iT

Instructional Technology
GREENVILLE COUNTY SCHOOLS

T5P

Training Priorities
for the 2017-18 **School Year**

- G Suite for Education
- Mobile Learing with Chromebooks
- SAMR and Digital Learning Tools
- Personalized Learning Academy
- Edmodo or Google Classroom

Transformative ★ On-going ★ Purposeful

Introduction

Dear School Administrator,

   Thank you for your interest in providing quality professional development for your staff and teachers. As you are probably aware, our district has implemented a variety of technology initiatives from iPads to laptops to Chromebooks. While we hope that we will continue to stay on the cutting edge of educational technology, our objective in the Office of Instructional Technology is to equip teachers to produce students who are effective communicators, inventive thinkers, and engaged collaborators.

With that goal in mind, the technology professional development we provide should support the overall goals your school has set for this year. Too often, technology integration focuses on the technology tool itself. Our desire is to support you as you focus on student learning. Before you plan your professional development this year, we would ask that you read page three of this document with your teacher leaders and challenge them with these guiding questions:

- *What are your student learning goals for the year?*
- *What is your curriculum focus for the year?*
- *What are the results of the technology integration survey?*
- *What professional development focus would address those weaknesses from the survey?*
- *What PD focus would enhance and extend the strengths noted in the survey?*

In Instructional Technology, we are *teachers growing teachers.* We want to provide professional development that enhances and supports the important work your teachers are doing in the classroom. Please let us know how we can best meet your needs and serve your teachers this year.

Sincerely,

Tim Cushman
Coordinator of Instructional Technology

The T.O.P Technologies

Some of the most common questions we receive in the Office of Instructional Technology are:

- "What is the latest and greatest in the technology world?"
- "What kind of technology are other schools buying?"
- "If I want to integrate technology in the classroom, which ones would you suggest?
- "I have some extra money. What technology should I buy?"

The questions are always hard to answer because the effectiveness of technology isn't based on the technology tool itself. Other factors such as school learning goals, teacher preparation, prior knowledge, and curricular strategies all play a vital role in determining if a specific technology tool actually increases student engagement and achievement in the classroom. What we have learned, however, is that there are three main characteristics of any technology that must be present in order for that tool to be used effectively in any classroom:

The technology must be transformative. In other words, for technology to be effective in the classroom, it must support the teacher as the facilitator of learning and the students as the focus of learning. As others have described it, the learning must shift from transmission, where the teacher delivers content to students as receivers; to transaction, where students and teachers collaborate to become creators of the content themselves.

In addition, effective technology integration must be on-going. Education has long had the unfortunate reputation of "more is better" and with this mindset, schools and teachers are often dabbling with technology tools in short, "sit-and-get" workshops that are inconsistently transferred back to the classroom and to the students. In order for technology to effect change on student achievement, there must be an ongoing focus on one or two tools, giving teachers and students time to learn the tool, collaborate using the tool, and apply the lessons learned from the tool. Research consistently confirms that teachers and schools who master one technology tool in depth have a greater impact on student achievement than those who attempt to integrate a plethora of various technology tools into the curriculum at one time.

Finally, the best technologies are those that are purposeful. Many technology initiatives fail because the tool itself was not connected to the goals of the school and the real learning needs of the students in the school. Twenty-first century learners need to demonstrate what are often called the four Cs: collaboration, communication, creative design, and critical thinking. Every effective technology discussion should begin with "What do we want our students to know and be able to do?" Tools that work well in one school may not work well in your school.

The technology tools that make the greatest impact on the classroom are those that are transformative, ongoing, and purposeful. As a leader of professional development and technology in your school, we urge you to investigate these T.O.P technologies, choose one that best fits the academic needs of your school, teachers, and students, and develop a plan to ensure that the integration of this tool is indeed transformative, ongoing, and purposeful during the 2017-2018 school year.

G Suite for Education

Description

G Suite for Education (formerly Google Apps for Education) is a suite of free tools that includes Drive, Docs, Slides, Sheets, and Forms and provides schools with the opportunity to collaborate and communicate no matter which devices they have available. With G Suite, teachers and students can work together in real time in Google to complete that group project - in class and at home.

Sample Tools

Chromebooks or laptops with the Chrome browser

Outcome

Participants will be adept at using one or more G Suite apps to create content and collaborate with teachers and students in the academic setting. It is recommended that the school leadership identify specific goals for participants which are aligned to the instructional goals of the school. Examples may include – collaborative lesson plans, project-based learning, or student collaboration.

Sample Progression of Training

Core Training (8 training hours)

> 1 hour sessions each month August – April OR

> 2 hour sessions each month September – December or January – April

Supplemental Training

> Google Classroom (see page)

> Google Sites (2 hours, scheduled with Mike Simmons, district webmaster, Contact - msimmons@greenville.k12.sc.us)

Mobile Learning with Chromebooks

Description

The Chromebooks in the Classroom series is an intermediate series designed for educators who have completed the Gsuite (formerly GAFE) training series and are interested in more advanced strategies for incorporating 1:1 technology into 3rd - 12th grade classrooms. The series was created to provide a basic overview of Chromebooks and to highlight five primary benefits of using Chromebooks in a 1:1 environment: student engagement, assessment, collaboration, student projects, and the flipped classroom.

Each session requires two complete hours of training time. School leadership teams are given the option of selecting which of the five topics best align with the instructional goals of the school to create a customized professional development series for teachers that can range from 2 to 12 hours in total length. Please note that the first session, Introduction to Chromebooks, is the required first session in the series.

Sample Tools

Chromebooks

Outcome

Emphasis will be placed on using student Chromebooks in whole group, small group, and individual settings.

Sample Progression of Training

Semester Focus (2 to 12 training hours, customizable by school administration):
    2 hour monthly sessions, August - December

Yearly Focus (2 to 12 training hours, customizable by school administration)
    2 hour monthly sessions, August - April

SAMR and Digital Learning Tools

Description

Mark Prensky, a writer and speaker on learning and education, coined the term "digital native" in 2001. Students in Greenville County Schools during the current school year are digital natives – young people who were born during or after the general introduction of technology into our society. As one teacher observed, "Digital natives are not the students our educational system was designed to teach." One of the increasingly important tools for learners is digital literacy.

The SAMR and Digital Learning Tools series is designed to equip educators with the skills to evaluate effective technology use in the classroom by exploring the depth and extent to which students use the devices in learning - from the substitution level to the redefinition level.

Sample Tools

iPads, Chromebooks, laptops

Outcome

Participants will learn the characteristics of effective technology integration in the classroom and revise current lesson plans to reflect the most efficient and meaningful ways to challenge students through higher levels of comprehension and critical thinking. In addition, participants will learn the basic navigational functions and uses of Nearpod throughout the series.

Sample Progression of Training

Semester Focus (4 - 6 training hours):
    1 ½ hour sessions each month August – December
    2, one hour sessions each month September - November

Yearly Focus
    1 hour sessions each month September – March

Personalized Learning Academy

Description

The Personalized Learning Academy guides school leadership teams in creating a comprehensive plan to implement personalized learning at their schools. The two-day training series includes modules on establishing mission and vision, communicating with all stakeholders, modeling classroom instruction on the SAMR framework, managing devices, and discipline procedures in a digital environment.

Outcome

Leadership teams will develop a plan for implementing personalized learning in their schools alongside goals and benchmarks to achieve true personalized learning.

Sample Progression of Training

Personalized Learning Academies are offered each summer for district-wide teams who are preparing for a 1:1 device rollout during the following school year. Please check the Instructional Technology website for scheduled dates and times.

In some instances, members of the Instructional Technology team may also lead individual school teams through the Personalized Learning Academy during the school year using a modified schedule and approach.

Yearly Focus (10 - 14 training hours)
    1 hour sessions twice monthly, August - May
    2 hour sessions each month August – May

Edmodo or Google Classroom

Edmodo

Description

Through Edmodo, teachers are able to provide personalized learning experiences to engage students in the learning process, tackle real world problems, and develop 21st Century skills to meet the demands of current and future workplaces. Two growing trends in our classrooms are blended learning and flipped learning. Blended learning combines online digital media with traditional classroom methods where learning takes place in part online as well as face-to-face. Flipped learning is the approach in which direct instruction moves from the whole group learning space to the individual learning space. Flipped learning occurs outside of the class and application occurs in class under teacher facilitation.

Edmodo has taken the best from many worlds and placed it all in one location. With an emphasis on connections, Edmodo connects "all learners with the people and resources needed to reach their full potential." Edmodo provides classroom teachers a safe and easy way to connect and collaborate with other teachers. It is a great platform to connect teachers and students to share engaging content, assignments, and school notices.

By integrating Edmodo into the classroom, teachers can:

- provide a safe environment for differentiating instruction with one-to-one, small group, or whole group communication.
- create an anytime, anywhere mobile learning environment with smartphone apps and mobile site with built-in Google or Microsoft integration (both available on chromebooks).
- provide easy access to project-based learning, class work, and school events through assignments, quizzes, and calendar features.
- share all content for a unit of study through library folder-sharing, as well as eliminate copes using the Make Copies feature
- create and manage personal content library with unlimited storage, including sharing quizzes and assignments between teachers.
- expand their own professional learning community by connecting with a global network of teachers.

Outcome

Students will collaborate with each other and their teacher in a safe social network. Emphasis will be placed on the Internet Safety Standards, content integration, and effective instructional strategies.

Sample Progression of Training

Semester Focus (6 training hours):

> 3 two hour sessions each month September – November OR February - April

> 6 one hour sessions each month September – November and February - April

Google Classroom

Description

The goal of any digital classroom system is to empower students and staff to connect, create, and collaborate while facilitating a common platform for communication and organization. Google Classroom was designed to help teachers save time, keep classes organized, and improve communication with students. works well in learning environments where Google Docs, Drive, and Forms are being used heavily.

By integrating Google Classroom into the classroom, teachers can:

- provide a safe environment for differentiating instruction with one-to-one or whole group communication
- set up a class, invite students and co-teachers. In the class stream, they then share information—assignments, announcements, and questions.
- create assignments, send announcements, and instantly start class discussions. Students can share resources with each other and interact in the class stream or by email. Teachers can also quickly see who has or hasn't completed the work, and give direct, real-time feedback and grades.

Outcome

Students will collaborate with each other and their teacher in a safe digital learning network.

Sample Progression of Training

Semester Focus (4 training hours):
    1 hour sessions each month September – December OR
    2, one hour sessions each month October – November, February - March

Yearly Focus (10-12 training hours)
    1 hour sessions each month August – June OR
    2, one hour sessions each month September – January, February – June

Just in Time Trainings

It may be necessary to provide your teachers and staff with short, practical professional development training in order to help them fulfill their job responsibilities. Just in Time trainings are offered for a variety of topics and skills. The trainings below are available from the Instructional Technology Team.

Blogging in the Classroom with Google Blogger

Audience: General
Time Needed: 1 Hour Per Session
Description: Participants will create a classroom blog using the Greenville County Schools Blogger platform. The workshop will include discussion of the practical management of the blog and ideas for incorporating blogging into all areas of the curriculum. This will be a hands-on workshop in a computer lab or with teacher laptops.

ClassFlow: An Introduction

Audience: General
Time Needed: 2 hours
Description: ClassFlow is a free, cloud-based version of Promethean ActivInspire which gives teachers the ability to create lesson flipcharts anytime, anywhere. ClassFlow is ideal for the one to one classroom because it allows students to use their devices to respond to questions, prompts, and activities individually. With ClassFlow, teachers can create interactive lessons, connect with every student, and achieve instant feedback through a variety of formative assessment tools.

Coding in the Elementary Classroom

Audience: Elementary Teachers
Time Needed: 2 hours
Description: If you ever feel like a 20th century teacher in a 21st century classroom, this introduction to coding is just for you! At the most basic level, coding is what makes it possible for us to create computer software, apps, and websites. Our internet browsers, computer operating systems, and phone apps were all created with "code." Join us for this hands-on session where we will discover how coding can transform your classroom and help your students learn and create. We will explore with the Dash robot as well as the free Hour of Code resources online.

Coding with Robots

Audience: General
Time Needed: 2 hours
Description: If you ever feel like a 20th century teacher in a 21st century classroom, this introduction to coding is just for you! At the most basic level, coding is what makes it possible for us to create computer software, apps, and websites. Our internet browsers, computer operating systems, and phone apps were all created with "code." Join us for this hands-on session where we will discover how coding can transform your classroom and help your students learn and create. We will explore with the Dash, Sphero, and Ozobot robots.

Google Expeditions: Virtual Reality Field Trips

Audience: General

Time Needed: 1 hour

Description: Would you like to travel to explore WWII battlefields, dive underwater at the Great Barrier Reef, or visit Chernoby as you examine primary sources? There is an app for that! Google Expeditions uses Virtual Reality to take students all over the world on virtual field trips right from your classroom. Join us for a hands-on demonstration of the FREE Google Expeditions app. You will also learn tips and tricks for leading your own Expedition!

Internet Safety: What Every PARENT Needs to Understand

Audience: Parents/Teachers

Time Needed: 1 Hour Per Session

Instructor: ETS Information Security Trainer, Contact - Rick Floyd at rlfloyd@greenville.k12.sc.us

Description: Students are comfortable with technology and savvy in the way they communicate within the digital world. However, young people are not always aware of the potential consequences of their actions. This workshop focuses on the responsibility of all users to be good digital citizens while being cautious of the potential dangers. *Special emphasis will be placed on helping parents understand and deal with issues associated with having children on the Internet.*

Internet Safety: What Every STUDENT Needs to Understand

Audience: General

Time Needed: 1 Hour Per Session

Instructor: ETS Information Security Trainer, Contact - Rick Floyd at rlfloyd@greenville.k12.sc.us

Description: Students are comfortable with technology and savvy in the way they communicate within the digital world. However, young people are not always aware of the potential consequences of their actions. This workshop focuses on the responsibility of all users to be good digital citizens while being cautious of the potential dangers.

Promethean ActivInspire Basic Training

Audience: General

Time Needed: 8 hours

Description: This four part, introductory course gives an understanding of the basic tools and capabilities of ActivInspire software, providing participants with a foundation for continuing to build their knowledge of the software and its application in the classroom. Participants in this course will also receive step-by-step, hands-on instruction and integrated examples.

PowerTeacher Gradebook

Audience: PowerTeacher Managers

Time Needed: 45-60 Minutes Per Session

Description: The objective for PowerTeacher support is to equip all PowerTeacher Managers with the knowledge and resources to effectively lead and support the core functions of PowerTeacher at the school level. This starts with an accurate setup of all teacher gradebooks at the start of the school year. To support PowerTeacher Managers reach this objective, we will begin with a face-to-face training and focus on the setup of teacher gradebooks and any questions that have arisen.

SeeSaw: Student Portfolios and Classroom Communication

Audience: Elementary Teachers

Time Needed: 1 hour

Description: Seesaw is a free app and website that allows students of any age to document what they are learning at school. All of their digital work can be organized and stored in this one location, making it accessible to the teacher and parents. Student work can be shared with classmates, parents, and even published to a class blog. Seesaw gives students an authentic audience for their work. Learn how Seesaw can help transform your classroom, whether you have only one iPad or teach in a 1:1 environment. Please bring a laptop and iPad if available.

Windows 10: Getting Started

Audience: Teachers and Support Staff

Time Needed: 1 hour

Description: This session will explore the basic features of Windows 10 as a classroom management and teaching resource.

Online Courses

Google Certified Educator Level 1 Test Preparation
Audience: General
Time Needed: 8 weeks

Description: For educators who have learned the fundamentals of using Google tools in the classroom, the Level 1 certification validates standard technology implementation skills. This online course will provide an opportunity to increase your professional knowledge by learning new ways to incorporate technology into the classroom. This course will also facilitate your preparation toward earning Google's Educator – Level 1 certification. **Certification requires additional work, including purchasing and passing an exam.

iTunes U: iPads in the Elementary and Middle School Classroom

Audience: Teachers
Time Needed: 8 weeks
Description: This course will help you learn how to effectively integrate the iPad in your classroom. It is designed to work for teachers in classrooms with one device per student or classrooms with only a few iPads. Assignments within this course can be completed with a small group of students or an entire class. Teachers will find that the apps introduced as a part of this course can be used across all subject areas, regardless of grade level or class size.

We encourage teachers to work through this course and increase their skills and knowledge of effective iPad integration. When taken with an instructor, you can earn 8 hours of credit by completing all assignments and participating in all discussions within the allotted eight week time period.

iTunes U: SAMR in Your Classroom

Audience: General
Time Needed: 8 weeks
Description: This course is designed to introduce educators to the SAMR model in the technology classroom. This course will help you think through how to effectively integrate technology into your classroom. It is a self-paced course designed to work for teachers in classrooms with one device per student or classrooms with only a few devices. Assignments within this course can be completed with a small group of students or an entire class. Teachers will find the concepts and programs introduced as part of this course can be used across all subject areas, regardless of grade level or class size.

We encourage teachers to work through this course and increase their skills and knowledge of effective technology integration. When taken with an instructor, you can earn 8 hours of credit by completing all assignments and participating in all discussions within the allotted eight week time period.

iQuest: An iPad Virtual Adventure

Audience: General
Time Needed: 8 weeks
Description: Summer is about having fun, trying new things, and connecting with peers. That's what Instructional Technology's Summer iQuest is about, too! Through a series of creative

challenges, you will build your own knowledge and skill in using technology to create and share. Join us for this iPad virtual adventure this summer!

iQuest Gone Google

Audience: General
Time Needed: 8 weeks
Description: The iQuest Gone Google online course is designed for teachers who have a working knowledge of GSuite apps including Drive, Docs, Drawings, Slides, and Forms and want to expand their knowledge to the next level. Through a series of creative, virtual challenges, participants will build their own knowledge and skill in using technology to create and share with colleagues and create a variety of student learning activities using Google apps.

This course is offered on a rotational basis throughout the school year and summer to accommodate teachers' busy schedules and is on a first-come, first-served basis. All instruction is provided online and participants are given six weeks to complete all components of the course.

iVoyage: An iPad Virtual Adventure

Audience: General
Time Needed: 8 weeks
Description: The iVoyage online course is designed to help teachers learn how to use new apps. In this course teachers will explore six apps through a series of virtual challenges. The activities used in these challenges could be used in your iPad class tomorrow.

Legacy: A Game-Based Simulation PD Surveying Tech Tools for Middle School Teachers

Audience: Middle School Teachers
Time Needed: 7 weeks
Description: Legacy is essentially an online, technology PD opportunity with a twist - middle school teachers will participate in a sports-themed, game-based simulation as they develop and expand their technology toolkit. During this course, participants will complete weekly workouts (or assignments) in order to improve their ranking from rookie to hall-of-famer.

With three weekly aspects (exposure to a tool, practice with a tool, and developing a plan to use the tool), participants will have hands-on practice in a friendly, yet competitive setting and leave with a common baseline of knowledge and skills concerning digital tools that have proven to be successful in middle level classrooms. The technology tools focus on creation, collaboration, and assessment.

Sample Teacher/Staff Technology Survey

1. How would you rate your current comfort level with technology?
    4 (very comfortable)
    3 (somewhat comfortable)
    2 (somewhat uncomfortable)
    1 (very uncomfortable)

2. What are some of the technology tools that you use daily or most every day?

3. What is one thing you would like to do with your class that you are not doing now?

4. What would you need to be able to accomplish this?

5. What is one technology tool you would like to learn to make you a better teacher or learner?

6. What is the biggest obstacle in your effort to integrate technology into your curriculum?
    - lack of knowledge on teacher's part
    - lack of knowledge on student's part
    - lack of time
    - lack of reliable access
    - other:

7. What are your hardware, software, or program needs?

Sample Observation Tool (Promethean)

Components	Needs Improvement	Some Progress Made	Ideal
Student Engagement	Lessons are teacher directed and do not actively engage students.	Opportunities for student engagement are limited.	The teacher actively engages students with a variety of instructional techniques using interactive whiteboard technology.
ActivBoard	The ActivBoard is not being used.	The ActivBoard is being used for lessons.	The ActivBoard is being used for lessons as an interactive teaching tool.
Student Response Systems	The teacher does not utilize the ActiVotes/ ActivExpressions.	ActiVotes/ ActivExpressions are used, but data is not used to inform instruction.	The teacher effectively utilizes ActiVotes/ ActivExpressions for formative assessment to inform instruction.
ActivInspire Tools	ActivInspire tools are not being used to enhance instruction.	There is limited usage of ActivInspire tools to enhance instruction.	Instruction is being enhanced using ActivInspire tools in a variety of ways.

SAMR Technology Integration Model

SAMR is a model designed to help educators infuse technology into teaching and learning. Developed by Dr. Ruben Puentedura, the model supports and enables teachers to design, develop, and infuse digital learning experiences that utilize technology. The goal is to transform learning experiences so they result in higher levels of achievement for students. See www.hippasus.com/blog for more information on the SAMR model.

Level	Definition	Examples	Functional Change
Substitution	Computer technology is used to perform the same task as was done before the use of computers.	Students print out worksheet, finish it, pass it in.	No functional change in teaching and learning. There may well be times when this the appropriate level of work as there is no real gain to be had from computer technology. One needs to decide computer use based on any other possible benefits. This area tends to be teacher centric where the instructor is guiding all aspects of a lesson.
Augmentation	Computer Technology offers an effective tool to perform common tasks.	Students take a quiz using a Google Form instead of using pencil and paper.	There is some functional benefit here in that paper is being saved, students and teacher can receive almost immediate feedback on student level of understanding of material. This level starts to move along the teacher / student centric continuum. The impact of immediate feedback is that students may begin to become more engaged in learning.
Modification	This is the first step over the line between enhancing the traditional goings-on of the classroom and transforming the classroom. Common classroom tasks are being accomplished through the use of computer technology.	Students are asked to write an essay around the theme "And This I Believe...". An audio recording of the essay is made along with an original musical soundtrack. The recording will be played in front of an authentic audience such as parents, or college admission counselors.	There is significant functional change in the classroom. While all students are learning similar writing skills, the reality of an authentic audience gives each student has a personal stake in the quality of the work. Computer technology is necessary for this classroom to function allowing peer and teacher feedback, easy rewriting, and audio recording. Questions about writing skills increasingly come from the students themselves.
Redefinition	Computer technology allows for new tasks that were previously inconceivable.	A classroom is asked to create a documentary video answering an essential question related to important concepts. Teams of students take on different subtopics and collaborate to create one final product. Teams are expected to contact outside sources for information.	Common classroom tasks and computer technology exist not as ends but as supports for student centered learning. Students learn content and skills in support of important concepts. Collaboration becomes necessary and technology allows such communications to occur. Questions and discussion are increasingly student generated.