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The Value and Need for Professional Development

Today's districts, schools and teachers must promote 21st century learning as our society propels us toward the use of innovative digital tools in the workplace, in academia, and in our personal lives. These digital advances should be supported by technology-focused professional development to guide teacher implementation of a 21st century environment at the Sunset School District. Teachers in the 21st century need to go beyond computer literacy to attain technological competence (Morrison & Lowther, 2010). Teachers need to know not only the basics of computer literacy, but more importantly, how and when to use technology to enhance student learning. Smaldino, Lowther, and Russell (2012) state that "technologically competent teachers seamlessly integrate rich multimedia experiences into classroom activities that engage students in meaningful learning" (p. 283). Therefore, teachers, administrators, media specialists, counselors and other educators that connect with students in the Sunset School District will be trained to advance their technology skills in and out of the classroom.

Professional competence is always needed in the school and classroom environments; such competence is defined by five attributes. Having the knowledge, skills, abilities, attitudes and values required to perform capably in a profession or area of specialization. Professional competency for a teacher includes: (a) interpersonal skills, (b) technical skills, (c) leadership skills, (d) time-management skills, and (e) positive attitudes, performance, and teaching values. Properly trained teachers make the difference between success and failure of a professional

development initiative (Roblyer & Doering, 2013). Studies have settled on the kinds of areas in which teachers should be trained (ISTE, 2009). ISTE emphasizes six components for effective technology use that depend on long-term, consistent professional development implementation (p. 9). These components are expanded upon in the section on planning and delivery of professional development—and increase the argument for allowing teachers to regularly participate in opportunities to increase their experience in using technology and media for classroom teaching and learning. Additionally, Roblyer and Doering (2013) summarize findings from the literature on what makes teacher-training programs most valuable or effective:

- Hands-on, integration emphasis – technology integration skills cannot be learned sitting passively in a classroom, listening to an instructor, or watching demonstrations—participants must have an opportunity to navigate through a PD session. The focus must be on how to use the technology resources in classrooms, rather than just technical skills.

- Training over time – Schools must move away from "one-shot training" (Benson, 1997). Technology in-service training must be ongoing.

- Modeling, mentoring and coaching – teachers seem to learn computer skills through colleague interaction and information sharing (Smaldino, Lowther, & Russell, 2012).

- Post-training access – teachers not only need adequate access to technology to accomplish training, they also need access after training to practice and use what they have learned.

- Using student data and promoting partnerships using sponsors to educate teacher, parents and school personnel to increase their expectation and support.

The role of the teacher will always include the foundational responsibility of enabling students to learn the curriculum, but there are times when teachers differ over how to accomplish this goal and which are the best methods or mediums to achieve it. At the Sunset School District, teachers are charged with using a Google Classroom, a new Learning Management System (LMS). Google Classroom is a free web-based platform for Google Educator users (Classroom Help, 2015). This system allows educators to work with Google Applications to create online paperless classrooms where teachers can distribute, update and grade assignments, along with giving them the opportunity to collaborate online with each of their students. Recent teacher evaluations showed that many teachers in the Sunset School District are not proficient with this new tool and are not using it effectively, therefore, the Superintendent of Schools has asked the Technology Coordinator to create a training program to enhance the knowledge and skill level of all teachers, administrators, media specialists and counselors in regards to using Google Classroom.

Needs Assessment and Google Classroom and Apps Training

Schools can use many methods, processes or tools to identify training needs and determine the training that is required. The Technology Coordinator should work with teachers and the school to determine staff development needs and design training to meet those needs (Frazier, 2012). Training needs assessments can help the Technology Coordinator uncover the many changes needed for the Sunset School District to achieve its goals. Some changes are "achievable using a training intervention, others are not; while some changes are more critical than others" (Moskowitz, 2008, p. 50). The macro-model approach identifies training needs from the school's overall vision, mission, and strategic goals. The Technology Coordinator should aim

to meet with the Principal to determine how data gathered from the needs assessment supports or answers the following questions:

1. What knowledge, skills, attitudes and behaviors help support our <u>vision and mission</u> and

2. What knowledge, skills, attitudes, and behaviors are barriers to our <u>vision and mission</u>? (Moskowitz, 2008)

Accuracy is all-important, so it is important for the Technology Coordinator to write down all responses to those questions. Then vision and mission can be replaced with <u>strategic goal achievement</u>, and then strategic goal achievement can be replaced with <u>departmental goal achievement</u> or <u>instructional goal achievement</u>. Again the responses should be recorded immediately from the persons interviewed. Other sources of information for determining training needs and gathering data for proper planning are: (a) teacher performance evaluations, (b) student academic data, and (c) training done in other districts. Conducting a training needs survey is another important way to gather data to determine the direct and scope of future training programs. The Sunset School District will use the School Technology Assessment (STNA) survey to complete this need.

The Sunset School District is comprised of three schools, one elementary school covering grades K-5, one middle school for grades 6-8, and a high school with grades 9-12. Each teacher, administrator, and media specialist has been issued a laptop for school use. For the Google Classroom training, each educator will be expected to bring his or her laptop. The three members of the district's technology staff are Google Education Certified Trainers and will be leading the training sessions in each building. In addition to the technology staff, two teachers from each building, including the Library Media Specialist, have obtained their Google Level 2 Training Certificate and will act as mentors to educators within their buildings.

Two weeks prior to the initial training on Google Classroom, a professional development needs survey, along with the School Technology Assessment (STNA) will be distributed to all educators within the Sunset School District schools. The School Technology Assessment version 3.0 will be used as-is. This survey focuses on technology teaching and learning tools as a whole, not individual technology knowledge and skills (Serve Center, 2007). This assessment covers four areas: 1. Supportive Environment for Technology Use, 2. Professional Development, 3. Teaching and Learning, and 4. Impact of Technology. An online version of the STNA survey can be viewed by going to: https://uncg.qualtrics.com/jfe/form/SV_7TLb5uXbiry0CLa. The results from this survey will help the Sunset School District Technology Department determine the focus for instructional technology integration in all buildings. The individual survey will ask various questions in regards to an educator's knowledge and skill level of Google Classroom and Google Applications. This survey can be accessed by going to: http://goo.gl/forms/HMJIEb1xFU. The technology staff will evaluate the responses from this survey, and place the teachers into one of three categories: Green Circle, Blue Square, and Black Diamond. The Green Circle group will be for beginning Google Classroom users. Training for this group covers a full introduction to Google Classroom and Google Apps. The Blue Square group is the intermediate users who will have demonstrated user knowledge of Google Classroom and have the ability to move beyond creating classes, uploading students and sharing assignments or information with others. Blue Square users will setup their classes, begin sharing resources with their students, and learn more about Google Apps that can be used in Google Classroom. The Black Diamond group represents advanced users of Google Classroom. This group will be able to explore additional aspects of Google Classroom and Apps, along with the use of devices such as Tablets and Chromebooks. Teachers in the Black Diamond group will also

be encouraged to complete Educator 1 and/or Educator 2 Google Certified Training programs. Separate training sessions will be run for library media specialists, counselors, and administrators since they do not have their own classrooms. These educators will also be placed into user groups according to those discussed above. Their training sessions will cover general knowledge of the program, a demonstration of expected teacher and student interactions, and how students are able to access information within Google Classroom. While each group listed above will focus on Google Classroom training, during the face-to-face training sessions, teachers, administrators, library media specialists and counselors will also focus on important technology integration techniques. Doug Johnson (2013) states that effective technology practices are not part of the culture of education and that teachers should focus on good teaching techniques, and then evaluate where technology can be an asset for a particular lesson or activity. Johnson continues by giving examples of how this can be done by tying them to the Danielson's Framework domains. Examples of these are: 1. Planning and Preparation- creating assignments appropriate to the technology abilities of his/her students, 2. The Classroom Environment- demonstrate a positive attitude toward educational technology, 3. Instruction- use technology to create and project visual images and video that help explain content and concepts, and 4. Professional Responsibilities- use an online grading system. Educators in the Sunset School District will become familiar with these domains and ways to address technology integration in each, as they are part of the 2013 Danielson's Framework and the technology standards evaluation.

To help facilitate the training, teachers will be asked to remain in their own building. This will allow them access to their instructional materials and classrooms to gather any information they feel may be important to help them accomplish the task of setting up and

working in their Google Classroom accounts. Within each of the buildings, the staff will be broken down into smaller groups according to their green circle, blue square or black diamond designation. During the sessions, teachers will be expected to complete work in Google Classroom and be ready to share information with students when they return to school.

Once the initial face-to-face Google Classroom training has been completed, educators will have access to a Google Site geared toward learning more about Google Classroom, Google Apps and other technology related initiatives. Content on the Sunset School District Technology Professional Development site will connect individuals to online Google training, a blog, and various resources such as, YouTube videos, handouts and websites, along with a training calendar that displays the face-to-face technology training workshops available to all educators in the district. This site can be accessed by going to:

https://sites.google.com/site/sunsetschoolstechpd/home.

Planning and Delivery of Professional Development

As with any profession, long-term and consistent professional development is necessary for teachers to maintain proficiency and to have a positive impact on student learning. A favored approach to professional development is to begin training design by determining the desired results. Desired results should be determined by addressing the necessary changes in knowledge, skills, attitudes, and behaviors the needs assessment reveals (Moskowitz, 2008, p. 89). The needs assessment revealed that there are gaps in teacher training and use of technology. The strategic focus of the needs assessment examined both the internal and external factors that affected teacher performance such as "change initiatives" and weeding out processes that do not add value to teaching (Gupta, 2007, p. 158). The overarching factor revealed in the needs assessment

is that Sunset School District will focus teacher professional development on the effective use of technology, and ISTE (2009) recommends six components for appropriate implementation:

1. Preservice technology training aligned to in-service expectations

2. Modeling of technology use by trainers and experienced teachers

3. Developing communities of practice

4. Encouraging professional engagement

5. School and district leadership in (and modeling of) technology use

6. Online learning (both the type and topic of professional development) (p. 8).

Each of these components should support educators interested in the application of technology to improve learning. According to Micheal Moskowitz (2008) the program design plan guides the trainer to ask (and answer) specific questions about the training program.

1. What are the goals of the training program?

2. How will success be measured?

3. What are the key topics that must be covered?

4. In what sequence will the topics be presented?

5. What training medium(s) will be used?

6. Considering the organization's environment and culture, what are the program's requirements and constraints? (p. 88)

Program design decisions at the Sunset School are intended to support both the trainers and teacher participants in their mutual quest to facilitate change in knowledge, skills, attitudes, and behaviors to improve work performance and contribute to SMART goal achievement (Moskowitz, 2008, p. 89). Any training worth achieving should be written in SMART terms. SMART is a best-practice framework for setting goals that are specific, measurable, attainable,

relevant and timely. If the training professional cannot create a training goal in SMART terms, then the trainer should question the value of striving to achieve that goal. The Technology Integration Framework, or TIM, demonstrates how teachers and students can use technology to increase their learning. Through TIM there are five levels of technology integration (entry, adoption, adaptation, infusion and transformation) with characteristics for each environment (Arizona Technology Integration Matrix, n.d.). Therefore, TIM and SMART goals are critical components for achieving the desired training outcomes.

In order for the introduction of a new technology, such as a LMS to take place, a technology coordinator needs to be prepared to support the teachers, administrators, media specialists and others who will be accessing and using the technology. The first item to consider is how the LMS is going to be introduced to the staff. The introduction of the technology affects how well it is received by teachers or whether they quickly decide to abandon the new item (O'Hanlon, 2009). Another consideration is making sure that teachers, administrators, media specialists and others are provided with the opportunity to learn, given their knowledge and skill level in regards to the new technology. The differences in skill and comfort with technology need to be accounted for in the training design. Many teachers tend to resist change such as the introduction of new technology, because they fear looking unprofessional or unprepared in the classroom (Hicks, 2011). Hicks (2011) continues by saying that teachers resist the use of new and unfamiliar technology in the classroom, in fear that their unfamiliarity could make them appear unprofessional to students. Making sure that educators have the proper training on how to use the technology along with an established support structure will help teachers accept the new technology (Hicks, 2011). After the initial training, the support system can be particularly beneficial in getting educators to adapt to new technology. As teachers use the software, they

will begin to have questions about its use. If there is no structure in place to help them get quick answers to their questions, the risk of rejection of the new technology increases. A few methods to help with the introduction to new technologies as listed by O'Hanlon (2009) include running a pilot program where the participants then become mentors to others teachers in the district; offering incentives, such as stipends, to teachers who attend additional trainings and show that they are utilizing the new technology in their instruction; and making sure classes are offered as follow-up for teachers to obtain the necessary support of the new technology.

Technology-Focused Teacher Evaluation

The National Educational Technology Standards for Teachers (NETS-T) describes how classroom practices, lesson development, and professional expectations for 21st century teachers should be approached (ISTE, 2009). The content and activities of technology-focused professional development (PD), according to NETS-T, should address face-to-face or virtual sessions. Virtual PD also includes teacher communities of practice, where teachers with common interests share best practices and solutions, and join advocacy initiatives. The Sunset School District will use the 2013 Danielson Framework for Teaching evaluation instrument as one component of the teacher evaluation system. The 2013 Danielson Framework addresses the implication of Common Core State Standards; however, it remains generic to allow school districts to supplement the framework according to academic discipline or subject matter (Danielson, 2013). The 2013 version of the Framework does not support in-depth technology related standards, therefore, the Sunset School District will incorporate the NETS-T standards into Domain 3 (Instruction) and Domain 4 (Professional Responsibilities) of the framework. Educators in K-12 schools will be assessed on the following technology standards using the New

Jersey Department of Education Optional Individual Teacher Professional Development Plan (PDP) template. The following NETS-T goals will be evaluated (ISTE, 2015):

- **NETS-T 1:** *Facilitate and inspire students learning and creativity* - at this level the PD facilitator should engage teachers in activities that demonstrate how new and innovative uses of technology and media can advance student learning and creativity in face-to-face and virtual environments. PD facilitators can also achieve this goal by having teachers assume the role of students while they model a variety of ways to help, facilitate, and inspire learning during the hands-on activities. For example, teachers could create digital posters that demonstrate content and skills to be learned by their students.

- **NETS-T 2:** *Design and Develop Digital-Age Learning Experiences and Assessments* - this standard requires teachers to participate in ongoing hands-on activities facilitated by technology coaches or similar PD staff. Teachers should design, develop, and evaluate authentic learning and assessment experiences that require students to use technology and media. The goals of the PD for teachers are to produce lessons that foster student achievement of learning objectives and to meet the NETS for Students standards of technology implementation.

- **NETS-T 3:** *Model Digital-Age Work and Learning* - this element is critical for 21st century teachers to be competent users of technology and media. To achieve this goal, many teachers will require PD to help them gain the knowledge and skills to apply digital solutions for modeling digital-age work and learning processes needed in a global and digital society. PD topics can include how to create a Google classroom, maintain a class website, and use social networking tools, participating in a Bring Your Own Device

(BYOD) initiative, viewing webinars, and using digital tools to manage their teacher responsibilities.

- **NETS-T 4:** *Promote and Model Digital Citizenship and Responsibility* - this is an invaluable aspect of PD training for teachers to gain an understanding of the legal and ethical issues associated with digital citizenship. Teachers need to be provided PD in which they study and practice applying copyright guidelines, locally acceptable-use policies, and rules of netiquette. Within these areas it is critical to prepare teachers with knowledge and tools to address digital issues concerning their students. These issues would include, but are not limited to, Internet safety for students, such as never sharing personal information, and cyber bullying prevention (Robinson, Brown and Green, 2010).

- **NETS-T 5:** *Engage in Professional Growth and Leadership* - it is important to provide teachers with PD about how to become lifelong learners and how to serve as leaders in the effective use of technology by modeling these skills in the Sunset School District, and community. Teachers can also be introduced to technology, media associations and journals as additional options for achieving professional growth and engagement.

<center>**Evaluation of the Professional Development Experience**</center>

To properly evaluate the experience of the professional development for the LMS in the Sunset School District we will follow the model set forth by Thomas R. Guskey. In this model there are five different levels of evaluation to consider which beginning with the immediate reaction from the professional development experience, to how it is being implemented in the school system and what the outcomes are from the implementation (Guskey, 2002). In order to accomplish this, evaluation data will be collected from a variety of sources. The first will be a survey of the participants about their experience during the initial training session. This survey

will be completed at the conclusion of the training day. The second evaluation, will involve seeing if teachers are able to accomplish certain tasks within Google Classroom, and will also be completed at the conclusion of the first training session. Based upon the results of these two surveys, additional training will need to be setup to help remediate issues that staff members may be having in regards to the use of Google Classroom.

The next group of surveys will be administered to both teachers and students to learn about their experience with Google Classroom both inside and outside of the school building. This, along with classroom observations from the administration, will help guide additional training. At this stage, parents will also be asked to complete a survey about their child's experience with Google Classroom. This survey will help determine if the LMS access that parents have has been useful in their role of assisting their child in their educational journey. The last group to receive a survey will be the administrators for each school building in the Sunset School District. This final survey will look at how administrators are using the LMS to help support both the students and teachers within the building and/or content area they supervise.

Administrators have access to the analytical reports regarding usage on Google Classroom. From these reports they will be able to determine how much time is spent by both teachers and students viewing content in and using the LMS. These results will inform the creation of; more personalized professional development training on Google Classroom in the future.

The surveys created for the professional development experience have all been created using Google Forms and can be located using the following links:

- Teacher Survey After the Initial Google Classroom Workshop:

  http://goo.gl/forms/bhsOgkSyJG Usually, in a survey like this one, you also have to ask question about presenters and the way they deliver the training.

- Checklist of the Tasks to be Accomplished After the Initial Google Classroom Workshop: http://goo.gl/forms/bNXZas8XFF

- Teacher Survey on the Usage of Google Classroom Inside and Outside of the Classroom: http://goo.gl/forms/SNXlpBUQm1

- Student Survey on the Usage of Google Classroom Inside and Outside of the Classroom: http://goo.gl/forms/JOVDHb9atd

- Parent Survey on the Usage of Google Classroom: http://goo.gl/forms/f24NSx7LvG

- Administrator Survey on the Usage of Google Classroom: http://goo.gl/forms/PXzXTVp4LD

Annotated Bibliography

Teachers can expand their professional knowledge and growth by keeping up with literature in their field: educational technology journals, websites of professional organization and books written for professional educators. Putting effort and being committed to their professional development growth, they can stay informed of new technology and media that may have positive impacts on student learning. Teachers can use this knowledge and growth to better create and implement a variety of 21st-century learning environments.

Professional Organization Websites

AACE (2015). Association for the Advancement of Computing in Education. Retrieved from

http://www.aace.org/

AACE is an international educational and professional organization dedicated to the use of information technology to advance the knowledge, theory, and quality of learning and

teaching at all levels. AACE disseminates research and applications through publications and conferences. Journals published by AACE include *Journal of Computers in Mathematics and Science Teaching (JCMST), Journal of Interactive Learning Research (JILR), Journal of Educational Multimedia and Hypermedia (JEMH), Journal of Technology and Teacher Education (JTATE), AACE Journal (AACE),* and *Contemporary Issues in Technology & Teacher Education (CITE)*.

ACTE (2015). Association for Career and Technical Education. Retrieved from

http://www.acteonlin.org

ACTE is the largest national professional organization that focuses on providing career and technical educators with leadership and competencies to increase the knowledge and skill level of the workforce. ACTE represents all teachers, administrators, counselors and researchers through advocacy, professional development, leadership development, research, and provides members and non-members with access to resources such as white papers, journals, blogs, micro-docs, and the *Techniques* magazine.

AECT (2015). Association for Educational Communications and Technology. Retrieved from

http://aect.site-ym.com/?publications_landing

AECT is an international organization representing educational technology professionals who work in schools, colleges, and universities, as well as the corporate government, and military sectors. Its mission is to provide leadership in educational communications and technology by linking professionals who share a common interest in the use of educational technology and its application to the learning process. AECT has ten divisions designed around areas of special interest represented within the membership: design and development, distance learning, graduate student assembly, international, multimedia production, research and theory, school media and technology, systemic change, teacher education, and training and performance. The association maintains an active publications program, including *Tech Trends* and *Educational Technology Research and Development,* both published six times during the academic year, as well as a large number of books and videos. AECT sponsors an annual conference that features over 300 educational sessions and workshops focusing on how teachers are using new technologies and teaching methods in the classroom. It also hosts a summer professional development conference and a bi-annual research symposium.

For Library Media Specialists

ALA (2015). American Library Association. Retrieved from http://www.ala.org/

ALA is the largest library association in the world. Over 60,000 members represent all types of libraries—public, school, academic, state, and special libraries—serving persons in government, commerce, the armed services, hospitals, prisons, and other institutions. The association has 11 divisions focusing on various types of libraries and services. The

American Association of School Libraries (AASL), one of the divisions, holds national conferences focusing on the interests of school media specialists. AASL also publishes *School Library Media Research*, which presents research that pertains to the uses of technology for instructional and informational purposes. Special issues have dealt with such themes as communications, technology, and facility design for learning environments that require a great deal of technology.

For Administrators

GSN (2015). Global SchoolNet Foundation. Retrieved from http://www.globalschoolnet.org/

Founded by teachers, GSN has a mission of supporting 21st century learning through content-driven collaboration among teachers and students in order to improve the academic performance of students. GSN brings youth from 194 countries together online, to explore community, cultural, and scientific issues that prepare them for the workforce that help them to become responsible and literate global citizens. Global SchoolNet's free membership program provides project-based learning support materials, resources, activities, lessons, and special offers from its partners.

For Teachers and Administrators

ISTE (2015). International Society for Technology in Education. Retrieved from

http://www.iste.org/

The mission of ISTE is to improve education through the use of technology in learning, teaching, and administration. ISTE members include teachers, administrators, computer coordinators, information resource managers, university faculty, and educational technology specialists. The organization maintains regional affiliate memberships to support and respond to grassroot efforts to improve the educational use of technology. Its support services and materials for educators include books, courseware, conferences, and a variety of publications. ISTE publications include the J*ournal of Research on Computing in Education,* the *Journal of Digital Learning in Teacher Education,* the *ISTE Daily Leader,* the *ISTE Update*, books, and courseware packages. Of particular interests to teachers is *Leading and Learning with Technology*, which focuses on technology integration in PK-12 classrooms. Many of the articles are written by teachers, sharing what they have accomplished using computers in their classrooms with children of all ages and abilities.

ITEEA (2015). The International Technology and Engineering Educators Association. Retrieved

from http://www.iteea.org/

ITEEA is the professional organization for technology, innovation, and design in engineering education. Its mission is to promote technological literacy by supporting the teaching of technology and promoting the professionalism of those engaged in this

pursuit. ITEEA strengthens the profession through leadership, professional development, membership services, publications, and classroom activities. ITEEA publishes two-peer reviewed scholarly journals, *Technology and Engineering Teacher*, and the *Journal of Technology Education*. Another journal is *Children's Technology and Engineering* (CTE), which is a useful, engaging tool for K-6 teachers interested in technological literacy. ITEEA also provide *Science, Technology, Engineering, and Mathematics (STEM) Connections*, a free online newsletter to keep teachers current on the latest STEM strategies and resources.

IVLA (2015). International Visual Literacy Association. Retrieved from

http://ivla.org/new/category/publications/

IVLA is dedicated to exploring the concept of visual literacy--how we use visuals for communication and how we interpret these visuals. It is particularly concerned with the development of instructional materials designed to foster skills in interpreting visuals. The organization draws its members from a variety of disciplines and professions, including public schools, higher education, business and communication, professional artists, production specialists, and design specialists.

USDLA (2015). United States Distance Learning Association. Retrieved from

https://www.usdla.org/

USDLA promotes the development and application of distance learning for education and training. The 20,000 members and sponsors represent PK-12 education, higher education, continuing education, corporate training, telemedicine, and military and government training. The association has become a leading source of information and recommendations for government agencies, the U.S. Congress, industry, and those involved in the development of distance learning programs. USDLA has chapters in all 50 states. It is a sponsor of annual USDLA National Conferences and provides a variety of online resources. In addition, USDLA holds regular meetings with leaders of distance learning programs in Australia, Europe, India, Japan, and the United Kingdom.

For Counselors

Washington Framework for Comprehensive Guidance and Counseling (n.d.). Using technology

to monitor student progress. Retrieved from

http://www.cgcpframework.org/?page_id=423

School Counselors, through the Washington Framework for Comprehensive Guidance and Counseling, can receive professional development training that focuses on evaluating interventions with groups and/or individual students to make a positive difference. Tools such as surveys can be used to measure pre- and post- perceptual data on their beliefs,

attitudes and perceptions. Simultaneously, school counselors can use a data-analysis tool to measure whether attendance has improved, grades have risen, negative behavior has decreased, failure rate has decreased, testing scores have improved, and GPA has risen. The website recommends useful tools that are of low cost or free of charge.

Weblinks

There are thousands of websites that are devoted to the improvement of education, and each may offer a variety of links to other sites that prove invaluable for those seeking to integrate technology into their teaching and classrooms. Sorting out the useful from the not so useful can be an onerous task. Below are weblinks that offer resources helpful to K-12 professionals, parents and students.

Abshire, S. (n.d.). *Funding your technology dreams*. Retrieved from

http://www2.cpsb.org/Scripts/abshire/grants.asp

Multiple listings of ongoing sources of technology grants, funding opportunities, and creative solutions to obtain technology resources for your class. The site also includes resources to help write grants.

AskEric. (2015), *Welcome to the technology center*. Retrieved from

http://www.americatakingaction.com/technology/

Drawing on the 16 clearinghouses of the Educational Resources Information Center (ERIC) system, this "superportal" (Gordon, 2003) offers links, lessons plans, a searchable database, and a Q&A service to teachers, media specialists, counselors, administrators and parents. Thousands of helpful, research-based resources are available here with a few keystrokes (p. 160).

Busy Teachers' Website K-12 (2015). *Busy teacher's cafe.* Retrieved from

http://www.busyteacherscafe.com/resources.html

The goal of this website is to provide teachers with current professional and teacher-resource materials. The site also includes lesson plans, classroom activities, and other resources including connections to mini-offices and smartboard sites.

Edsitement. (2015). *Edsitement: The best of humanities on the web*. Retrieved from

http://edsitement.neh.gov/

A rich resource for humanities instruction at all levels; this site includes lesson plans and links for arts and culture, foreign languages, literature and language arts, and history and social studies. Organized by subject matter, it includes indications of how lessons meet various standards.

Education World (2012). *Virtual Field Trips: Interactive Science Lesson Ideas*. Retrieved from

http://www.educationworld.com/a_lesson/virtual-field-trips-science.shtml

An internet field trip is a trip that takes place online. With these field trips, Education World directs student through topics in life science, physical science, technology and the history of science. Each internet field trip highlights websites that serve to enrich the study of a specific curriculum theme or topic.

Edutopia Online (2015). *Edutopia: What works in education*. Retrieved from

http://www.edutopia.org/

An excellent multimedia resource for anyone with a stake in improving K-12 schools. It promotes magazine-style articles, slideshows, and a video gallery in an effort to demonstrate innovative classroom practices, professional development, parent involvement, and school-business partnerships. The video gallery showcases interviews with school leaders, researchers, and teachers. Documentary films are also featured.

Harvard Graduate School of Education. (2015). *Harvard Education Letter*. Retrieved from

http://hepg.org/hel-home/home

This weblink contains articles by leading researchers, K-12 practitioners, and educational journalists about the latest in education research and classroom-tested teaching strategies. Teachers who are tired of traditional professional development, can enlist in an Edcamp.

iEARN. (n.d). *Learning with the world, not just about it*. Retrieved from

http://www.iearn.org/professional-development

This non-profit network facilitates the creation of project-based collaborations among schools from all over the globe as a way of providing students with tools for international understanding, cooperation, and conflict resolution.

MiddleWeb (2015). *Middleweb: All about the Middle Grades*. Retrieved from

http://www.middleweb.com/

This multicolored site deals with all things related to "Middle Schools". In addition to curriculum resources, it offers links to articles about what is taking place in middle

schools. Teachers can use this site to connect with others and to discuss their practice through the teacher blogs feature. They can also stay current by reading book reviews.

Refdesk.com (2015). *Refdesk: Fact checker for the Internet*. Retrieved from

http://www.refdesk.com/

This encyclopedic portal collects links to hundreds of helpful sites, including reference books, dictionaries, almanacs, and news updates.

TappedIn. (2013). *A community of educational professionals*. Retrieved from

http://www.tappedin.org/

Tapped In is an online work place that caters to its local and international community of K-12 teachers, media specialists, administrators, and professional development staff, as well as university faculty, students, and researchers. These stakeholders gather in this virtual space to learn, collaborate, share, and support one another. The site was created in 1997 and content was not added beyond 2013, but much of the material has been archived and is freely available.

Tech4schools (2015). *Empowering education through technology*. Retrieved from

http://tech4schools.co.uk/

This site offers support for schools that utilize the most up-to-date technologies and ensures that all key stakeholders, including pupils and parents, understand the benefits of these technologies in supporting a learning framework.

The Kennedy Center. (2015). *ArtsEdge*. Retrieved from https://artsedge.kennedy-

center.org/educators.aspx

This weblink offers a number of "mini-sites," described as "multidisciplinary, self-contained explorations of arts-related themes or subjects" (Gordon, 2003). Nested in these pages are instructional activities, multimedia features, and primary sources on topics such as the Harlem Renaissance, Irish culture, and Asian art, as well as biographical lessons about Louis Armstrong, Marian Anderson, and others. It also provides a place for teachers to exchange lessons, activities, web links, and more.

WebQuest (2015). *WebQuest.org*. Retrieved from http://webquest.org/

A good site for teaching students not only how to find information on the Web, but also how to evaluate and use that information in practical ways.

WebTeacher. (2015). *Web Teacher: The ins and outs of distance education*. Retrieved from

http://www.webteacher.org/

This site created by teachers offers training and advice to help teachers use the Internet, make decisions on distance learning opportunities, and promote new technologies. Not sure whether you want professional development offered face-to-face or online? Then this is site for such a professional. There is a Spanish translation for all content.

Journals

As a teacher, it is important to stay active and current with cutting-edge research. A key contribution by professional organizations in instructional technology and media is to publish journals of interest to their members. Various other print and electronic periodicals are targeted to educators interested in using educational technology and media in the classroom. Electronic journals have increased in popularity and add to the "green emphasis" of providing teachers with current information that includes interactive links while saving paper. Examples of highly-respected journals (http://designer.50g.com/journals.htm) are noted below:

- *Educational Technology* - has been the leading periodical for five decades and is read by many educators in over 100 countries. The magazine addresses both teachers and educational technologists, providing articles on a range of topics, from theoretical to practical aspects of technology. Additional details about this journal can be found at this URL: http://asianvu.com/bookstoread/etp/

- *T.H.E Journal* is dedicated to informing and educating PK-12 practitioners to improve and advance the learning process through the use of technology. It has over 90,000 subscribers and offers a variety of resources, including a monthly print and digital magazine, two websites, and five newsletters. Additional details are found at this URL: https://thejournal.com/Home.aspx

- *eSchool News* in both print and online publication provides "Technology News for Today's K-20 Educator" covering education technology in all its aspects—from legislation and litigation, to case studies and new products. The newspaper has over 300,000 subscribers and the website has more than 600,000 unique visitors each month. Details can be found at this URL: http://www.eschoolnews.com/

- *Media and Methods* highlights new software and hardware to assist schools with purchase decisions. Additional details are provided using this link: http://www.media-methods.com/

- *Tech & Learning* provides district technology coordinators with practical resources and expert strategies for transforming education through the integration of digital technologies. The magazine is also used as a professional development tool to help educators learn about the newest technologies and products in order to best prepare students for the global digital workforce.

Books

Cuban, L. (2003). *Oversold and underused: Computers in the classroom.* Cambridge, MA: Harvard University Press.

Joyce, B., & Calhoun, E. (2010). *Models of professional development: A celebration of results.* Thousand Oaks, CA: Sage.

Kise, J. A. G. (2006). *Differentiated coaching: A framework for helping teachers change.* Thousand Oaks, CA: Corwin.

Knight, J. (2007). *Instructional coaching: A partnership approach to improving instruction.* Thousand Oaks, CA: Corwin.

Reeves, D. B. (2010). *Transforming professional development into student results*. San Francisco, CA: ASCD.

Reiser, R. A., & Dempsey, J. V. (2011). *Trends and issues in instructional design and technology* (3rd ed.). Upper Saddle River, NJ: Merrill/Prentice Hall.

Schlager, M. S., & Fusco, J. (2004). Teacher professional development, technology and communities of practice: Are we putting the cart before the horse? In S. Barab, R. Kling, and J. Gray (Eds.), *Designing virtual communities in the service of learning*. New York, NY: Cambridge University Press.

Sparks, D. (2001). *E-learning for educators: Implementing the standards for staff development.* Oxford, OH: National Staff Development Council.

Technology Grant News (2010). *Winning at IT: Grantwriting for technology grants.* New York, NY: Technology Grant News Publication.

Yoon, K., Duncan, T., Lee, S., W.-Y., Scarloss, B., & Shapley, K. (2007). *Reviewing the evidence on how teacher professional development affects student achievement.* Washington, DC: U.S. Department of Education.

Professional Development Agenda

Audience: Teachers, Sunset School District - Grades K -12

Venue: **Sunset School Learning Lab   (Blended Training Delivery: Live Instructors along with use of Google Classroom)**

Date: **December 11, 2015**

NOTE: Visit our website and forward your completed Web form to apinderdarling@njcu.edu to benefit from this professional development opportunity.

Objective(s): The objective of this one-day workshop is to improve participants' foundation and competence in technology integration and application of Common Core State Standards Transition. It will also provide participants with a variety of high-quality, 21st century classroom activities using modern digital technologies to deliver content to their students. By the end of this professional development workshop, 95% of participants will demonstrate a higher knowledge level from exposure to both the session content and annotated bibliography of useful websites, journals and books as the primary means of knowledge transfer. Best practices and national standards will be explored.

A g e n d a

Session Start Time	Teacher PD Activity
8:00 a.m.	Registration and Introductory Activity/ Katy Blatnick-Gagne Sunset School

8:30 a.m.	Welcome, Sponsors, Brief Remarks/ School Principal
9:00 a.m.	Goals, Learning objectives, Review of PD Schedule / Gregg Caverly
9:30 a.m.	Technology Integration and the Mathematics curriculum **OR** Technology Integration and the English Language Arts curriculum for Kindergarten teachers and first year teachers/Gregg Caverly & Antoinette Pinder-Darling
	Outcome: To increase participant understanding of effective ways to support learning, local school content and will be provided tangible examples of CCSS-aligned practices.
10:30 a.m.	Personalized learning for Diverse Learners with a technological focus for Middle School Teachers / Katy Blatnick-Gagne
	Outcome: To increase participant understanding of ways to adapt to a variety of learners using technology.
11:30 a.m.	Improved Assessment Literacy for Teachers of grades 10-12 / Dr. Robert Robbins
	Outcome: Participants gain knowledge and skill regarding how to balance use of formative and summative assessments as appropriate, how to use assessment data to understand learner's progress, adjust instruction as needed, provide feedback to learners, and document learner progress against State, NET-S and Common Core Standards.
12:30 p.m.	LUNCH BREAK
2:00 p.m.	Collaborative Professional Culture / Antoinette Pinder-Darling
	Outcome: Participants will execute learning to collectively engage in collective inquiry, particularly with regard to decision-making processes, lesson design, and analyzing data from multiple sources.
3:00 p.m.	Google Classroom and Global Technology Skills for the 21st Century Classroom - All teachers / Dr. Karen Smith
	Outcome: Teachers need to be able to impart global skills and dispositions on learners, particularly in the areas problem

solving, curiosity, creativity, innovation, interpersonal skills, the ability to synthesize across disciplines, global awareness, ethics, and technological expertise.

4:00 p.m.   Panel (Question and Answer) Session – all presenters

4:45 p.m.   Complete PD evaluation forms / Gregg Caverly

5:00 p.m.   Wrap-up/Distribute materials / Antoinette Pinder-Darling

What to bring?

- Laptops
- Notepad
- Two pens

Materials to be provided   Annotated bibliography as a QR code.

Sunset School District
Individual Teacher Professional Development Plan (PDP) for Technology Implementation Template

District Name	School Name	Date

Teacher Name	Assignment/Department/Grade Level	Rating & Date of Most Recent Summative Evaluation

Supervisor Name	Principal Name (if different)	Plan Begin/End Dates

I. Areas Identified for Development of Professional Practice

No.	Areas Identified for Development	Rationale/Sources of Evidence
1	**NETS-T 1:** *Facilitate and inspire students learning and creativity*	Facilitate, promote and encourage real-world learning.
2	**NETS-T 2:** *Design and Develop Digital-Age Learning Experiences and Assessments*	Incorporate digital tools in a variety of learning opportunities, establish a technology-rich classroom, and customize learning to all
3	**NETS-T 3:** *Model Digital-Age Work and Learning*	Collaborate and communicate with all learners (students, teachers, parents, etc.), model the effective use of digital tools.
4	**NETS-T 4:** *Promote and Model Digital Citizenship and Responsibility*	Model and teach about the ethical use of digital information in regards to copyright, intellectual property, etc.
5	**NETS-T 5:** *Engage in Professional Growth and Leadership*	Participate in local/global learning communities, hold leadership positions (Google Certified Trainer), reflect on current research, contribute to school based professional technology development.

II. Professional Learning Goals and Activities *Address the NETS-T Goals above

Area No.	Professional Learning Goals	Initial Activities	Follow-up Activities (as appropriate)	Estimated Hours	Completion Date
1					
2					
3					

III. District and School PDP Support

District/School Administrator Support Activities
Give a description of the technology resources available in your school/district that will help you accomplish your professional learning goals.

My signature below indicates that I have received a copy of this Professional Development Plan and that I understand and contributed to its contents.

Teacher Signature: _____ Date: _____

Supervisor Signature: _____ Title: _____ Date: _____

IV. PDP Progress Summary

Interim Review of PDP Progress

Area No.	Demonstrated Progress	Sources of Evidence	PDP Revisions (if applicable)	Review Date
1				
2				
3				

My signature below indicates that I have reviewed the information recorded in the <u>Interim Review of PDP Progress</u> and that I understand its contents:

Staff Member's Signature: _____   **Date:** _____

Summative Review of PDP Progress

Area No.	Professional Learning Goals	Expectations Met (Y) or Not Met (N)	Sources of Evidence	Summative Review Date
1				
2				
3				

My signature below indicates that I have reviewed the information recorded in the <u>Summative Review of PDP Progress</u> and that I understand its contents:

Staff Member's Signature: _____   **Date:** _____

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Gordon, D. T. (2003). *Better teaching and learning in the digital classroom*. Cambridge, MA: Harvard Education Press.

Gupta, K. (2007). *A practical guide to needs assessment* (2nd ed.). San Francisco, CA: ASCD.

Guskey, T. (2002). *Does it make a difference: Evaluating professional development*? Retrieved from http://draweb.njcu.edu:2620/publications/educational-leadership/mar02/vol59/num06/Does-It-Make-a-Difference%C2%A2-Evaluating-Professional-Development.aspx

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Moskowitz, M. (2008). *A practical guide to training and development: Assess, design, deliver and evaluate.* San Francisco, CA: John Wiley & Sons.

O'Hanlon, C. (2009). Resistance is futile. *T H E Journal, 36*(3), 32-36.

Robinson, L., Brown, A., & Green, T. (2010). *Security vs. access: balancing safety and productivity in the digital school* (1st ed.). Eugene, OR: ISTE.

Roblyer, M. D., & Doering, A. H. (2013). *Integrating educational technology into teaching* (6th ed). Upper Saddle River, NJ: Pearson.

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