroom.
 - 2.1.1 Comparing and judging the usefulness of different websites
 - 2.1.2 Brainstorming possible applications of the websites
- 2.2 After exploring various resources from the presentation, teachers will cooperatively compile a list of creative ways to use the resources in their classrooms to increase student engagement.
 - 2.2.1 Adapting examples and applying them to personal teaching styles and grade levels

GOAL 3: Teachers will create one authentic, 30-minute lesson or activity involving assessment, discussion, or assignments using the online tools presented to implement.

- 3.1 After instruction, teachers will design an authentic learning experience that meets all the criteria for using technology in a relevant and meaningful way.
 - 3.1.1 Designing a lesson using at least one of the online tools
- 3.2 After instruction, teachers will implement the technology lesson they have created at least one time in their own classroom.
 - 3.2.1 Producing and performing the lesson to a class of students
- 3.3 After implementation, teachers will evaluate their experience by listing at least two strengths and two opportunities for improvement for each learning experience.
 - 3.3.1 Judging the lesson based on criteria for meaningful technology usage

Procedural Analysis

Participants will be asked to make decisions about the usefulness of online tools based on the needs of their students and their curriculum. Participants will work through the process of implementing technologies into the classroom. The procedural analysis will be divided into three sections and use a flow chart to trace the needs of the teachers (assessment, discussion, or assignments) to the appropriate online tool.

See [Appendix A.2](#) for a flow chart of Procedural Analysis.

SECTION 2: EVIDENCE OF ACCEPTABLE RESULTS

A. Formative Evaluation

Formative evaluation during the design process is necessary to ensure that the training program we are designing meets the needs of the learners and is effective in guiding learners to achieve the desired goals and objectives of the training. Evaluation will take place during the design process and will allow us to determine what changes need to be made to the training. It will consist of small focus groups for each of our stakeholders (teachers, district technology leaders, and administrators) participating in a trial run of the three training sessions. Data will be collected using a focus group interview during & after each session and an electronic survey after each session. The following key questions will be addressed in the formative evaluation.

Key Questions:

1. Are the learning materials and content appropriate for different levels of teachers' experience with educational technology?
2. Are the learning materials and content appropriate for identified goals and objectives?
3. Did the introduction of technologies within the training program increase interest in utilizing technology within the classroom?
4. Did the delivery method enhance the learning process or should another method be considered?
5. Were the learning experiences and activities beneficial to the learners?
6. What improvements in learning materials, content, and instructional design are necessary?
7. Do the learners feel they are more equipped to increase engagement by using technology in the classroom as a result of this training?

Approach 1: Focus Group Interview

In order to get an outside perspective on the planned training, small focus groups will run through the training. The focus groups will be divided up into teachers, the district technology team, and administrators. Participants will be able to ask for clarification or explanations and

give feedback during the sessions. They will also participate in an interview after each session in which they will provide suggestions as to how the learners' needs can be better addressed and give feedback to help identify any unclear instructions or content, technology or usability issues, and any weaknesses in the curriculum or flow of the training program. Feedback will help to guide any changes in the sessions that need to be made before roll out of official training.

See [Appendix A.3](#) for questions that will be asked during the interviews.

Approach 2: Electronic Survey

The electronic survey will be administered to the participants of the focus group after each session. No identifying information will be collected, allowing the participants to be open and honest with their answers and feedback. Participants will be asked to identify strengths and weaknesses of each training program session, as well as assess whether the training program addresses the needs of the learners and helps them to achieve the goals and objectives of the training program. Feedback will help to guide any changes in the sessions that need to be made before roll out of official training.

See [Appendix A.3](#) for the survey or at [this link](#).

B. Summative Evaluation

Summative evaluation after the training sessions will measure whether or not our training was effective in accomplishing its goals and objectives. The first approach will consist of several different summative evaluation activities, each taking place at the end of each session, before learners leave. These evaluations will provide immediate feedback as to whether or not the learning goals and objectives were met for that session. The second approach will take place 2-3 months after the completion of the training and will consist of a survey sent to all participants. The following key questions will be addressed in the summative evaluation.

Key Questions:

1. Did the participants leave with a variety of resources and tools to help them increase engagement by using technology in the classroom. (Goal 2.1)
2. Did the participants gain an understanding of the benefits of implementing online tools within their classroom? (Goal 1.1)
3. What benefits did the participants identify after instruction? (Goal 1.2)
4. Did the participants leave with a variety of ways to incorporate new resources into their teaching and lesson planning? (Goal 2.2)
5. Were the participants able to successfully create and implement lessons that increased engagement by using technology in the classroom? (Goal 3.1 & 3.2))

6. Since the final session, are teachers utilizing technology more often within their classrooms? (Goal 3.3)
7. Since the final session, are teachers more effectively implementing technology tools within their classroom to increase engagement, and not just as a replacement for paper/pencil work?(Goal 3.3)
8. What issues are teachers encountering in incorporating more technology in their classrooms? (Goal 3.3)
9. Did the teachers find this training beneficial and helping them effectively implement technology tools within their classroom to increase engagement? (Goal 3.3)

Approach 1: Summative Evaluation Activities:

Immediate feedback from learners is necessary to ensure that they are understanding the content and are able to apply the information and skills addressed in the objectives and goals. This first approach to summative evaluation aims to assess the learners' understanding before they leave the sessions so that the instructor can give immediate feedback and remediation if necessary as they are working on activities. This is more timely than waiting until the next session to address misconceptions or misunderstandings. Each session will have one or more summative evaluations using this approach.

See [Appendix A.4](#) for Summative Evaluation Activities.

Approach 2: Electronic Survey:

During the final session, learners will spend a portion of their time creating a lesson that uses one new technology tool presented to them in the three sessions. They will be instructed to take this lesson back to their classrooms and implement it with their own students. The lesson has to meet the criteria that they learned in the sessions that makes technology meaningful and relevant. The electronic survey will be implemented 2-3 months after teachers have completed this last session, giving them time to implement the lesson they have created. The survey will allow participants to reflect on the lesson they created and will include questions that assess the impact of the training sessions. They will also have the opportunity to give feedback about the effects and usefulness of the training program, as well and any suggestions they have that might improve the training sessions. Feedback from this survey will help to guide any changes or improvements that can be made before the next implementation of the training.

See [Appendix A.4](#) for survey or at [this link](#).

SECTION 3: LEARNING EXPERIENCES AND/OR INSTRUCTION

A. Learner Analysis

In order to effectively determine the training needs of teachers attending the *Technology in the K-5 Classroom to Enhance Student Learning*, a learner analysis is conducted on the characteristics of the group participants. Learner characteristics include demographic data on diversity and culture, language, and teaching assignments, as well as the size of the group. Physical needs for vision, hearing, mobility and special needs accommodations are assessed. Information about prior knowledge, experience and comfort with technology are essential in creating the best learning experience for the attendees. Knowledge of the range of abilities with technology, as well as applications that are currently used and embedded into teachers' lessons, will help trainers to create learning experiences appropriate for individual situations. The learner analysis also tackles self-concepts toward learning any new technology tools for use in the classroom and the ability to apply newly acquired knowledge. It includes the motivation and attitudes of attendees toward technology use. The design of the learning experience will take into account a variety of learning styles. Questions posed to teachers in survey will help designers build accommodations into the learning experience to cover the variety of learner needs for the group as a whole. Finally, we consider the follow-up project and any roadblocks there might be with implementation of newly acquired skills with technology into the classroom.

Instruments to collect the data will be in the form of surveys and interviews with the stakeholders: teachers, administration and district technology leaders. Data collection is conducted prior to design of the instruction. Having a better understanding of the learners enables the project team to develop more appropriate instruction. Teacher and administration surveys show attitudes and give direct knowledge of learner skills and attitudes. Interviews with those who know the learners well can help with general characteristics of the group and exceptions more quickly than trying to survey every single learner characteristic. A combination of those tools, surveys and interviews, should give a clear picture of learners as a group.

Learner Variables to consider in planning

| Orienting Context | Learner Factor Questions | Data Collection for Information |
|---|---|--|
| Learner Characteristics: Demographic and Group data • Size of target group • Roles played within the | What is the size of the audience for instruction? (3) | 1. Needs Assessment Survey for Teachers 2. Surveys for Administration |

| | | |
|---|---|--|
| <ul style="list-style-type: none"> district subjects/grade levels taught • Diversity of group, cultural background • Primary language spoken <p>Physiological</p> <ul style="list-style-type: none"> • Mobility • Special needs Accommodations • Physical disability (vision, hearing, environmental sensitivities) <p>Prior knowledge of topic Technology Experience:</p> <ul style="list-style-type: none"> • Familiarity with technology • Comfort with tech in classroom • Currently embed tech into lessons-what apps they use • Range of abilities of learners (basic tasks to tech savvy) | <p>What is your current teaching assignment (subject/grade)? (1) What other roles have you played within the school district?(1)</p> <p>What is the cultural background of the audience of learners? (3) What is your ethnic/cultural background? (1)</p> <p>Is English your primary language? (1)</p> <p>Do you have any special needs?(1)</p> <p>Does learning experience need accommodations for physical or learning disabilities? (1,3)</p> <p>When I think about using technology in the classroom I am</p> <ul style="list-style-type: none"> • Clueless • Apprehensive • Capable • Confident (1,2) <p>My use of technology in the classroom is</p> <ul style="list-style-type: none"> • Minimal • Moderate • Often • Extensive (1,2) <p>When I think about the assignments that use technology, I know they are</p> <ul style="list-style-type: none"> • Nonexistent (because I do not use technology) • Basic • Substitution (of paper and pencil) • Quality (1,2) <p>When I struggle implementing technology, it is because</p> | <p>3. Interviews for Administration and District leaders</p> |
|---|---|--|

| | | |
|--|---|--|
| | <ul style="list-style-type: none"> • I have difficulty finding quality websites • I don't know how to use technology in a meaningful way • I find technology pointless • I need help using technology (1,2) <p>Checklists and questions on how technology is used in the classroom, as well as, specific applications teachers currently use. (1,2)</p> <p>Students use of technology is</p> <ul style="list-style-type: none"> • a waste of time • Okay to use sparingly • Okay to use often • Imperative for students to gain effective skills (1,2) <p>Using technology in my classroom is:</p> <ul style="list-style-type: none"> • Expected by school leaders • Something I enjoy using with students and need to learn more(1) <p>When learning new technology, I</p> <ul style="list-style-type: none"> • Never get it • Always find it a struggle to learn • After some time spent with technology, I can use it with my students. • Technology is easy for me. I can learn it quickly. (1) | |
|--|---|--|

| Instructional Context | Learner Factor Questions | Data Collection for Information |
|-----------------------|----------------------------------|---------------------------------|
| Type of learning | The design of this training will | 1. Surveys for Teachers |

| | | |
|--|--|---|
| <ul style="list-style-type: none"> ● Constructivist ● Instructivist ● Connectivist <p>Learning preferences Learning Styles</p> | <p>include a variety of learning styles. Which styles of learning do you enjoy?</p> <ul style="list-style-type: none"> ● Listening ● Seeing/observation ● Doing/exploring (1) <p>What method of learning do you prefer for initial instruction?</p> <ul style="list-style-type: none"> ● Lecture ● Group work ● In charge of own learning (1) <p>What method of learning do you prefer for the final project?</p> <ul style="list-style-type: none"> ● Lecture ● Group work ● In charge of own learning (1) <p>What method do you prefer when learning about websites?</p> <ul style="list-style-type: none"> ● Lecture ● Group work ● In charge of own learning (1) <p>Do you prefer teachers to:</p> <ul style="list-style-type: none"> ● Explain specific websites and how to use ● Arrange learning experiences and guide learning experience through a list of applicable resources to explore ● Learn through connections with peers in group work (1) <p>Feedback preference?</p> <ul style="list-style-type: none"> ● From instructors ● From peers ● Combination (1) <p>What are some areas of technology usage where you want to grow? (1,2)</p> | <p>2. Surveys for Administration</p> <p>3. Interviews for Administration and District leaders</p> |
|--|--|---|

| Transfer Context | Learner Factor Questions | Data Collection for Information |
|-------------------------------|---------------------------------|--|
| Ways instruction transfers to | If training has a usable | 1. Surveys for Teachers |

| | | |
|---|---|--|
| context of classroom/teaching <ul style="list-style-type: none"> ● Use new knowledge to create a classroom usable project ● Variety of ways to implement use of technology introduced in teaching units | classroom project as part of the learning, would there be any reason why you could not complete the follow-up project? (1) What concerns/roadblocks would stop implementation in the classroom? (1,2) Do you need any support in completing implementation? (1) | 2. Surveys for Administration 3. Interviews for Administration and District leaders |
|---|---|--|

Assumptions for this learning experience:

As we consider the people who will attend *Technology in the K-5 Classroom to Enhance Student Learning*, assumptions about the learners greatly affect the design of the learning experience. The learners will be a diverse group of elementary level classroom and special area teachers from kindergarten to grade 5. Learners include intellectually able adults.

Assumptions of intellect are based on teacher requirements to complete college and gain certification prior to working. The learners speak English fluently. Age, social and gender factors are present. While trainers need to be sensitive to these differences, they are not as important as learner comfort and ability with technology. A strong learning design would need to accommodate for individual differences in learning style in this diverse group. This three-day training will need to include visual and auditory presentations with whole group and small group instruction, as well as active, individual learning. Incorporating the use of Google Slides with graphics and websites would assist in learner accommodations. Assumption is that some learners would prefer auditory learning, some would prefer visual, and others more active learning. Accommodations built into the design should cover all the learner needs. The session will need to be held in a location that will accommodate physical limitations. None of the participants will have disabilities that would prevent full participation in the one hour sessions.

The learners that will attend this 3-day training have basic background knowledge using online technology, but want to take steps with new technology tools in their classrooms. Training is valued as teachers are searching for cutting edge technology and better use of technology with updated strategies. Teachers are comfortable with learning and implementing new technology, however, they may need to consider a wider application of technology that is more than just a substitution for paper and pencil tasks. Ample time needs to be provided for learners to complete the more complex tasks. Smaller one hour sessions would meet the time constraints of learners. Motivation is present to complete a final project and implement it into their classroom. However, trainers may need to continue offering support following the workshop to help ensure learner understanding and ability to apply knowledge. Learners are active and self-regulated. Learner centered instruction that requires discussion, creation, and construction is best. Peer interaction will help this group foster a deeper understanding. The best design strategies for the teachers will allow them to create their own learning, organize the materials to each individual situation and apply new knowledge into their classroom situations. Providing rich

resources and guidance in locating resources will allow learners some choice in content based on interest and help the transfer of knowledge by situating learning in real-world contexts.

B. Contextual Analysis

| ORIENTING CONTEXT | Data Collection Methods |
|---|--|
| Immediate Environment Considerations | |
| <ol style="list-style-type: none"> 1. What is the level of teacher knowledge and current use of classroom technology? 2. What technology resources are currently available? | <ol style="list-style-type: none"> 1. Pre-Training Teacher & Administration Surveys 2. Stake-holders Interview |
| Organizational Considerations | |
| <ol style="list-style-type: none"> 1. In what facility and with what equipment will the training be held? 2. Will learners have sufficient prior knowledge to utilize the training? | <ol style="list-style-type: none"> 1. Focus Group Interview 2. Pre-Training Teacher & Administration Surveys |

| INSTRUCTIONAL CONTEXT | Data Collection Methods |
|--|---|
| Immediate Environment Considerations | |
| <ol style="list-style-type: none"> 1. What are the learners' current levels of comfort with using technology? 2. Can learners keep up with the pace of training? 3. Can learners apply the content to fit their particular needs? | <ol style="list-style-type: none"> 1. Ice Breaker 2. Informal Interviews with Learners 3. Formative Evaluations (Electronic Surveys) |
| Organizational Considerations | |
| <ol style="list-style-type: none"> 1. Will learners interact thoroughly with the content of each site? 2. Will the content be specific enough to engage learners? | <ol style="list-style-type: none"> 1. Informal Interviews with Learners 2. Formative Evaluations (Electronic Surveys) |

| TRANSFER CONTEXT | Data Collection Methods |
|------------------|-------------------------|
|------------------|-------------------------|

| Immediate Environment Considerations | |
|--|---|
| 1. Will the content be applicable for timely classroom implementation? 2. What follow-up is necessary to provide additional guidance and resources? | 1. Summative evaluations (Electronic Surveys) 2. a. Slides with Links & Instructions Provided to Learners b. Instructor Contact Information |
| Organizational Considerations | |
| 1. Will the learner be held accountable for knowing and using the new information? | 1. Post-Training Survey |

Based on the Contextual Analysis, the following assumptions were made:

- Learners are current K-5 teachers with intermediate technology experience and are intrinsically motivated to participate in training that will help increase the engagement of their students.
- Learners are familiar with using basic Internet applications and tools (such as email, grade book software, and file creation/usage) so that they may access resources and complete online surveys.
- Learners have access to the internet and school-issued devices (i.e. iPad or laptop).
- During instruction, learners will be able to ask questions and provide feedback to instructors.
- Learners will have access to resources, such as the slideshow and notes, after the training.
- Instructors will be available for quick questions and feedback via email after the training.

C. Types of Learning Experiences and/or Instruction

The in-service teacher training *Technology in the K-5 Classroom to Enhance Student Learning* is built with face-to-face group presentation, individual/small group resource evaluation and exploration with the creation of a lesson to implement in their own classrooms. It is designed for teachers who already have basic background knowledge of using online technology but want to take the next steps to integrate technology into their classrooms. Training is designed to help teachers know how to select the right tools and consider their beliefs about the benefits of implementing online tools. The focus will be on technology that isn't just a substitute for paper and pencil work but enhances student learning that is relevant and meaningful. The three sessions are broken down into categories of assessments, discussions, and assignments. Instruction will be delivered to staff members through three one-hour sessions utilizing an

interactive Google Slides presentation that participants can use as we discuss it in the training. Three cutting edge technology tools will be presented in each session with ways to utilize them within the session subcategory of assessments, discussions, and assignments. The instructional strategies include a motivational section, the topic presentation, and generative strategies with a mix of individual, whole class, and small group interaction. The generative strategies are designed to allow learners to create their own learning and organize the materials to each individual situation. In this way, knowledge is transferred and applied into their classroom situations. The final project which continues after the training session is designed to allow the teachers to process the thinking and generate their own individual and applicable learning experience.

See [Appendix B.1](#) for the Table of Learning Experiences and Instructional Strategies.

D. Materials for Training Program or Learning System

Sample training materials have been created for the three instructional sessions. These materials include a Google Slide Presentation that will be used on all three days of the training. All materials and information presented to participants will be included in this presentation.

See [Appendix B.2.](#) for Instructional Materials.

E. Implementation Plan and Schedule

In this three-day training, teachers will gain strategies and tools to immediately incorporate meaningful technology into their classrooms. Teachers will be exposed to new websites, ready-to-use lessons utilizing cutting-edge technology, and strategies that illustrate best practices in utilizing technology for student learning. The focus will be on technology that isn't just a substitute for paper and pencil work but enhances student learning with relevant and meaningful technology. It is also recommended teachers set aside time work in-between and after sessions to effectively transform their lesson. To have a lesson effectively incorporate technology for student learning, teachers should continually get feedback to review and edit their lesson to enhance it.

Instruction will be delivered to staff members through three one-hour sessions utilizing a Google Slides Presentation with specific topics covered during different sessions. Activity prompts, graphics, websites, etc. will all be included so that it is an interactive presentation that participants can refer to and use/explore as we discuss it in the training.

See [Appendix B.3.](#) for the Implementation Schedule.

SECTION 4: REFERENCES

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SECTION 5: APPENDIX A

A.1. Instruments for Needs Assessment & Learner Analysis

A.1.1. Survey for teachers

Please answer the following questions honestly regarding your use of technology in the classroom.

- 1) My use of educational websites to encourage the use of technology in the classroom is
 - a) Minimal
 - b) Moderate
 - c) Often
 - d) Extensive

- 2) When I think about using technology in the classroom I am
 - a) Clueless
 - b) Apprehensive
 - c) Capable
 - d) Confident

- 3) When I think about the assignments that use technology, I know they are
 - a) Nonexistent (because I do not use technology)
 - b) Basic
 - c) Substitution (of paper and pencil)
 - d) Quality

- 4) When I struggle implementing technology, it is because
 - a) I have difficulty finding quality websites
 - b) I don't know how to use technology in a meaningful way
 - c) I find technology pointless
 - d) I need help using technology

- 5) Technology available in my school district is

- a) Minimal equipment and software purchased
 b) Some computing equipment and software, but not available always
 c) Subscriptions, software, tech tools are purchased and available in my classroom
- 6) Students use of technology is
 a) a waste of time
 b) Okay to use sparingly
 c) Okay to use often
 d) Imperative for students to gain effective skills
- 7) Please check how often you use technology?

| | Never ✓ | Sometimes ✓ | Often ✓ |
|-----------------|---------|-------------|---------|
| For assignments | | | |
| For discussion | | | |
| For assessments | | | |

- 8) List three meaningful ways your current students have used technology?
-
-
-

- 9) Please check any software/websites you feel comfortable using as a teaching tool.

| | | | |
|---|-------------|---|--------------|
| ✓ | | ✓ | |
| | Mindmeister | | Flipgrid |
| | Padlet | | Quizizz |
| | Kahoot! | | Google forms |
| | Quizlet | | Hyperdocs |
| | Blabberize | | Blendspace |
| | Padlet | | NewsELA |

| | | |
|--|--------------------------------|---------------------|
| | Prezi | Google Classroom |
| | Chatterpix | Code.org |
| | Hyperdocs | Seesaw |
| | WeVideo | Common Sense Media |
| | World Book Encyclopedia online | Discovery Education |
| | Nearpod | Google Expeditions |
| | EdPuzzle | Symbaloo |

10) What are some areas of technology usage where you want to grow?

11) What is your current teaching assignment (subject/grade)?

12) What other roles have you played within the school district?

13) What is your ethnic/cultural background?

14) Is English your primary language?

15) Do you have any special needs?

16) Does learning experience need accommodations for physical or learning disabilities?

17) When learning new technology, I

- a) Never get it
- b) Always find it a struggle to learn
- c) After some time spent with technology, I can use it with my students.
- d) Technology is easy for me. I can learn it quickly.

18) The design of this training will include a variety of learning styles. Which styles of learning do you enjoy?

- a) Listening
- b) Seeing/observation
- c) Doing/exploring

19) What method of learning do you prefer for initial instruction?

- a) Lecture
- b) Group work
- c) In charge of own learning (1)

- 20) What method of learning do you prefer for final project?
- a) Lecture
 - b) Group work
 - c) In charge of own learning (1)
- 21) What method do you prefer when learning about websites?
- a) Lecture
 - b) Group work
 - c) In charge of own learning (1)
- 22) Do you prefer teachers to:
- a) Explain specific websites and how to use
 - b) Arrange learning experiences and guide learning experience through a list of applicable resources to explore
 - c) Learn through connections with peers in group work
- 23) Feedback preference?
- a) From instructors
 - b) From peers
 - c) Combination
- 24) If training has a usable classroom project as part of the learning, would there be any reason why you could not complete the follow-up project?
- 25) What concerns/roadblocks would stop implementation in the classroom?
- 26) Do you need any support in completing implementation?
- 27) Using technology in my classroom is:
- a) Expected by school leaders
 - b) Something I enjoy using with students and need to learn more

A.1.2. Survey for Administration

Please answer the following questions honestly regarding use of technology in the classrooms in your building.

- 1) Use of technology in the classrooms is
 - a) Minimal
 - b) Moderate
 - c) Often
 - d) Extensive
- 2) When observing technology use in the classroom, teachers appear to be:
 - a) Clueless
 - b) Apprehensive
 - c) Capable

-
- d) Confident
- 3) When thinking about assignments that use technology in my school, they are
- a) Nonexistent
 - b) Basic
 - c) Substitution
 - d) Quality
- 4) When teachers struggle implementing technology, it is because
- a) they have difficulty finding quality websites
 - b) they don't know how to use technology in a meaningful way
 - c) they find technology pointless
 - d) they need help using technology
- 5) Technology available in my school district is
- a) Minimal equipment and software purchased
 - b) Some computing equipment and software, but not available always
 - c) Subscriptions, software, tech tools are purchased and available in the classroom
- 6) Students use of technology is
- a) a waste of time
 - b) Okay to use sparingly
 - c) Okay to use often
 - d) Imperative for students to gain effective skills
- 7) What are some areas of technology usage where you want to see your school grow?
-

8) Please check how often technology is used?

| | Never ✓ | Sometimes ✓ | Often ✓ |
|-----------------|---------|-------------|---------|
| For assignments | | | |
| For discussion | | | |
| For assessments | | | |

9) List some meaningful ways students in your school have used technology?

10) Please check any software/websites available for use as a teaching tool.

| | | | |
|---|--------------------------------|---|---------------------|
| ✓ | | ✓ | |
| | Mindmeister | | Flipgrid |
| | Padlet | | Quizizz |
| | Kahoot! | | Google forms |
| | Quizlet | | Hyperdocs |
| | Blabberize | | Blendspace |
| | Padlet | | NewsELA |
| | Prezi | | Google Classroom |
| | Chatterpix | | Code.org |
| | Hyperdocs | | Seesaw |
| | WeVideo | | Common Sense Media |
| | World Book Encyclopedia online | | Discovery Education |
| | Nearpod | | Google Expeditions |
| | EdPuzzle | | Symbaloo |

11) What concerns/roadblocks would stop implementation of a final project in the classrooms?

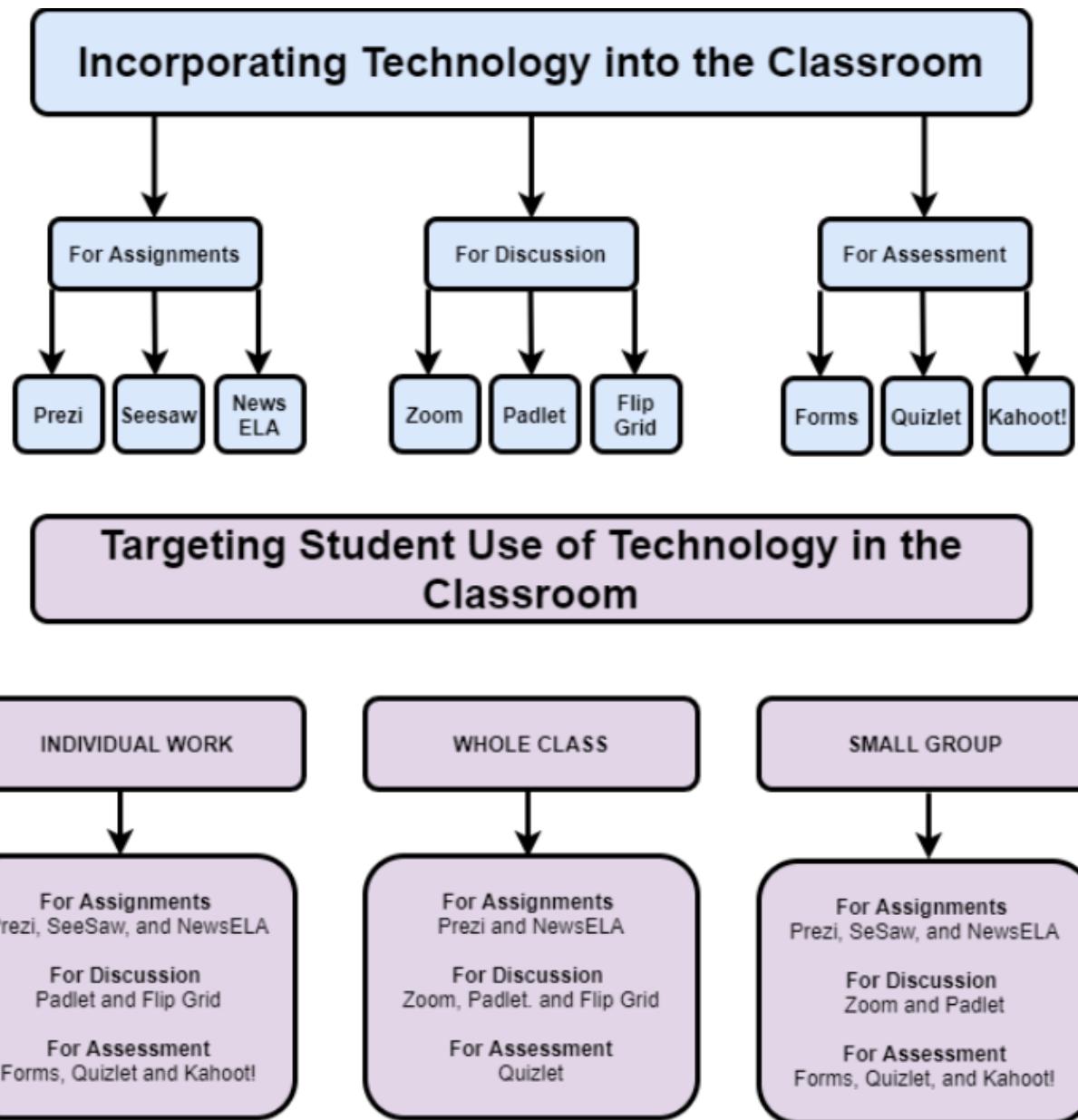
A.1.3. Interview for Administration and District leaders

1. What is the time frame available to complete a training on technology in the K-5 classroom? Days? Hours?
2. Will there be a budget available for the cost of this training and purchases?
3. Will these items be available during training?
 - Teacher devices for each participant
 - Internet using wifi
 - Projector and screen attached to a computing device
4. List subscription services that are available to your school building.

5. What equipment is standard in every classroom in your building?
6. What is the size of the audience for instruction?
7. What is the cultural background of the audience of learners?
8. Does learning experience need accommodations for physical or learning disabilities?

A.2. Procedural Analysis Visual

A.2.1. Procedural Analysis Flowchart



A.3 Formative Evaluation Materials

A.3.1. Approach 1: Focus Group Interview

Thank you for taking the time to be here and help me out. My name is (_____) and I am working on designing a training program to help classroom teachers increase engagement by using technology more effectively in their classrooms. Your feedback will be key in helping to determine any revisions that are needed to make these training sessions as beneficial as possible for teachers.

This focus group will be looking at the content of the sessions, as well as the learning materials, experiences, delivery method, and instructional design. Please be honest in your responses; your feedback will help me determine what I can do to make this training the best it can be.

We are going to go through three mock training sessions. Please feel free to stop me at any time to give feedback and ask questions or for clarification; you do not have to wait till the end of the session. We will also have a short discussion at the end of each session where I will be asking you for specific feedback on some items.

Do you have any questions before we begin?

Questions for Focus Group Discussion:

1. Is the training appropriate for different levels of experience with educational technology?
2. Does the content provide learners with the knowledge needed to meet the program goals and objectives?
3. Did the sessions cover enough material and was the content too easy or too difficult?
4. Was the delivery method used the best way to present the materials?
5. Did the training contain appropriate assessments for measuring participant learning?
6. Did you feel the training was an effective use of time?
7. What were the biggest strengths and weaknesses of the program?
8. Are there any other suggestions for improvements, feedback, or comments you have about the training program?

A.3.2. Approach 2: Focus Group Survey

https://docs.google.com/forms/d/e/1FAIpQLScdx21Awlotrybr0t3_ZmXmyFiMpY-p5hvI0Oz5yoawxQeNIA/viewform?usp=sf_link



Focus Group - PD Technology Trainings

Post Training - Electronic Survey

Were you satisfied with the overall training?

- Yes
- No
- Other: _____

Would you recommend this training to others?

- Yes
- No
- Other: _____

Were there any topics you do not understand? If so, which topics and why was it difficult to understand?

Your answer

Are there any topics you would like to pursue learning further? If so, which topics and why?

Your answer

[Next](#)

Rating Scale

I felt the course material will be essential to my success.

1 2 3 4 5

Strongly Disagree

Strongly Agree

I will be able to immediately apply what I learned.

1 2 3 4 5

Strongly Disagree

Strongly Agree

I was engaged during the session(s).

1 2 3 4 5

Strongly Disagree

Strongly Agree

I was comfortable with the pace and duration of the training session(s).

1 2 3 4 5

Strongly Disagree

Strongly Agree

I was given opportunities to get my questions answered.

1 2 3 4 5

Strongly Disagree

Strongly Agree

I was given opportunities to practice the skills/knowledge I learned.

1 2 3 4 5

Strongly Disagree

Strongly Agree

Any other feedback to strengthen the training?

Your answer

Back

Submit

A.4. Summative Evaluation Materials

A.4.1. Approach 1: Summative Evaluation Activities

Session 1 Instruments

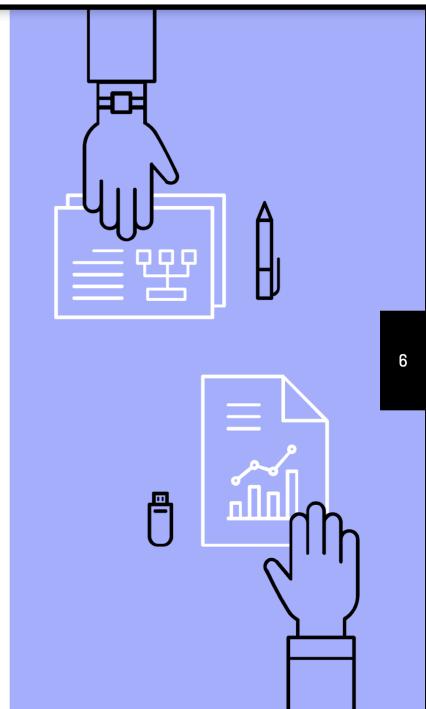
Evaluation Activity 1: Before instruction, as an ice breaker, teachers will share their personal beliefs on the benefits of implementing technology in the classroom using padlet to interact with each other. After instruction, teachers will compare their prior beliefs to newly acquired beliefs about the benefits of technology in the classroom by sharing one or more ways that those beliefs have changed on the padlet.

ICE BREAKER

Before we get started, please use the following link to create a Padlet post to answer the following question:

What are your current beliefs on the benefits of implementing technology in the classroom?

[PADLET DISCUSSION](#)



6

EXIT SLIP

Revisit the group Padlet activity and create a new post answering the following:

What are some of the newly acquired beliefs you have gained from this session?

Discuss one way your beliefs have changed after today's session.

PADLET DISCUSSION



Evaluation Activity 2: Teachers will be given a list of online tools/resources as a “toolbox” and will be given time to explore those sites. They should choose three resources to explore in detail and come up with two benefits of implementing each resource in the classroom. They will post their ideas on a shared Google Doc.

ACTIVITY

Take a look at each of the resources and identify two benefits of implementing each resource in your classroom to assist with classroom assessment.

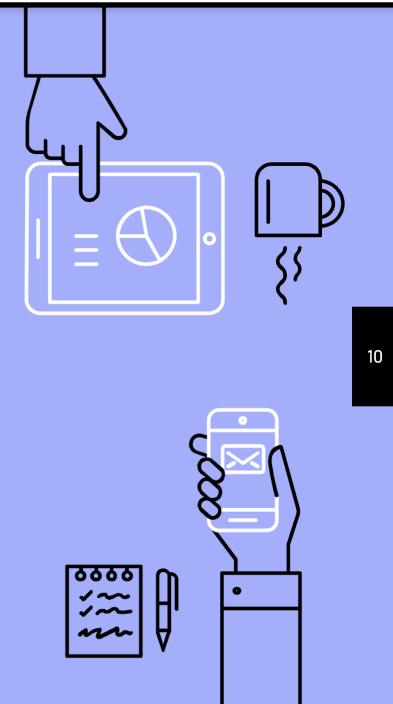
KAHOOT

GOOGLE FORMS

QUIZLET

Use the Google Doc linked below to record your findings.

IMPLEMENTATION ACTIVITY



Evaluation Activity 1: Before instruction, as an icebreaker, teachers will respond to the question, "How have you used technology in the classroom to increase student engagement?" by recording a video response in Flipgrid. After instruction teachers will create another video response using Flipgrid to share their favorite resource/tool and their reasoning.

ICE BREAKER

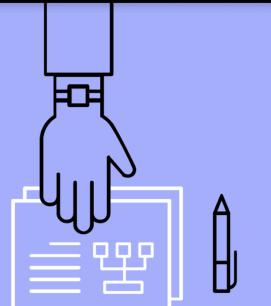
Before we get started, please use the following link to create a video post on Flipgrid to answer the following question:

How have you used technology in the classroom to increase student engagement?

[FLIPGRID ICE BREAKER](#)

Password: Techk-12

View at least two other teachers videos to find out ways they increase student engagement through their use of technology.



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EXIT SLIP

Revisit the group Flipgrid activity and create a new video answering the following:

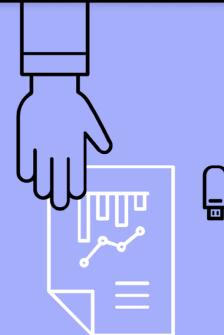
What is your favorite resource from today?

How could you use this resource in your classroom?

[FLIPGRID EXIT SLIP](#)

Password: Techk-12

View at least two other teacher's videos to find out their favorite resources from today.



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Evaluation Activity 2 and 3: Teachers will collaborate using Mindmeister to make a mind map for the online tools or resources sharing creative ways to use them to increase student engagement.

ACTIVITY

Pick two of the following websites to explore.

[Padlet](#) [Flipgrid](#) [Zoom / Google Meet](#)

Share creative ways that you can use each of the resources above on the MindMeister linked below.

[MindMeister](#)

After looking at each of the resources and ways you can use them, use the link below to rate the technology on how useful it is to YOU in the classroom.

[Rating Scale Google Doc](#)

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Evaluation Activity 3: Teachers will be given time to explore three sites. Teachers will rate the tools based on how well they can effectively use that tool in their classroom to increase student engagement and motivation.

ACTIVITY

Pick two of the following websites to explore.

[Padlet](#) [Flipgrid](#) [Zoom / Google Meet](#)

Share creative ways that you can use each of the resources above on the MindMeister linked below.

[MindMeister](#)

After looking at each of the resources and ways you can use them, use the link below to rate the technology on how useful it is to YOU in the classroom.

[Rating Scale Google Doc](#)

17

Session 3 Instruments

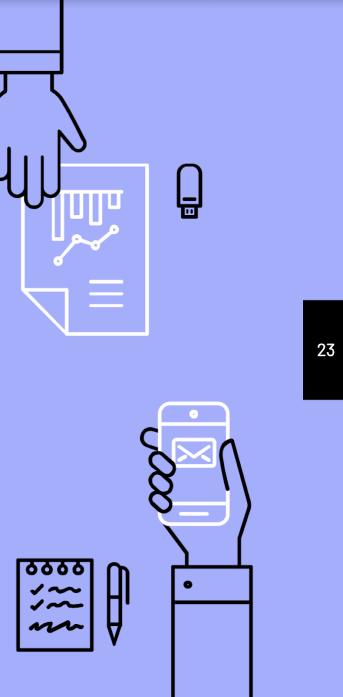
Evaluation Activity 1: Teachers choose one new technology tool presented to them and make a lesson to take with them to implement using one of the tech from the training. It has to meet criteria for tech being meaningful and relevant. They then go back to their classrooms and implement their lesson.

EXIT SLIP

Choose one of the following new technology tools that we have explored over the last three sessions. Make a lesson to take with you to implement in your classroom. Make sure it meets the criteria for using technology in a meaningful and relevant way.

| | | |
|------------------------|------------------------------|----------------------------------|
| Kahoot | Google Forms | Quizlet |
| Padlet | Flipgrid | Zoom/Google Meet |
| Prezi | Seesaw | NewsELA |

Go back to your classroom and implement your lesson. You will be getting a survey in a couple months to let us know how it goes!



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A.4.2. Approach 2: Electronic Survey

https://docs.google.com/forms/d/e/1FAIpQLSfTVy83GE1IdKbyV95R_9wi1hZ_kJpOPKVIBKs6HHS2-vV9Dw/viewform?usp=sf_link



Implementing Technology Resources Survey

Post Survey Questions

Were you satisfied with the overall training?

- Yes
- No
- Other: _____

Are you using what you learned during training in your daily work?

Your answer _____

What was your biggest take away from this training?

Your answer _____

What additional support do you need to apply these skills in your classroom?

Your answer _____

Are there noticeable changes in your work post training?

Your answer _____

Do you feel you've performed better since training?

- Yes
- No
- Other: _____

If so, which areas have you improved the most?

Your answer _____

Has this training helped you reach any personal or professional goals?

Your answer _____

Please share any other feedback you have regarding the trainings.

Your answer _____

[Back](#)

[Next](#)



Implementing Technology Resources Survey

Post Survey Lesson Reflection

After implementing your lesson, do you feel that the tools you learned in the trainings were overall beneficial?

Yes
 No
 Other: _____

Share a positive outcome from the lesson you created within the training.

Your answer _____

Is there any portion of your lesson that you feel could of been better? If so, which part and why?

Your answer _____

Please share any other training lesson feedback.

Your answer _____

[Back](#) [Submit](#)

SECTION 6: APPENDIX B

B.1. Table of Learning Experiences and Instructional Strategies

B.1.1. Table of Types of Learning Experiences

| Learning Objective | Types of Learning Content | Type of Learning Performance |
|--------------------|---------------------------|------------------------------|
| | | |

| GOAL 1: Teachers will understand the benefits of implementing online tools. | | |
|---|--------------------|---------------------|
| 1.1 Given a list of online tools/resources, teachers will explore three websites and identify at least two benefits of implementing each resource in the classroom. | Concept, Principle | Application/Analyze |
| 1.2 After instruction, teachers will compare their prior beliefs to newly acquired beliefs about the benefits of technology in the classroom by sharing one or more ways that those beliefs have changed. | Concept, Principle | Analyze/Evaluate |

| GOAL 2: Teachers will be introduced to a variety of resources to help increase engagement with technology in the classroom. | | |
|---|--------------------|----------------------|
| 2.1 After viewing each google slides presentation, teachers will rate various technology resources based on how they can effectively use the tools in their classroom. | Concept, Principle | Application/Analysis |
| 2.2 After exploring various resources from the presentation, teachers will cooperatively compile a list of creative ways to use the resources in their classrooms to increase student engagement. | Process | Analyze/Apply |

| GOAL 3: Teachers will create one authentic lesson or activity using the online tools presented to implement in their classrooms. | | |
|---|---------|---------------|
| 3.1 After instruction, teachers will design an authentic learning experience that meets all the criteria for using technology in a relevant and meaningful way. | Process | Design/Create |
| 3.2 After instruction, teachers will implement the technology lesson they have created at least one time in their own classroom. | Process | Application |

| | | |
|---|-----------------------------|----------|
| 3.3 After implementation, teachers will evaluate their experience by listing at least two strengths and two opportunities for improvement for each learning experience. | Process, Troubleshooting | Evaluate |
|---|-----------------------------|----------|

B.1.2. Table of Types of Instructional Strategies

| | |
|--|--|
| Objectives | <p>1.1 Given a list of online tools/resources, teachers will explore three websites and identify at least two benefits of implementing each resource in the classroom.</p> <p>1.2 After instruction, teachers will compare their prior beliefs to newly acquired beliefs about the benefits of technology in the classroom by sharing one or more ways that those beliefs have changed.</p> <p>2.1 After viewing each Google Slides presentation, teachers will rate various technology resources based on how they can effectively use the tools in their classroom.</p> <p>2.2 After exploring various resources from the presentation, teachers will cooperatively compile a list of creative ways to use the resources in their classrooms to increase student engagement.</p> |
| Chronological Order | Session 1 - Technology for Assessment |
| Tools | Kahoot!, Google Forms, and Quizlet |
| Steps in the Instructional Strategy | |
| Motivational | Before instruction as an ice breaker, teachers will share their personal beliefs on the benefits of implementing technology in the classroom using padlet to interact with each other. |
| Initial Presentation | A Google Slides presentation on using technology for assessment that include Kahoot!, Google forms, and Quizlet that encompasses criteria for technology to be meaningful and relevant. |
| Generative Strategy | Teachers will be given online assessment tools/resources and will be |

| | |
|--|--|
| | given time to explore those sites. They should explore all three resources in detail and come up with two benefits of implementing each assessment tool in the classroom. They will post their ideas on a shared Google document and share within their group. A Padlet Exit Slip will allow learners to share ways their beliefs about the benefits of technology have changed. |
|--|--|

| | |
|--|--|
| Objectives | 1.1 Given a list of online tools/resources, teachers will explore three websites and identify at least two benefits of implementing each resource in the classroom. 2.1 After viewing each Google Slides presentation, teachers will rate various technology resources based on how they can effectively use the tools in their classroom. 2.2 After exploring various resources from the presentation, teachers will cooperatively compile a list of creative ways to use the resources in their classrooms to increase student engagement. |
| Chronological Order | Session 2 - Technology for discussion |
| Tools | Padlet, Flipgrid and Zoom |
| Steps in the Instructional Strategy | |
| Motivational | Before instruction, as an icebreaker, teachers will respond to the question, "How have you used technology in classroom discussions to increase student engagement?" by recording a video response in Flipgrid. |
| Initial Presentation | A Google Slides presentation on using technology for discussion that include Padlet, Flipgrid, and Zoom and encompasses criteria for technology to be meaningful and relevant. |
| Generative Strategy | Teachers will be given time to explore online tools: Padlet, Flipgrid, Zoom. Teachers will rate the tools based on how well they can effectively use that discussion tool in their classroom to increase student engagement and motivation. Teachers will collaborate using Mindmeister to make a mind map for the online tool showing creative ways to use them to increase student engagement. Teachers will |

| | |
|--|--|
| | rate the technology on how useful it is for classrooms on a Google Document. After instruction, teachers will create another video response using Flipgrid to share their favorite resource/tool for discussion and their reasoning. |
|--|--|

| | |
|---------------------|--|
| Objectives | <p>1.1 Given a list of online tools/resources, teachers will explore three websites and identify at least two benefits of implementing each resource in the classroom.</p> <p>2.1 After viewing each Google Slides presentation, teachers will rate various technology resources based on how they can effectively use the tools in their classroom.</p> <p>3.1 After instruction, teachers will design an authentic learning experience that meets all the criteria for using technology in a relevant and meaningful way.</p> <p>3.2 After instruction, teachers will implement the technology lesson they have created at least one time in their own classroom.</p> <p>3.3 After implementation, teachers will evaluate their experience by listing at least two strengths and two opportunities for improvement for each learning experience.</p> |
| Chronological Order | Session 3 - Technology for Assignments |
| Tools | Prezi, Seesaw, and NewsELA |

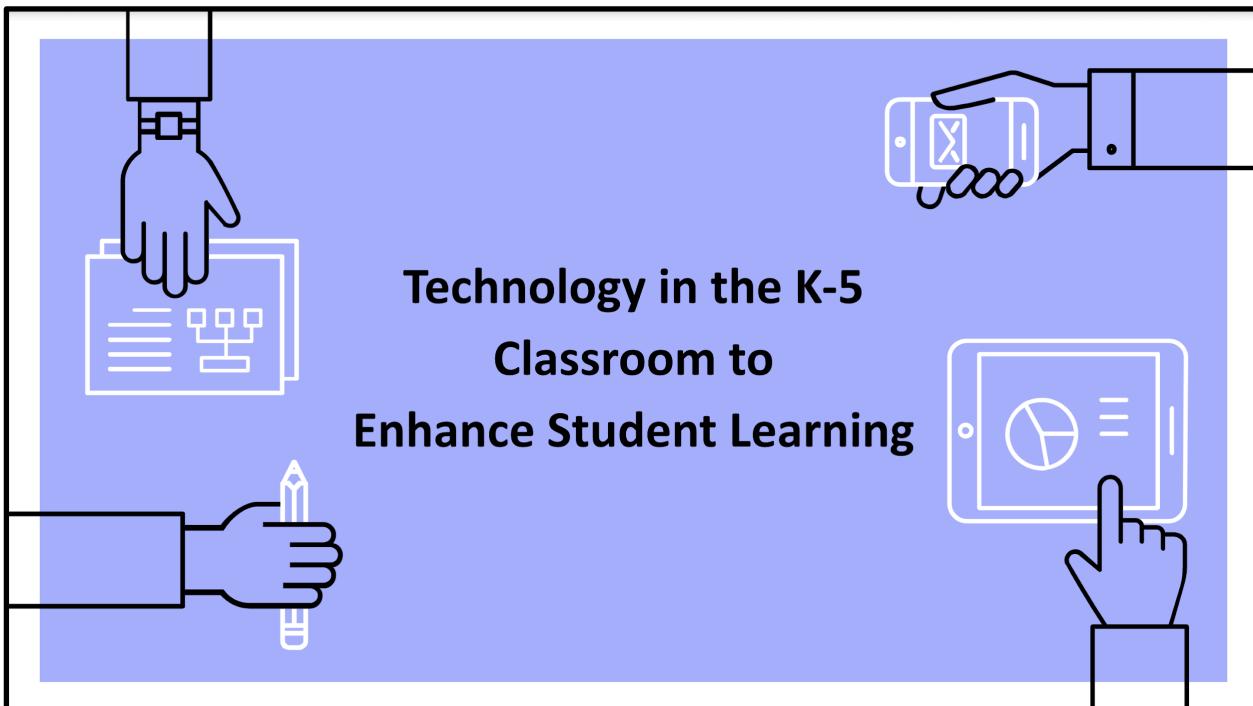
Steps in the Instructional Strategy

| | |
|----------------------|--|
| Motivational | Before instruction, as an ice breaker, teachers will share their thoughts and feelings after session 1 and 2. Teachers will share their concerns about using technology for assignments and briefly discuss aloud. |
| Initial Presentation | A Google Slides presentation on using technology for assignments that include Prezi, Seesaw, and NewsELA that encompasses criteria for technology to be meaningful and relevant. |

| | |
|----------------------|---|
| Generative Strategy | <p>Teachers will be given time to explore online tools: Prezi, SeeSaw, and NewsELA. Teachers will explore the tools based on how well they can effectively use the assignment tool in their classroom to increase meaningful student engagement and motivation.</p> <p>During the last section of the final training, teachers will choose one new technology tool presented to them over the last three lessons and create a lesson to take back to their classroom. They will integrate one of the technology tools explored at the training and the lesson has to meet criteria for technology being meaningful and relevant. Teachers will then go back to their classrooms and implement their new lesson.</p> |
| Closure & Reflection | <p>Students will be asked to implement the lesson that they created at the training and reflect on it. Feedback will be collected within 2-3 months after teachers have completed this last session, giving them time to implement the lesson they have created.</p> |

B.2. Instructional Materials

B.2.1. Google Slides Presentation



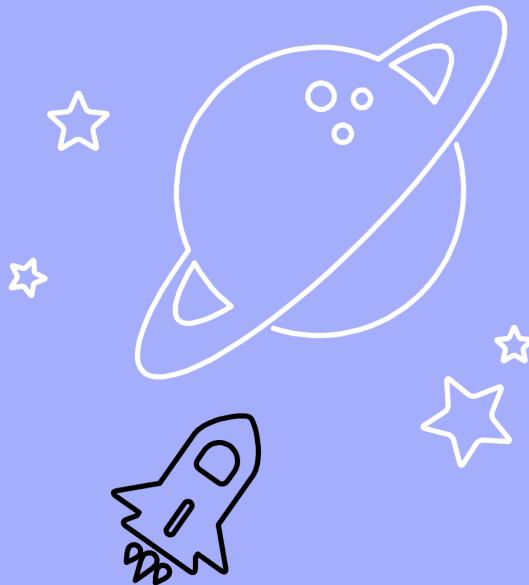
WELCOME!

PRESENTER'S
INTRODUCTION

A photograph of a young woman with curly hair, wearing a purple headband, gold hoop earrings, and a gold watch, smiling broadly. A small black square in the bottom right corner contains the number '2'.

OBJECTIVES

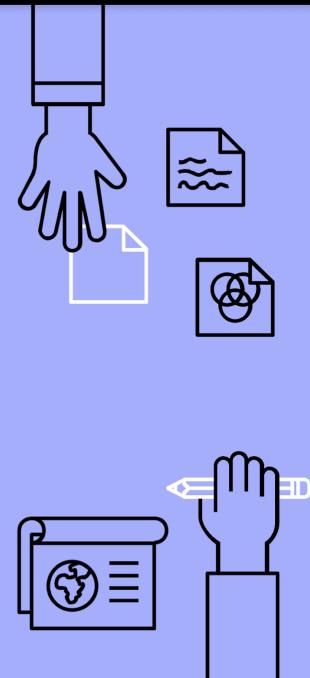
- ▷ Gain strategies and tools to immediately incorporate meaningful technology into your classroom.
- ▷ Find new websites and strategies that illustrate best practices in utilizing technology for student learning.
- ▷ Focus on relevant and meaningful technology that isn't just a substitute for paper and pencil work but enhances student learning.



3

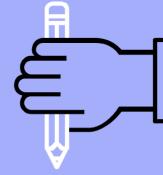
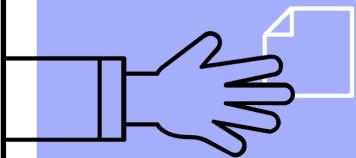
GUIDELINES FOR MEANINGFUL AND RELEVANT TECHNOLOGY:

1. Encourages student choice
2. Promotes relevant learning
3. Allows for authentic assessment
4. Allows for student collaboration
5. Focuses on the learning goal before the tool
6. Helps teachers provide feedback
7. Helps teachers differentiate
8. Helps students learn at their own pace
9. Encourages creation not consumption
10. Engaging



4

DAY 1: IMPLEMENTING TECHNOLOGY FOR ASSESSMENT



ICE BREAKER

Before we get started, please use the following link to create a Padlet post to answer the following question:

What are your current beliefs on the benefits of implementing technology in the classroom?

[PADLET DISCUSSION](#)



6



Kahoot

- ▷ Kahoot! is a question quiz game for the whole class. Students use their own devices to choose answers to teacher-created questions. The format is almost like a gameshow with students competing for the top score.
- ▷ Teachers like to use it for a competition for pre-tests or reviews. It's highly engaging for students with fun colors and music!

Tools
for
Assessment

7

Google Forms

- ▷ Google Forms is a tool used to create online surveys and quizzes. There are a variety of question formats, as well as the option to export to a spreadsheet for easy grading.
- ▷ Teachers like to use it for quick “exit tickets,” surveys, and longer quizzes. It can also be set up to grade questions with an answer key!

Tools
for
Assessment

8

Quizlet

- ▷ Quizlet is a tool that can be used to create flashcards or to search and utilize content that someone else has created.
- ▷ Teachers like to use it to help students review concepts, such as vocabulary. Its “Quizlet Live” feature allows groups that challenge each other!

Tools
for
Assessment

ACTIVITY

Take a look at each of the resources and identify two benefits of implementing each resource in your classroom to assist with classroom assessment.

[KAHOOT](#)

[GOOGLE FORMS](#)

[QUIZLET](#)

Use the Google Doc linked below to record your findings.

[IMPLEMENTATION ACTIVITY](#)



EXIT SLIP

Revisit the group Padlet activity and create a new post answering the following:

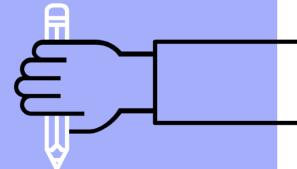
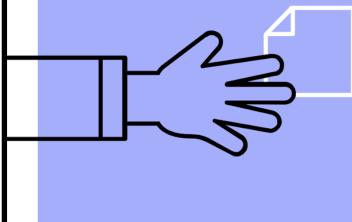
What are some of the newly acquired beliefs you have gained from this session?

Discuss one way your beliefs have changed after today's session.

PADLET DISCUSSION



DAY 2: IMPLEMENTING TECHNOLOGY FOR DISCUSSION



ICE BREAKER

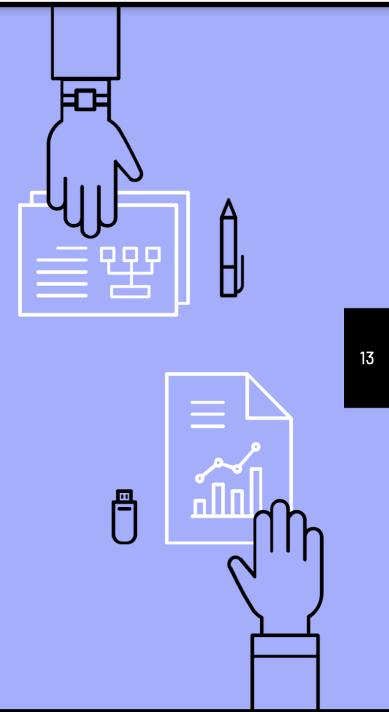
Before we get started, please use the following link to create a video post on Flipgrid to answer the following question:

How have you used technology in the classroom to increase student engagement?

FLIPGRID ICE BREAKER

Password: Techk-12

View at least two other teachers videos to find out ways they increase student engagement through their use of technology.



Padlet

- ▷ Padlet is an online bulletin board where teachers and students can share posts with text and pictures and reply to classmates' posts.
- ▷ Teachers like to use it to create discussion boards on different topics and allow students to respond visually. It's fun to use with multiple formatting options!

Tools
for
Discussion

14

Flipgrid

- ▷ Flipgrid is like a discussion board except with short videos posted on one page. Students can record themselves to post or comment on others' videos.
- ▷ Teachers like to use it as a place to post book reviews, responses to a prompt, or idea-sharing. It could also be used remotely for discussions!

Tools
for
Discussion

15

Zoom/Google Meet

- ▷ Zoom and Google Meet are apps used to video conference a group of people. There are private chat functions and other features, such as changing backgrounds, screen share, recording.
- ▷ Teachers like to use it as a tool to meet outside the classroom to discuss projects, have book studies, study for tests, etc. Teachers can also record narrated lessons or read-alouds!

Tools
for
Discussion

16

ACTIVITY

Pick two of the following websites to explore.

[Padlet](#)

[Flipgrid](#)

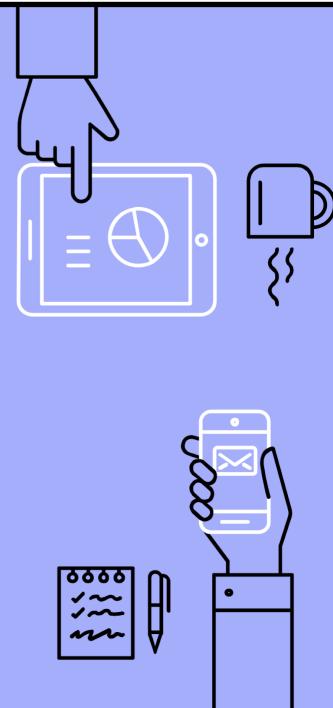
[Zoom / Google Meet](#)

Share creative ways that you can use each of the resources above on the MindMeister linked below.

[MindMeister](#)

After looking at each of the resources and ways you can use them, use the link below to rate the technology on how useful it is to YOU in the classroom.

[Rating Scale Google Doc](#)



17

EXIT SLIP

Revisit the group Flipgrid activity and create a new video answering the following:

What is your favorite resource from today?

How could you use this resource in your classroom?

[FLIPGRID EXIT SLIP](#)

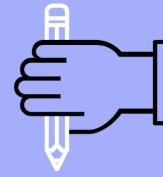
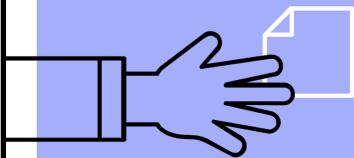
Password: Techk-12

View at least two other teacher's videos to find out their favorite resources from today.



18

DAY 3: IMPLEMENTING TECHNOLOGY FOR ASSIGNMENTS



Prezi

- ▷ Prezi is an interactive presentation tool that zooms around one larger “picture” instead of just moving from slide to slide.
- ▷ Teachers like to use it so students can work in groups or individually to create an interactive presentation. Text, pictures, and videos are also easily incorporated!

Tools
for
Assignments

Seesaw

- ▷ Seesaw is an app where students join a classroom and interact on a common feed where teachers and students can both post. Teachers can upload a variety of media and comment on students' posts.
- ▷ Teachers like to use it for students to post and interact with each other on a classroom feed during class time or outside of the classroom. It's also a great platform for remote learning!

Tools
for
Assignments

21

NewsELA

- ▷ NewsELA is an online news source geared specifically for the classroom. Articles are posted on a wide variety of current events and topics across subject areas and reading levels.
- ▷ Teachers like to use it to create text sets on different topics and adjust reading levels of articles to different lexiles. It's a great source for current events!

Tools
for
Assignments

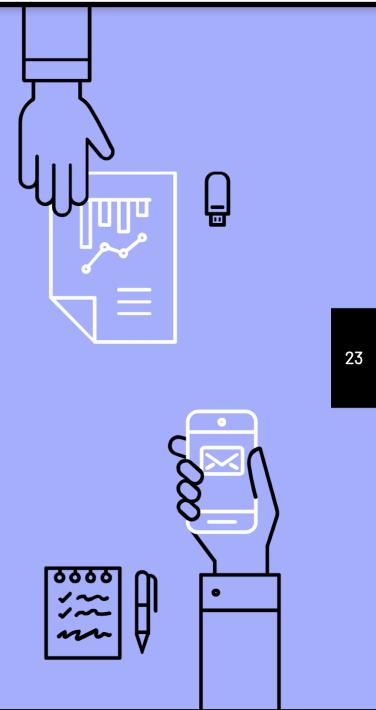
22

EXIT SLIP

Choose one of the following new technology tools that we have explored over the last three sessions. Make a lesson to take with you to implement in your classroom. Make sure it meets the criteria for using technology in a meaningful and relevant way.

| | | |
|------------------------|------------------------------|----------------------------------|
| Kahoot | Google Forms | Quizlet |
| Padlet | Flipgrid | Zoom/Google Meet |
| Prezi | Seesaw | NewsELA |

Go back to your classroom and implement your lesson. You will be getting a survey in a couple months to let us know how it goes!

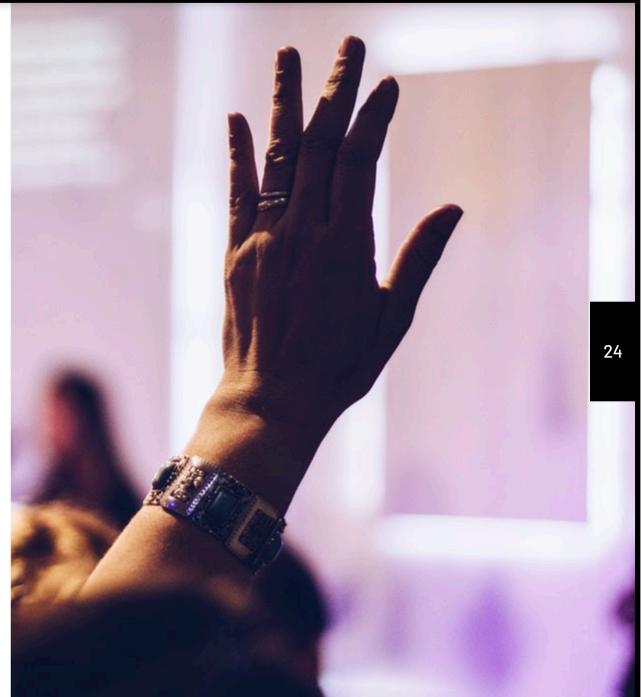


23

THANKS!

Any questions?

Please contact us at
(presentor's email).



24

RESOURCES

<https://nearpod.com/blog/4-keys-incorporating-meaningful-technology-classroom/>

<https://www.teachhub.com/benefits-technology-classroom>

<https://marketing.pinecc.com/blog/the-importance-of-technology-in-education-pinecoves-top-10-reasons>

<https://www.edutopia.org/technology-integration-guide-description>


25

B.3. Schedules

B.3.1. Implementation Schedule

DAY 1 Implementing Technology for ASSESSMENT

| Time Frame | Activity | Teacher Outcomes |
|------------|--------------------------|--|
| 2 mins | Introduction of training | <ul style="list-style-type: none"> Teachers will learn a basic understanding of the training |
| 6 mins | Ice breaker | <ul style="list-style-type: none"> Teachers will share their thoughts on how technology in the classroom can benefit students using a Padlet |
| 20 mins | Slides Presentation | <ul style="list-style-type: none"> Teachers will learn about technology tools used for assessment Teachers will understand the criteria for technology to be engaging and meaningful for student learning |
| 25 mins | Toolbox | <ul style="list-style-type: none"> Teachers will be exposed to the “toolbox,” which provides them with resources for implementing technology into assessments. |

| | | |
|--------|------------------------|--|
| | | <p>These include Kahoot!, Google Forms, and Quizlet.</p> <ul style="list-style-type: none"> Teachers will explore all resources and identify two benefits of implementing each resource into classroom assessments Teachers will briefly share a benefit they identified to someone in the group and on a shared Google Document. |
| 7 mins | Closure and Reflection | <ul style="list-style-type: none"> Teachers will revisit their initial posting on Padlet. They will add a posting about newly acquired and how their beliefs have changed as a result of this training |

DAY 2 Implementing Technology for DISCUSSIONS

| Time Frame | Activity | Teacher Outcomes |
|------------|------------------------|--|
| 2 mins | Check-In | <ul style="list-style-type: none"> Teachers will briefly share their thoughts and feelings after Day 1 |
| 6 mins | Ice breaker | <ul style="list-style-type: none"> Teachers will create a brief video on Flipgrid to share their how they've used technology in the classroom to increase student engagement in discussions |
| 20 mins | Slides Presentation | <ul style="list-style-type: none"> Teachers will learn about technology tools used for discussions Teachers will continue to understand the criteria for technology to be engaging and meaningful for student learning |
| 25 mins | Toolbox | <ul style="list-style-type: none"> Teachers will be exposed to the “toolbox,” which provides them with resources for implementing technology into discussions. These include Padlet, Flipgrid, and Zoom Teachers will explore all resources and create a mind map of the different ways they can use technology for a variety of assignments in their classroom |
| 7 mins | Closure and Reflection | <ul style="list-style-type: none"> Teachers will create a new Flipgrid to share their favorite resource from today and how they can use it in their classroom. Teachers will also view other teachers posts to find out about their learning. |

DAY 3 Implementing Technology for ASSIGNMENTS

| Time Frame | Activity | Teacher Outcomes |
|------------|------------------------|---|
| 2 mins | Check-In | <ul style="list-style-type: none"> Teachers will briefly share their thoughts and feelings after Day 1 & 2 |
| 20 mins | Slides Presentation | <ul style="list-style-type: none"> Teachers will learn about technology tools used for assignments that include Prezi, SeeSaw and NewELA. Teachers will continue to understand the criteria for technology to be engaging and meaningful for student learning |
| 25 mins | Toolbox | <ul style="list-style-type: none"> Teachers will be exposed to the “toolbox,” which provides them with resources for implementing technology into assignments Teachers will explore the websites. and create a lesson to take with them to implement in their classroom. |
| 13 mins | Closure and Reflection | <ul style="list-style-type: none"> Teachers will share the lesson they have created with the group to get feedback from other teachers. |