

# Technology Committee Professional Development: Implementing Change at RHL

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I teach 5<sup>th</sup> Grade at in the Cherry Creek School District. Rolling Hills Elementary School is in Aurora, CO and feeds into Falcon Creek Middle School and Grandview High School. Rolling Hills is a year-round school with 736 students; however we will be moving to a traditional calendar for the 2012-2013 school year. Of our student population, 12% are Asian American, 8.3% African American, 6.9% Hispanic American, and 72.8% are Caucasian. Seven percent of our student population qualifies for free and reduced lunch.

In years past, our school district used to require each building to have a technology committee to determine how funds would be spent and what professional development would be needed. The move addressed a longstanding need. About six to seven years ago, the district stopped funding individual schools' technology needs, leaving individual schools to determine funding, resource, and training. Originally, this responsibility fell to site-based technology committees made up of a technology teacher, classroom teachers, and the school's principal. Eventually, budget cuts led to the dissolution of our school's technology committee. It was too much responsibility for the committee to locate funding and plan professional development.

Even without an active committee, some school faculty members sought to integrate technology into the classroom. Two years ago, our fifth grade committee applied for (and won) a 21<sup>st</sup> Century Learning Morgridge Family Foundation Grant that supplied each member with an Interactive White Board (SMART board). As per our grant agreement, we attended a year's worth of professional development around using and sustaining SMART technology in our classrooms and building. We learned everything from basic lesson design, to more advanced techniques for getting higher student engagement using the technology.

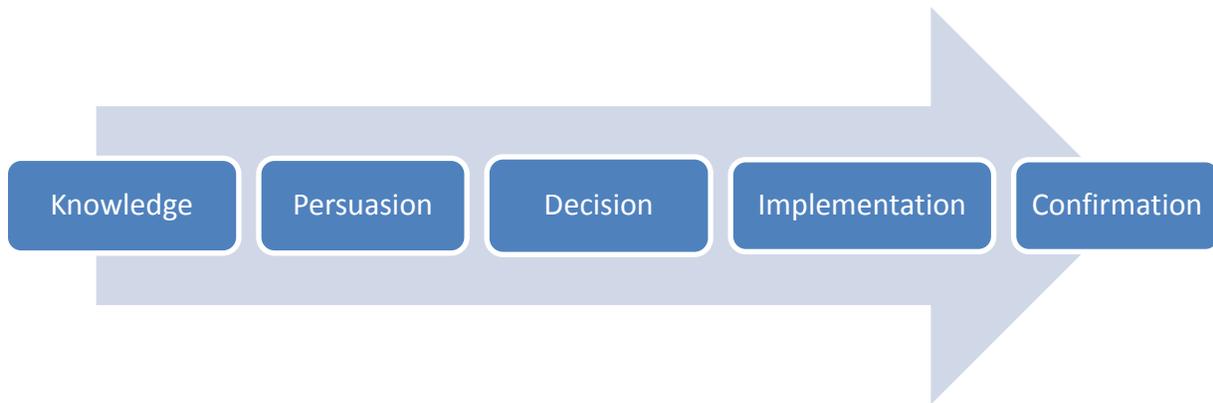
Last year, our Parent-Teacher-Community Organization (PTCO) matched the funds we raised as a school in order to equip *every classroom with an Interactive White Board*. However, this influx of technology came with no planned professional development, aside from basic operation. The primary objective of the PTCO was to *buy* the technology. It was assumed that, as a building, we could train ourselves. Throughout that year, I became the building's SMART board technical support for any and all issues IWB related.

Although I teach the fifth grade, my graduate work in the ILT program led me to conduct necessary technology needs assessments and to spearhead the restart of a new technology committee. My goal was to provide leadership in helping my staff not only adopt new technologies but, more importantly, to effectively use the technology we currently own. Therefore, I spent this past school year conducting technology audits, specifically assessing the use (or nonuse) of technology (specifically, SMART boards). Many of the SMART boards have become very expensive projector screens. The accompanying "Notebook" software used to create interactive lessons for the SMART board is being used to create glorified overhead transparencies. It is shocking that tens of thousands of dollars were spent on technology that is designed to increase student engagement, deepen critical thinking skills, and increase student motivation, yet they are ***not being used***.

My goal with my technology committee is **to create and sustain meaningful professional development** to the Rolling Hills Elementary staff. Much of this last school year has been spent troubleshooting basic technology needs; however, in presentations at a variety of meetings, I have slowly introduced convenient technology, such as Tablet use, Microsoft Outlook use, Wikis such as GoogleDocs. I would like to enter the 2012-2013 school year with organized and supportive professional development that will transform my school into a 21<sup>st</sup> Century, collaborative committee.

## Planned Intervention

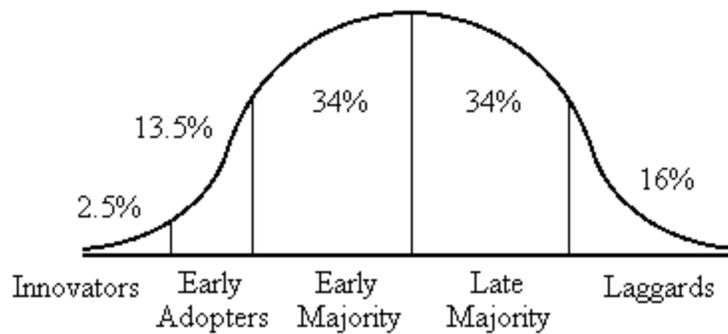
Rolling Hills Elementary lies in a technology paradox. We have an abundance of technology (as compared to other schools in the district), yet this technology is not being used to its potential. My original intention with the Technology Committee was to not only create a committee responsible for technology, but to institute real change in the building. I naively thought I could create a new culture of learning in a single school year while providing direction for instructional design. Rogers (1995) discusses diffusion of technology as a series of stages, where the process occurs over time.



**Figure 1. Five stages of Rogers' (1995) Innovation-Decision Process Model.**

The adoption of an innovation is not a single act. Each step in the process may take any amount of time, depending on the group of individuals. For example, in the 2011-2012 school year, I feel that I was successfully able to take my staff into the “Knowledge” stage, were they gained “basic understanding” of the building’s technology, into the “Persuasion” stage, where staff members are “forming positive and negative impressions of such technology” (Rogers, 1995).

I plan to intervene next year to a staff that closely mirrors Roger’s (1995) estimation of the bell-curve distribution of a group’s feelings toward change.



**Figure 2. Hypothesized distribution of adopter categories within a typical population.**

My staff is “more likely to adopt [professional development] if [it] offers them a better way to do something, is compatible with their values, beliefs and needs, is not too complex, can be tried out before adoption, and has observable benefits” (Ely, 1999). In order for next year’s professional development to be successful, I will need to be cognizant of Ely’s eight conditions of implementation, so that I can constantly evaluate our progress toward a common goal.

1. **Dissatisfaction with the status quo.** Things could be better. Others seem to be moving ahead while we are standing still. Dissatisfaction is based on an innate feeling or is induced by a "marketing." campaign.
2. **Knowledge and skills exist.** Knowledge and skills are those required by the ultimate user of the innovation. Without them, people become frustrated and immobilized. Training is usually a vital part of most successful innovations.
3. **Availability of resources.** Resources are the things that are required to make implementation work--the hardware, software, audiovisual media and the like. Without them, implementation is reduced.
4. **Availability of time.** Time is necessary to acquire and practice knowledge and skills. This means good time, "company" time, not just personal time at home.
5. **Rewards and/or incentives exist.** An incentive is something that serves as an expectation of a reward--a stimulus to act. A reward is something given for meeting an acceptable standard of performance.
6. **Participation.** This is shared decision-making; communication among all parties involved in the process or their representatives.
7. **Commitment.** This condition demonstrates firm and visible evidence that there is endorsement and continuing support for the innovation. This factor is seen most frequently in those who advocate the innovation and their supervisors.
8. **Leadership.** This factor includes (1) leadership of the executive officer of the organization and, sometimes, by a board and (2) leadership within the institution or project related to the day-to-day activities of the innovation being implemented.

**Figure 3. Ely, D.P. (1999) Eight conditions to implementation and institutionalization of educational technology**

## Timeline

Date	Action
June 13, 2012	<ul style="list-style-type: none"> <li>• Review Rolling Hills' (RHL) technology status quo.               <ul style="list-style-type: none"> <li>○ What things can be better?</li> </ul> </li> <li>• Review RHL's knowledge/skills base               <ul style="list-style-type: none"> <li>○ What skills do we currently possess in the building that we can use for future professional development?</li> </ul> </li> </ul>
June 20, 2012	<ul style="list-style-type: none"> <li>• Discuss RHL's available resources               <ul style="list-style-type: none"> <li>○ What hardware/software do we have?</li> </ul> </li> </ul>
June 27, 2012	<ul style="list-style-type: none"> <li>• Needs assessment               <ul style="list-style-type: none"> <li>○ Review satisfaction survey from 2011-2012 school year.</li> </ul> </li> <li>• Discussion of time-line for 2012-2013 technology professional development.</li> <li>• Goal(s): What do we want to accomplish by the end of the school year?</li> </ul>
Week of:	Action
June 11	<ul style="list-style-type: none"> <li>• Create handout outlining RHL Technology use/non-use (status-quo)</li> <li>• Create handout outlining RHL's knowledge base</li> </ul>
June 18	<ul style="list-style-type: none"> <li>• Prepare presentation of RHL's available resources</li> </ul>
June 25	<ul style="list-style-type: none"> <li>• Create charts/graphs of RHL satisfaction survey for 2011-2012 school year.</li> <li>• Create handout to collect staff's end-of-year technology goal(s)</li> </ul>
July 2	<ul style="list-style-type: none"> <li>• Review collected information</li> <li>• Begin outline of 2012-2013 Technology Professional Development Plan</li> </ul>
July 9	<ul style="list-style-type: none"> <li>• Review other CCSD schools' technology PD (school-level)</li> <li>• Review CCSD technology PD (district-level)</li> </ul>
July 16	<ul style="list-style-type: none"> <li>• Formative peer review of PD rough draft (Technology Committee)</li> <li>• Formative peer review of PD (Principal)</li> </ul>
July 23	<ul style="list-style-type: none"> <li>• Revise Technology PD Plan</li> <li>• Meet with Technology Committee to discuss <b>implementation vs. institutionalization</b> <ul style="list-style-type: none"> <li>○ How can we ensure Ely's (1999) final conditions to implementation</li> <li>○ Is institutionalization possible?</li> </ul> </li> </ul>
August 8-15 Work Week	<ul style="list-style-type: none"> <li>• Introduce 2012-2013 Technology Professional Development               <ul style="list-style-type: none"> <li>○ Present quality indicators that will be present throughout year</li> </ul> </li> </ul>

## Evaluation Plan

In order to fully evaluate the success or failure of a school's professional development, there need to be many formative check-points throughout the school year. For Rolling Hills' professional development, I (with the help of the Technology Committee) will create a number of quality indicators that will be present throughout the 2012-2013 school year. For example, staff will be required to complete a short survey, which accompanies all staff meetings and/or technology professional development meetings. I anticipate distributing these monthly.

In addition, individual grade-level committees will be required to spend at least one of their committee planning times discussing the effectiveness of the professional development. They will complete another quality indicator document, which will provide me with information on how previous professional development meetings went, how information is being implemented in classrooms, and ideas for next steps. I want the staff to feel that they are part of a shared decision making process, and that *the school* will indicate the direction of our professional development. Although there will be an outline of anticipated topics and trainings, the staff will really determine what we will accomplish through professional development.

## Progress Report

I have met with both our building's technology teacher/coordinator and the school's principal to discuss the proposed 2012-2013 technology professional development. We discussed the history of technology at our school and their thoughts on a possible professional development.

Since the district no longer has input regarding our specific building-level technology training, we discussed possible goals for professional development in the upcoming school year. Based on the results of satisfaction survey, there is a definite need for SMART board training, beyond just basic operation and lesson design.

Next week, I am meeting with our school's principal and our school's technology teacher to draft a document that will serve as our professional development for next year. It will include a calendar to schedule specific meeting times based on teacher's availability and other required district training directives. I also want to focus on an incentive program so that we receive as close to 100% participation as possible. Knowing our staff, a reward-based system is our best chance at having committed teachers participate in and subsequently lead others.

In the upcoming month before a new school year begins, I plan meeting with our technology committee to introduce the new professional development, but also discuss anticipated concerns from the other staff. It is important that I embrace these concerns and implement our SMART board training with empathy and credibility. Many teachers did not ask for these interactive whiteboards to be installed in their classroom, so there is still a considerable amount of frustration and backlash to my initiative. I will strive to keep teacher credibility while training teachers how to best deliver classroom content to their 21<sup>st</sup> century students.

## Expected Findings

Based on the current 2011-2012 school year's reaction and reception to the Technology Committee's presence, I anticipate some resistance for the upcoming school year. During the year, we were given many staff meetings to present technology; however, during meetings, about a third of the staff was resistant in participating. For example, these staff routinely did not bring their laptops and

Tablets for the meetings, and often were continuously disengaged from the presentation. When the Technology Committee issued a “mandated” customer satisfaction survey in order to evaluate our presentations, less than 25% actually completed the questionnaire. The data, although insightful in determining some of our school’s culture surrounding technology, did not accurately represent the predominant philosophy of the school. In fact, the *lack of participation* in the survey indicates more of where our school currently is in diffusing SMART board technology into classrooms.

It is vitally important that this professional development, although created by the Technology Committee, be mandated via the principal. The 2012-2013 school year will be our first year under the traditional calendar, so all staff will be present at all meetings. We have a considerable amount of other change occurring during this upcoming school year, including implementing a new Behavioral Development program in the building, Equity/Achievement Gap professional development, piloting a Recess before Lunch initiative, and a completely new school schedule. If technology is not discussed in the same manner as these other issues, then I fear it will continue to be given lip service.

Nonetheless, I am confident that our principal will support our technology professional development plan. She has been very supportive this last school year, and has given no indication of not committing our school to innovation and student achievement through technology.

## References

- Ely, D.P. (1999) New perspectives on the implementation of educational technology innovations. Paper delivered at the Association for Educational Communications and Technology Annual Conference, Houston, TX, Feb., 1999.
- Rogers, E.M. (1995). *Diffusion of innovations*, (4th ed.) New York: Free Press.
- Surry, D.W., & Ely, D.P. (2001). Adoption, diffusion, implementation, and institutionalization of educational innovations. In R. Reiser & J. V. Dempsey (Eds.), *Trends and issues in instructional design and technology*. Upper Saddle River, NJ: Prentice-Hall. Draft online: <http://www.southalabama.edu/coe/bset/surry/papers/adoption/chap.htm>