Module 3

Planning, Troubleshooting, Integration, and Reflection

Module Overview

When you complete this module you will have a better understanding of the kind of planning that will help you to be successful in a one to one eLearning environment. From the foundation of planning, you will begin considering troubleshooting skills that will aid in your efficiency, and be introduced to new ideas for empowering students as technology experts. By revisiting your Curriculum Map and drafting some activities, you will be able shape your use of one to one eLearning in the classroom. Finally, you will spend time reflecting on what you have learned so far, and create a plan to implement and continue to learn about, new strategies for one to one eLearning that have been presented to you during this training.

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Module Questions

- What are key areas of planning that you need to consider before launching a one to one eLearning program in your classroom?

- What is your comfort level with simple troubleshooting in a one to one eLearning program in your classroom?

- How can you leverage the skills and experiences of your students, and empower them as technology experts, as you launch a one to one eLearning program in your classroom?

- In what ways can you implement and continue to learn about, new strategies, new tools, and new skills to support your current curriculum?

- How has your thinking changed from the beginning of the training to the end of the training?

Objectives

Teachers will leave the training having:

- Analyzed their own readiness in three areas: the physical environment, students, and teachers.

- Gained experience in troubleshooting basic elements of laptop use.

- Explored opportunities to leverage student technology skills.

- Created activities, based on their Curriculum Maps, to use in their classrooms.

- Quantified changes in practice that should occur if they successfully implement the activities in their Curriculum Map.

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Resources

- Getting Started: Checklist Stage 1

- Instructional Planning Packet

- Laptop Learning Level Survey

- Participant's Curriculum Map

- Getting Started: Trying out Troubleshooting

- Troubleshooting Tutorial: Checking the battery levels and optimizing power options

- Troubleshooting Tutorial: Understanding Computer Specifications and Program Minimum Requirements

- Troubleshooting Tutorial: Using external drives

- Troubleshooting Tutorial: Adjusting audio input and output

- Troubleshooting Tutorial: Installing software (example - Mozilla FireFox)

- Troubleshooting Tutorial: Creating and sharing bookmarks

- Technology Options Providing Options for Tools

- Technology Tips Animoto

- Technology Tips Bubbl

- Technology Tips Cacoo

- Technology Tips Edmodo

- Technology Tips Empressr

- Technology Tips FreeMind

- Technology Tips Glogster

- Technology Tips Mindomo

- Technology Tips MovieMaker

- Technology Tips Penzu

- Technology Tips Pidgin

- Technology Tips Prezi

- Technology Tips ProProfs

- Technology Tips QuestionPro

- Technology Tips SlideRocket

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- Technology Tip for "Taking Photos with a Laptop Camera"
- Technology Tips VoiceThread
- Technology Tips WallWisher
- Technology Tips Weebly
- Technology Tips Wetoku

Tools

- **www.wallwisher.com**
- **www.genyes.com**
- **www.4teachers.org**
- **www.internet4classrooms.com**

Planning, Troubleshooting, Integration, and Reflection

Activity 1: Getting Ready for the Laptops

Planning a personal strategy for integrating laptops into your classroom will help you on the road to success. Sometimes the best way to develop your own use of laptops is to consider the struggles and successes that others have experienced. Let's start by introducing you to Felix. As you read Felix's story, consider where he successfully planned, or could have improved his planning.

Vignette 1

Felix is a middle level mathematics teacher. His school just started a new one to one eLearning program last week. Today, Felix's class of 24 students will facilitate a lesson that he designed, which will use the laptops for the full class meeting.

Question A for Vignette 1: When the laptops first arrive in your school, what do you need to consider before planning to use the laptops for a full lesson?

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Vignette 2

All of the student's in his class come directly from Language Arts. When they come to class, they are all very concerned because they have worked on their laptops for the full class meeting in Language Arts and need to recharge their laptop batteries.

Question A for Vignette 2: What is the problem Felix is facing?

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Question B for Vignette 2: What will Felix need to do to accommodate for the lack of battery power?

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Step 1: Planning for Success

When preparing to use laptops there are two aspects that you need to focus on, technical and instructional. The technical preparation for a one to one environment focuses on the physical, skill, and resource readiness. This activity will help you make sure you are prepared for the technical aspect. For the first activity we will focus on identifying your current level of readiness. Complete the Getting Started: Checklist Stage 1 to identify your current readiness and your level of readiness specific to physical space, student readiness, and personal readiness.

Lets reflect about your readiness with these questions:

1. Think about your answers to the section on physical space. What is your level of readiness? What questions were you able to answer and what questions were you unable to answer? What do you need to find out or do to improve the readiness of your physical space?

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2. Now move to the section on student readiness. Are your students ready? Do they have the skills they need? Do you know what skills they still need to develop? What rules, if any, will you need to have in place for students before they are provided the laptops?

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3. Lastly, look at the section on personal readiness. How prepared are you? What can you do independently to prepare for the use of the laptops? What skills do you need to develop? How can you become more familiar with the hardware and software of the laptop?

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Activity 1 Resources

• Getting Started: Checklist Stage 1

Activity 2: Technical Considerations

Explicitly thinking about your readiness to initiate a one to one eLearning environment can help you to plan for and implement essential conditions. Considering how complex, yet rewarding, a one to one eLearning environment can be, it becomes increasingly important to share knowledge and dig deeper into preparation and planning. Let's return to Felix to find out more.

Vignette 3

After the first day with the laptops, Felix was frustrated that a simple technical issue, how students will recharge their batteries, had distracted his students from completing the lesson. He met with the Language Arts teacher and they thought about ways to troubleshoot. As they began their conversation, they kept a list of other items that they should spend some time troubleshooting.

Question A for Vignette 3: What items might you have to think about, which you may need to be able to troubleshoot, before you begin to integrate laptops?

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Question B for Vignette 3: Are there people with whom you work who can help you in troubleshooting?

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Step 1: Trying Out Troubleshooting

Learning to troubleshoot simple glitches can help you to focus on your teaching and your students' learning. There are a few common elements of troubleshooting that we want to make you aware of before you move forward in implementing a one to one laptop initiative in your classroom. For this activity you will use tutorials to prepare for simple troubleshooting in your classroom.

Tutorials will focus on:

- Troubleshooting Tutorial: Checking the battery levels and optimizing power options

- Troubleshooting Tutorial: Understanding Computer Specifications and Program Minimum Requirements

- Troubleshooting Tutorial: Using external drives

- Troubleshooting Tutorial: Adjusting audio input and output

- Troubleshooting Tutorial: Installing software (example - Mozilla FireFox)

- Troubleshooting Tutorial: Creating and sharing bookmarks

- Troubleshooting Tutorial: Connecting to Wireless networks

Step 2: Trying Things Out

1. Your facilitator will assign one of the tutorials to you and a partner. There may be more than one group that will focus on this tutorial. Note: These tutorials were built using a specific machine and operating system. The challenge for you will be to use these sample tutorials as a means of figuring out how to troubleshoot on your own computer.

2. Use your laptops to become familiar with settings.

3. Fill in the Getting Started: Trying out Troubleshooting template to keep track of your notes and helpful hints.

4. When you have completed your tutorial and your notes, you will share these ideas with a larger group. In your larger group, take notes for other helpful hints that your peers have shared.

5. When you have completed the Getting Started: Trying out Troubleshooting template you will complete a jigsaw activity where you are able to learn tips and helpful hints from your peers for each of the eight tutorials. Using the Getting Started: Trying out Troubleshooting template again, continue talking with your peers until you have notes and helpful hints completed for at least eight of the troubleshooting tutorials.

Activity 2 Resources

- Getting Started: Trying out Troubleshooting

- Troubleshooting Tutorial: Checking the battery levels and optimizing power options

- Troubleshooting Tutorial: Configuring power options

- Troubleshooting Tutorial: Understanding Computer Specifications and Program Minimum Requirements

- Troubleshooting Tutorial: Using external drives

- Troubleshooting Tutorial: Adjusting audio input and output

- Troubleshooting Tutorial: Installing software (example - Mozilla FireFox)

- Troubleshooting Tutorial: Creating and sharing bookmarks

- Troubleshooting Tutorial: Connecting to Wireless networks

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Activity 3: Students as Tech Experts

The collaboration between students and teachers to support the integration of laptops can be very powerful. Developing ways to share the responsibility for troubleshooting can provide your students additional opportunities to become technically proficient and provide you an additional layer of support. This collaboration can focus on either technical or instructional, or both of these elements of the classroom. Let's start by hearing about Elizabeth's experiences with empowering her students to become experts.

Vignette 4

Elizabeth is a teacher in a primary school. Her school has just started a one to one eLearning program for their students. She attended a workshop to learn about how to use the computers, but found herself apprehensive when she tried to get started. One of the main concerns Elizabeth had was her lack of basic skills with computers and other technologies. When students brought the computers to her classroom, she was surprised to find them taking time to explore, learn, and practice on the computers. Elizabeth realized that her students were fast learners and agile in their ability to find, try, and use new tools. She saw she had a small group of students who were really interested in learning as much as they could about the computers. She asked this group of students if they would be interested in becoming the "experts" in first-line troubleshooting and helping others if they ran into a technical problem. They were very excited about doing this. Over time the students began providing tech support to other teachers and their students as well. This not only helped those teachers and the students in their classrooms, but the group of "techsperts" was learning real-world skills. These students set up a virtual student network where they could share troubleshooting information with other "techsperts" around the country.

Step 1: Empowering Student Skills

Empowering students, as Elizabeth's story demonstrates, can really contribute to the overall success of a one to one eLearning program. However, preparing students to be "techsperts" will take time to plan.

During this first step of the activity discuss with your group your initial beliefs about students becoming technology experts. Think about these guiding questions:

1. Are there students with whom you work who could serve as technology experts?

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2. How do you think students as technology experts could influence your classroom?

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Step 2: Considering Students as Tech Experts

Generation YES is an organization committed to helping students help teachers integrate technology into the classroom setting. Teachers and students work together to develop innovative lessons, use technology in new and intriguing ways, and corroboratively develop an infrastructure to support meaningful use of technology. Below you will find an abbreviated piece of Sylvia Martinez's (2009) work with Generation YES on *Student Support for Laptop Programs*. Review these key points before moving on to Step 3.

> "Schools around the world are looking to put the power of technology into student hands by providing laptop computers for every student. These initiatives seek to equip every student with the personal technology needed to learn and communicate in the 21st century. Empowering students to be leaders and valued partners in a school laptop implementation can lead to:
>
> • Increased classroom technology integration
>
> • Greater support for classroom teachers using new technology in lessons
>
> • Greater student understanding and support for laptop program goals
>
> • Greater parent understanding and support for laptop program goals
>
> • Student empowerment, leadership, and ownership"
>
> "There are two major ways that students can participate in a laptop

implementation. One is committees. These could be technology planning committees, school site councils, technology security review committees, or peer review committees. The other is day-to-day activities related to laptop support. This may be traditional tech support, instructional support, or helping new users learn about their laptops."

"Students can plan and deliver training on many topics that new laptop users will find invaluable. You can have students do some teacher training as well. Teachers will see that students have skills and passion about the laptops and you may find that they actually respond better to students as technology mentors than traditional professional development.

• OS basics

• Printer setup and queues

• How to use shared server space

• How to manage student access to subscription services (video, library, hosted software)

• How to organize folders

• How to backup data

• Acceptable use policies and school rules

• Internet security

• Cyberbullying

• Netiquette

• Effective Internet searching and research

• Copyright and plagiarism

• Where to find school-appropriate images, music, and software

• How to use applications

• Self-help tech support tips"

"Most schools combine both hardware and instructional support models when they develop a student tech team. No matter how you blend them, here are several essential elements that successful programs share.

School acknowledgement. The student tech team should be a recognized part of the school with funding, resources, a place to meet, and acknowledgment in school events, websites, and newsletters.

Identity. The student team should have a name, shirts, hats, lanyards, a logo, and other standard items that school clubs have. Create recognition for student leadership with certificates, banquets, and awards.

The primary student benefit is academic. This should never be about using kids for free labor. Programs must include training for the students, constant monitoring, and new learning opportunities. Emphasize academic skills such as technical writing, collaboration, programming, and

troubleshooting.

Increasing leadership challenges. Find ways to constantly add new student roles. Your students will get bored and leave if they are only allowed to do routine tasks. Reward hard work with recognition and additional responsibility. Challenge your students to push for excellence in all areas.

Encourage student voice. Invite student feedback and act on it. Create opportunities for student-led initiatives, let students speak at board meetings and conferences, and allow them to initiate new ideas. Find ways for students to own this program, from naming and decorating laptop carts to putting students on the technology committee.

Maintain strong relationships. An adult mentor with a strong personal relationship with students will have a more successful, secure program.

Focus on learning. Work with teachers to find ways to support classroom curriculum with new technology. Technical support that fixes broken hardware is only half the problem. Students can help teachers find ways to use technology in lessons and student assignments. This support reduces teachers feeling overwhelmed by so much change in the first years of a laptop program."

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Step 3: Supporting Students as Tech Experts

One of the tools that has been developed for education is the shared "wall" space found online at **www.wallwisher.com**. In your groups create a "wall" and share the URL among your team. For this task, consider the resources available from Generation YES and capture your brainstorming on the following topics:

1. What resources exist to organize and implement a "students as technology experts" program in your school?

Resources that might help in this area include:

- **www.genyes.com**

- **www.4teachers.org**

2. How do you think you will start leveraging the technological knowledge and skill of your students?

Resources that might help in this area include:

- Internet sites that provide Student Technology Surveys

- **www.internet4classrooms.com**

3. What resources could you share with students to develop training tools for topics such as those listed in the key points shared from Generation YES?

Resources that might help in this area include:

- Internet sites that provide Tech Tips

When you have finished brainstorming, use **www.wallwisher.com** and your unique URL to share text or links to videos, websites, or other digital resources that your team identifies.

References

The material in Activity 3, Step 2 is from the article "Student Support for Laptop Programs: Success and Student Ownership," by Sylvia Martinez (2009). Retrieved February 23, 2010 from **www.genyes. com**. Copyright 2009 by Generation YES Corp. Reprinted with permission.

Activity 3 Resources

- Technology Tips WallWisher

Tools

- **www.wallwisher.com**
- **www.genyes.com**
- **www.4teachers.org**
- **www.internet4classrooms.com**

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Activity 4: Creating Activities for Your Students

One of the biggest challenges in transitioning your classroom to a one to one eLearning environment, is to apply what you have learned in this workshop to your students' learning activities and lessons as soon as you return to your classroom (or as soon as your laptops are available). One way to do this is to have activities created and ready to implement that are aligned to your curriculum.

Returning to your Curriculum Map, you will now create additional activities for units or lessons in your Curriculum Map by completing an Activity Checklist found in your Instructional Planning Packet for each activity. Consider what you learned when you created your first activity in Module 2 and apply that knowledge to your new activities. As you do this, you may think of other units to add to your Map.

Step 1: Creating Additional Activities

1. Take a look at your Curriculum Map and identify 4-6 units for which you would like to create activities.

2. Using the Activity Checklist consider and complete each section for each of your activities. Be sure to consider implications for each element (for example, how does assessment change if you build in opportunities for students to share their work with the larger community?).

Step 2: Reviewing Your Work

1. Find a partner (preferably a different partner from the one with whom you collaborated regarding the first activity you developed in Module 2) and share one activity. Repeat the review process you used in Module 2, using the following guiding questions:

   a. How has your partner considered the elements of the Activity Checklist?

   b. What were the strengths of your partner's work?

   c. Are there any suggestions you would make to strengthen the activity?

2. Using the Activity Rubric found in your Instructional Planning Packetevaluate and score the activity together.

Activity 4 Resources

- Participant's Curriculum Map

- Instructional Planning Packet

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Activity 5: The New You

In the first module, you completed the Laptop Learning Level (L^3) Survey and considered how you use technology in your daily life as a teacher. In this activity, you will revisit the Laptop Learning Level Survey and consider how you would you like to respond to those questions one year from now. Answer the following questions as you consider your current practice, and the future practice that you envision implementing in your classroom.

1. What new practices do you hope to have implemented in your classroom?

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2. Review your Curriculum Map. How does your revised and completed Curriculum Map differ from the Curriculum Map that you started with?

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Step 1: Revisiting the Laptop Learning Level Survey

To begin, open the Laptop Learning Level Survey in Excel and complete the Goal Survey sheet. You will complete the survey again. However this time please have your completed Curriculum Map in front of you and consider your responses to the first two questions in this activity. As you complete the survey, respond as if it is one year from today. Imagine that you have successfully implemented all of the new ideas that you have generated during the one to one eLearning training.

Step 2: Reflecting on the New You

Access the results sheet in the Laptop Learning Level Survey excel file upon completion of your survey. Next, work with a partner to discuss the following questions:

1. How is your current score different from the score you received at the beginning of the training?

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2. How did your responses change from one survey to the next?

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3. Were there certain items where the differences in your responses really stood out?

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4. What do you see as hurdles to accomplishing the changes you would like to make?

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5. How might those hurdles be overcome?

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Activity 5 Resources

- Laptop Learning Level Survey

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