

Confessions of a Web Page Guru

Kickin' It: Old School

In the fall of 2002 I was one of a cadre of teachers at Fallbrook High School (FHS) leading the school wide initiative to use computers in teaching and learning. At the time, FHS was about 110 years old, having recently undergone an infrastructure upgrade (funded by a technology grant) to accommodate one networked computer in each classroom along with six "high tech" classrooms. The 2002-2003 academic year marked the first year that every classroom had a brand new networked computer. Many of the teachers were older, with most having little experience using computers as a teaching and learning tool. Most teachers just used their computers for email. Some used gradebook software to record grades. For the most part, it was as if there was no modern technology, just as things had been for the last 100 years.

As a cadre, we were supposed to help teachers use their classroom computer in their teaching and student learning. With limited grant funds, we held a Saturday training event for teachers, conducting various workshops, ranging from learning how to use email, PowerPoint, gradebook software, to building teacher home pages. A couple of the cadre presented on using computers in subject-matter topics like history and English. However, the majority of what we offered that day was teacher-centric.

The workshops were a big hit; my workshop on building home pages with Microsoft FrontPage, as well as all the other workshops received rave reviews. On the Kirkpatrick scale of evaluation, we wowed the audience at Level One (Tufte, 2006). As part of our plan, we offered to meet with teachers one-on-one after school or at lunch for informal coaching. That was the extent of our follow-through.

As the weeks went by, one teacher came to my classroom for a couple of times after school to work on her home page, but eventually she stopped coming. Although we did not collect specific metrics about learning results (Kirkpatrick Level Two) or changes in teachers' methodologies (Kirkpatrick Level Three), I assume that no real transfer of knowledge resulted.

WWIDT: What Would I Do Today?

Certainly, this population of teachers desperately needed training. But as a technology cadre, we should have:

- Conducted a performance analysis
- Devised a multi-faceted solution system
- Created and implemented a long-term follow-through plan

The Makeover

Performance Analysis

Despite the fantastic reviews our workshops received, they were ultimately unsuccessful in making real changes. We implemented a solution without first understanding our audience. We assumed they just needed to know what we knew, but we failed to ask questions to discover what their motivation level was and what fears they had. We didn't ask what they needed or wanted. A simple survey coupled with some informal interviews of teachers and administrators would have provided us with the drivers, barriers, and motivation factors for the technology rollout. An analysis would have revealed teachers' passions about their teaching, their vision for using technology, and their personal roadblocks with computers. Knowing these things is critical to developing a solution system that addresses these factors, which would increase the likelihood of transfer of learning (observable, long-term changes in teaching methods).

Solution System

Certainly, my makeover would include training, but it would not be the only component. I would include non-training interventions as part of the overall solution system that addresses: motivation and fears, knowledge and performance gaps, and sustainable and measurable learning transfer.

Motivation and fear levels

Probably the biggest barriers are varying levels of motivation and fears in the target audience as follows:

1. High motivation, high fear
2. High motivation, low fear
3. Low motivation, low fear
4. Low motivation, fear

My proposed solution system would address motivation by creating an appreciation for the need and value of technology. By addressing these two factors, the system has a better chance of succeeding because the question of "What's in it for me?" would be answered, increasing target audience buy-in. Another important aspect is to build *f-u-n* into the system. I would invite a prominent speaker with experience in training to present the school's vision for technology in an entertaining way. After the keynote address, I would have the speaker lead focus groups to draw out the teachers' motivations and apprehensions. Skillful diffusion of fears will prepare the target audience for the next phase of the solution system that addresses knowledge and performance gaps.

Training and non-training interventions

The heart of the system addresses these gaps with training and non-training interventions. These interventions support learners with varying ability levels from those needing to learn how to use a mouse to those who can create online courses. The training components would include short and longer training like:

- Mini-workshops
- Seminars
- Instructor-led classes
- Online classes
- Blended instruction

Non-training components would include:

- Job aids
- Checklists
- Online resources
- Coaching from technology mentor teachers

Gap and training needs analysis

Prior to implementing any training, I would conduct a training needs analysis to determine the scope and desired learning goals for each training intervention. Each intervention would have clearly defined outcomes and objectives to support the learning goals, allowing results to be measured and the system to be evaluated. With proper evaluation, adjustments and improvements can be made as needs change.

Transfer of learning via follow-through

According to Wick, et. al. (2006), targeted follow-through will ensure that results transfer into changes in teaching. The follow-through component of the system will include:

- Group follow-up meetings with technology instructors where teachers:
 - Share what they're learning
 - Receive additional reinforcement and instruction
 - Provide feedback on their progress
- Meaningful assignments and action items that apply what was learned
- Real accountability reflected in:
 - Teacher evaluations
 - School site and district administration policies
- Development of subject matter experts from the initial target audience who:
 - Provide additional peer coaching
 - Become another set of experts to teach others

Conclusion

Sadly, performance analysis is not common in K-12 public education. It is the first step in my proposed makeover to create an effective solution system that reaches a diverse audience of learners with varying abilities through both training and non-training interventions. Learning is then cemented into lasting behavioral change through long-term follow-up and support.

References

- Wick, Calhoun W., Pollock, Roy V. H., Jefferson, Andrew McK., & Flanagan, Richard D. (2006). *The six disciplines of breakthrough learning: How to turn training and development into business results*. San Francisco: John Wiley & Sons, Inc.
- Winfrey, E.C. (1999). Kirkpatrick's four levels of evaluation. In B. Hoffman (Ed.), *Encyclopedia of Educational Technology*. Retrieved December 12, 2007, from <http://coe.sdsu.edu/eet/articles/k4levels/start.htm>.