

Three Habits of Highly Successful School-Based Technologists

Service, Integration, Rounds (SIRs)

by Wanda Walters

Author's note: As a former Instructional Technology Specialist for Fairfax County Public Schools, I have had the pleasure of working with our School-Based Technology Management team members and School-Based Technology Specialists (SBTS) to ensure effective use of instructional technology. During the past few years, three strategies have evolved to provide technology specialists with the tools for a successful year. The goal of this article is to illustrate that by incorporating the **SIR** (Serviceability, Integration, and Rounds) strategy, school-based technology specialists will be able to easily and effectively serve the technology needs of their schools.

Historically, at the beginning of each school year, new and veteran technology specialists are bombarded with central- and school-based task requirements. Oftentimes, many specialists are not sure where to begin, except with feelings of frustration and being overwhelmed. The next three sections of this article will provide background on “SIR” and recommendations for effective implementation.

Serviceability

Is everything in working order? At the start of the school year, do your teachers have printing capability, email access, and projection functionality? As I have participated in walk-throughs of numerous school sites and conducted countless teacher workshops, one of the most disturbing observations that I made, and statements that I've often heard, was that despite all of the equipment available, teachers are lacking one or more of the aforementioned.

To address this basic service concern, I worked with Karen Gerstner from the FCPS School-Based Management team to facilitate a basic technological services priority for SBTS. We developed a checklist to verify that every elementary teacher could print, had email access (our district uses Microsoft Outlook) and could project from his/her laptop computer. Attached is the “POP into the New Year” checklist that school-based technologists use to validate that all teachers have the core technology necessities up and running within with the first few weeks of the school year. This checklist articulates the technology priorities for the opening of school and adds an important element of accountability for both the teacher and technology specialists to ensure that the minimum expected functionality is achieved.

Integration

Another stumbling block to a successful year is an unclear plan for effective

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tively integrating technology within the curriculum. Last year I developed the 5W/5E technology integration model that outlines a clear, concise, and doable method to successfully infuse technology into any instructional program. This model is being widely embraced by many educational entities. Below is a short synopsis. The entire article and supporting templates can be found in a previously published article in the *VSTE Journal* (Walters, 2005).

The 5W/5E model

We are all familiar with the 5W's: *What, Who, Where, When, and Why*. We begin by asking the 5 W's as it applies to curriculum and integrated technology.

1. **What?**

- What is the instructional goal?
- What technologies are available?
- What technologies would the educator like to use?

2. **Who** is being targeted for the infusion of technology?

- Whole group?
- Flexible group?
- Students with differentiated needs?

3. **Where** will the technology be delivered?

- In the classroom using a teacher presentation system?
- In the classroom computer center?
- In the computer lab?
- With resource/peer support?

4. **When** will the technology infusion take place?

- As a warm-up or wrap-up activity?
- After a particular lesson?
- What is the timeline?

The next is the most important question that the teacher needs to ask herself: *Why* is she using technology? Let me cite an example of the value of teachers being able to articulate their reason for using instructional technology.

As a technology trainer, I was listening to one of our very fine teachers sharing an integrated technology lesson that she developed. When asked why she designed that lesson, she looked quizzically and responded, "Because we were told to develop a lesson using technology for our next assignment." After listening to my 5W/5E presentation, she remarked, "Now I know why I developed that lesson. I wanted to evaluate my students' understanding of the social studies vocabulary....thanks for giving me the words." I feel as though this teacher was pleasantly reminded that she did in fact have an educational purpose before she had a technology goal.

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5. **Why** is the teacher using technology to address educational objectives?

To answer this question, the Biological Science Curriculum Study's 5E model is infused with this W.

- 1) Is it to **engage** students in the topic? For example, a teacher may use an interactive website as a warm-up activity to begin a unit on fractions and then continue the lesson with manipulatives and/or text resources.
- 2) Is the goal to provide the students the opportunity to further **explore** the concept? An instructor may assign students a particular CD ROM, website, or utilize designated templates.
- 3) How about using technology to **explain** an objective? Technology may be used to further clarify the concept and define relevant vocabulary.
- 4) Could the most appropriate use of technology be to provide students with the opportunity to **elaborate** and build on their understanding of the concept by applying it to new situations? This is especially true when it is evident that students have already mastered a particular baseline goal and are in need of a more differentiated, higher-level thinking experience.
- 5) Finally, would the teacher's intent be to assign students technology-based activities that will help them and the teacher to **evaluate** their understanding of the concept? For example, a teacher may direct students to open a paint program and show her that that they understand that $9/12 = 75\%$.

Using the Biological Sciences Curriculum Study (BSCS, 2006) "5-E" constructivist model: *Engage, Explore, Explain, Elaborate, and Evaluate*, teachers are better able to articulate their educational purpose for their selection and defend the appropriateness of the chosen technology. The 5-E model is based on a constructivist philosophy of learning (Trowbridge & Bybee, 1990). The theory of constructivism encourages educators to focus on making connections between facts that are required and tailoring instructional strategies that allow students to actively construct meaning and foster understanding of objectives. Effective use of technology is the perfect instrument to achieve this goal.

During the past year, I have discussed the 5W/5E concept with countless colleagues and the response has been virtually unanimous, with typical responses being "This makes so much sense," or "It is so logical, understandable, and doable." Many School Based Technology Specialists (SBTS) that I've had the pleasure of working with are planning to use the 5W/5E framework to organize technological resources for their teachers during the upcoming school year.

A supporting PowerPoint presentation and a PDF of colorful 5W/5E bookmarks for teachers are available upon request.

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Rounds

I have also had the pleasure of working with Linda Hamilton, a former central instructional technology specialist who has now returned to the classroom. Linda has also been a school-based technology resource teacher. As we were working together, we could not help but notice that there were numerous instances of school-based technology specialists who were not fully familiar with their staffs or the technology needs within their buildings. As we were brainstorming for a strategy to facilitate a solution, we discussed the practice that doctors use to check on the status of their hospitalized patients. They make “rounds.” Linda stated that while in a school-based position she “made rounds” throughout her building to ensure that all equipment was up and running – or logged in for service – at least once every two weeks, and always before the hardware technician (TSSPec) arrived for his/her scheduled visit. Even though teachers have the ability to email their school-based technology specialists for assistance, Linda found the face to face contact invaluable. Below are quotes from FCPS SBTS who use the “rounds” strategy.

“I started to implement the ‘rounds’ concept last year. A few days ahead of the TSSpec day, I literally cover the entire building to ask each teacher, specialist, and office staff member – face-to-face – if there are any tech problems. Many requests are really easy to fix on the spot. More difficult tasks I add to our job list. I am able to contact 95% of my staff within a 90 minute period on a single day.” P.S., Sunrise Valley ES.

“I am a new SBTS. Since both of my schools are fairly large, the Rounds strategy helps me to stay informed about technical problems that exist, as well as the training needs of teachers. I try to finish my “rounds” before the day the TSSPec is scheduled to be at each school. This allows me to attend to the instructional needs that were voiced during my “rounds,” and to perform Level 1 troubleshooting. The TSSPec and I work together to do follow-ups so that turnaround time is decreased. Teachers appreciate the attention and quick response that we are able to give to their requests. I love using this system.” L. M., Newington Forest and Saratoga ES.

“People are grateful that I come to them. Great [public relations] for SBTS! I find out about problems in a timely fashion (not 3:00 Friday!). I have time to prepare a list for the TSSPec. I have found that a lot of teachers don’t bother to email me or fill out the Fix It form because technology usage is low on their priority list. Teachers are, however, very receptive to help and want it, even though they don’t solicit it. I see faces and become familiar with staff and build valuable rapport. Quick fixes get done on the spot.” B.W., former SBTS, currently Early Childhood Instructional Technology Specialist.

It has been noted that the Rounds focus should change throughout the school year (e.g., use of a designated resource, strategy, other). If you are a school-based technology specialist, consider beginning the upcoming year with a “rounds” plan. You will find that your objectives will be easier to meet and your staff members will be very appreciative.

Three Habits, continued

If you are a school-based technology specialist, consider beginning the upcoming year with a “To SIR with Love” plan. You will find that your objectives will be easier to meet and your staff members will be very appreciative.

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