

ePortfolio

Action Research Team Professional Development Plan

Aries Cobb

INTRODUCTION

The director of technology integration at the Cleveland Metropolitan School District (CMSD) has assigned Aries Cobb, the lead professional development (PD) facilitator for technology integration, to use the problem-based learning model to continue the Enhancing Education Through Technology (EETT) project. Cobb, a grant writer, staff developer, and principal investigator of EETT, has created a new learning experience entitled ePortfolio: Action Research Team Professional Development Plan for the

2008–2009 school year for 25 teaching professionals at a targeted school in the CMSD. The targeted school has not met Academic Yearly Progress (AYP) for 3 or more years. The problem-based learning model is used for each school that has a technology integration program that is not working effectively in an effort to address the problem by examining teacher pedagogical beliefs and classroom technology use to enhance student technological literacy and reading achievement. A description and a PD design are outlined with a literature review for PD suggestions for the future.

STATEMENT OF THE PROBLEM

In the past, the EETT program was used to assist teachers and students to achieve higher scores on the Ohio Achievement Test in reading. Both students and teachers in the 2006–2007 report on EETT in selected schools in the district (CMSD Office of Research and Assessment, 2007) showed “statistically significant gains in technological skills that are complemented by integration of technology into practice. All student groups showed gains in technological literacy from winter to spring of the 2006–2007 academic year” (p. 4).

However, students in kindergarten through Grade 2 showed the greatest gains in technological literacy and reading achievement. Students in Grades 3–8 showed little significant gain in technological literacy and reading achievement.

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Aries Cobb, Assistant Professor,
Baldwin Wallace College,
Division of Education, 275 Eastland Road,
Berea, Ohio 44017-2088.
Telephone: (440) 826-8062.
E-mail: arcobb@bw.edu

Teachers in Grades 3-8 failed to report a comfort level in integrating technology in the classroom. The CMSD Office of Research and Assessment (2007) found a correlation between teacher technology integration practice and teacher beliefs about exemplary technology usage.

A FRAMEWORK FOR DESIGNING PD

The National Staff Development Council (NSDC, 2003) staff development standards are grounded in research that documents the connection between staff development and student learning. The standards are organized into context standards, process standards, and content standards. The goals for the ePortfolio: Action Research Team Professional Development Plan is described in three stages of implementation of each descriptor (see Table 1).

LEARNING EXPERIENCE DESIGN

The NSDC (2004) stated, “Staff development that improves the learning of all students organizes adults into teaching communities whose goals are aligned with those of the school and district” (p. 13). According to Fogarty and Pete (2007), “Whatever the focus, action research is a proudly rewarding experience for teachers because of its immediacy to their needs. There is a host of ways to organize teachers into focus groups” (p. 152). Five types of action research teams are used in the CMSD: action research team; committees; Critical Friends Group; curriculum commit-

tee; and department, team, and grade-level meetings. Action research teams use data to attain results, increase student achievement, and enhance teaching practices by changing teacher beliefs about best practice.

The action research team at each targeted school is inquiry based. The teachers and the students explore how to achieve based on their own inquiries. The action research team conducts research focused on the needs of the students and staff. The team is a small group of staff in the school building. The leadership is defined in the group. In other words, each team member has a defined role in the action research. The research is based on the achievement of the students. The group outlines learning goals for the students and the teaching staff. The group uses best practices and the latest trends in education. The members of the group volunteer to participate in the project. The knowledge acquired by the group through action research creates knowledge in action. Action research teams are a part of a professional learning community (PLC).

STANDARDS AND CRITERIA OF THE NSDC

According to the NSDC (2003) standards, the goal of PD is increased student learning. Fogarty and Pete (2007) have provided a guide to sustained professional learning. According to Fogarty and Pete (2007), teachers and administrators collaborate with each other because “learning thrives when the conditions are right ... with con-

Table 1. Goals of ePortfolio

Context	Data is always on the table in some form and members hold themselves accountable for attaining results.
Process	The study group uses a common classroom assessment to collect baseline data, monitor student progress every 6 to 12 weeks, and assess results at the end of the year on the study groups’ chosen student learning needs.
Content	Working together on the development of all lesson components together, demonstrating, and debriefing results together to change teacher pedagogical beliefs to enhance student achievement.

Note: Aligned with National Staff Development Council standards.

sistency, with continuity, and with a coveted commitment” (p. 139). PLC meetings focus on what needs to be done and what needs to be learned to change the way the teachers facilitate instruction. The main focus of the PLC is PD. The teachers collaborate to become better instructors to enhance student learning.

THE ROLE OF THE FACILITATOR

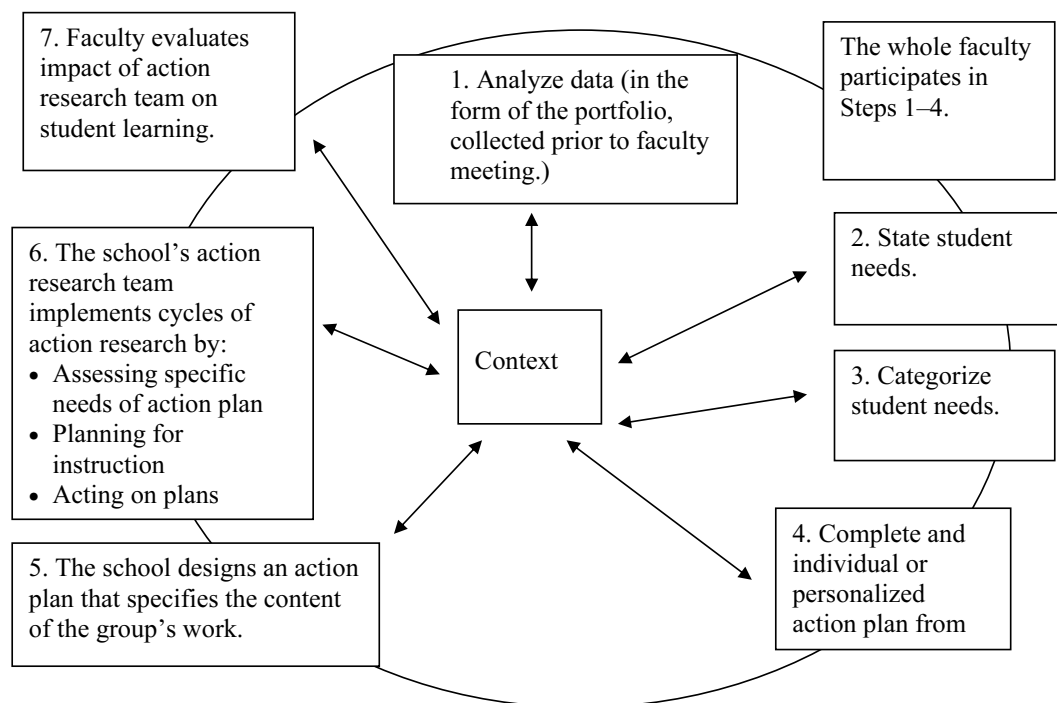
According to Fogarty and Pete (2007),

The role of the facilitator is to vigorously participate through collaborative structures of the Action Research Team. The facilitator participates in the communication by monitoring interventions within the Action Research Team, and facilitating questions. The facilitator interprets the results of the collaborations using research-based strategies, confer how the team works. (p. 109)

Lastly, the staff developer is a coach. The instructor of PD works through the situations in the action research team by counseling the participants. The intuitive coach knows how to intercede and expand on the PD process. The decision-making process is illustrated in Figure 1 and Table 2.

DATA SOURCE: EPORTFOLIO

The new learning experience is planned to address teachers’ belief about exemplary technology use in an effort to increase teaching and learning. According to the Center for Curriculum and Assessment (2003), an electronic portfolio (ePortfolio) is a collection produced by the writer; in the digital portfolios, this work is stored in an electronic format and accessible through the Internet or a portable electronic storage device, such as a CD. EPortfolios consist of audio clips, video, links to other media,



Source: Murphy and Lick (2005). Copyright 2005 by the Corwin Press.

Figure 1. Implementation phase of the decision-making process.

Table 2. Decision-Making Cycle Timeline

Decision-Making Cycle	Description	Time Frame
1. Analyze data.	The action research team looks at student data. The leader in each group gives each person one piece of data to analyze. The members look for pattern and trends, gaps or anomalies, area of strength and areas of weakness. Engage in a discussion about the different pieces of data.	30 minutes
2. State student needs.	Make a list of student needs based on the data. Each table makes a list of student needs. Discuss the list. Compile the individual list into one master list and give each participant a copy.	30 minutes
3. Categorize student needs	Categorize the student needs by sorting the needs into groups by theme or benchmark. Discuss the different categories.	1 hour
4. Write an action plan for yourself	Write an action plan for individual needs and student needs. Each action plan is targeted to the specific needs of the teacher and the students. <ul style="list-style-type: none"> • Write an essential question about what you would like to investigate. • Two specific student needs 	1 hour
5. Form action research team.	Each individual reads his/her essential question and two specific student needs. Categorize individuals in groups based on their needs. Each group should have 3–5 participants. End session with whole faculty.	1–2 hours
6. Develop action research team action plans	<ul style="list-style-type: none"> • List the student needs • Use data sources that track current progress (observation checklist, etc.) • For each need, write what data indicate in the current status of the need. • For each need, write what you want data to indicate at the end of the action research team’s work. • After 6–12 weeks of action research teamwork, write what the new data show. 	6–12 study sessions

Source: Murphy and Lick (2005). Copyright 2005 by the Corwin Press.

multiple connections with hyperlinks, and other digital features illustrating the author’s achievement. The staff developer decides to use ePortfolios to facilitate the teacher’s integration of content and to provide a means of evaluating positive teacher beliefs about integrating technology in the classroom. The ePortfolio is used as a tool to watch teacher beliefs change from ineffective technology integration to exemplary technology integration into the classroom matriculate.

The ePortfolio is a reflective tool that is a collection of artifacts; that is, student work samples and teacher planning tools (Cen-

ter for Curriculum and Assessment, 2003). Each artifact in the portfolio contains a description and a reflection by the teacher. EPortfolios are useful because a sample of the student work is analyzed against a rubric to identify student-learning needs and to motivate teachers to integrate technology in the classroom and as a result develop exemplary technology use and support teacher comfort level and positive beliefs about technology use. The rubric is set up in five categories: artifacts and written communication; reflections; use of multimedia, captions, and ease of navigation; layout and text elements; and writing

mechanics. Teachers are able to reflect on student work. Exemplary technology use is discussed by the action research team. Teachers develop a list of technological resources that change the educators' beliefs about using technology in the classroom.

MAJOR STRENGTHS

There are a number of rewards when working in a PLC. The rewards are based on the strength of the group. Teachers give one another support. The action research team meets regularly to plan how to achieve better student achievement. Fogarty and Pete (2007) stated, "For the teachers who are passionate about the work they do, there is no greater joy than to give something back to the profession" (p. 153).

Action research teams are change agents. It is beneficial for teachers to work in PLCs when they are working on lessons that promote student achievement. Teachers are motivated to work in action research teams when they are working toward initiating best practices. Teachers are rewarded with teaching that increases student achievement. Fogarty and Pete (2007) suggested coaches work with teachers and observed, "These practitioners are doing something they love doing, something they cannot imagine not doing" (p. 145). Furthermore, the PLC assists teachers in developing exemplary lessons and changing teachers' belief about best practices.

STRATEGIES TO MINIMIZE RESISTANCE

It is important for the leader in the school to create a comfortable climate. According to Tallerico (2005), teachers will be less reluctant to participate in PD when the climate of the school promotes success. In my own building I am not so sure that the teachers feel as if they are in a climate where they feel appreciated. The principal

in this case should encourage the staff when they are working toward a goal of the school. Also, the principal should offer suggestions when the teacher is struggling to meet the needs of the students or his or her own professional needs and deadlines.

According to Tallerico (2005), the principal should expect to meet some resistance when teachers are asked to change teaching practices. An effective principal will listen closely to all the concerns of the staff and address them individually to assure the teacher why the change is necessary. It is effective practice to demonstrate or to show the staff how the new practice can change student achievement. The best way for the school leader to do this is to point out other professionals in the field who are using the techniques and how the techniques have benefited the staff and the students.

Major obstacles in the school reform effort are (a) lack of agreement on what to do in staff development and how the sessions are designed and (b) what the teachers should do as a result of the staff development. Resistance by the teachers is mainly because teachers feel nervous about change, teachers feel ambiguity about whether the new curricula will increase student achievement, and teachers want to know if the cost for materials to implement the change will come from the teacher or the school budget.

Teachers engage in discussions in their targeted grade-level groups. The staff is able to come to consensus. Inquired costs will come from the Title II budget for PD, and materials of the change will be purchased out of that school budget. Teachers will not have any additional costs to implement the change.

Strategies to minimize resistance are based on Tallerico's (2005) suggestion that teachers who share in leadership, planning, and designing the change effort are enthusiastically involved in decisions about the classrooms. Furthermore, Tallerico suggested PD that presents teachers

with a lead role in designing instructional assists teachers in preparing to implement the change effort. Teacher should have time to collaborate. Teachers who have opportunities to work in action research teams are occupied in a potent form of staff development that allows participants to address issues related to the new content and instructional processes (Killion, 2002).

FIVE LEVELS OF PD EVALUATION

Guskey (as cited in Tallerico, 2005) identified five levels of PD evaluation. The evaluation of the PD is reflective of the implementation and the design of the PD (see Table 3).

The Chronological Sequence for Conducting Evaluation is a tool used to measure the effectiveness of the PD. Teacher reactions, teacher learning, organizational support and change, teacher use of new knowledge and skills, and student learning outcomes are examined in an effort to use the evaluation data in future PD efforts. The participants have time to reflect on the learning of both the teaching staff and the students. The PD facilitator will use the data to design new PD for future action research.

CONCLUSION

Wiburg and Brown (2007) implied that high-quality technology PD is designed to empower with the skills necessary to use technology to foster exemplary learning environments. This paper is most effective in assisting teachers as leaders in developing PLC to form policies to increase student achievement. According to Anderson and Dexter (2000), technology leaders make decisions in a committee. The school with a PLC has strong leadership. Teachers will learn how to effectively integrate technology in the classroom with high-quality PD by working in a PLC. A technology leader can use this report as a model for high-quality PD.

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Table 3. Chronological Sequence for Conducting Evaluation

Level of Evaluation	Details
1. Teacher reactions	Was their time well spent? Did the material make sense? Will it be useful?
2. Teacher learning	Did participants acquire the intended knowledge? Did participants acquire the intended skills?
3. Organizational support and change	Were problems addressed? Were sufficient resources made available?
4. Teacher use of new knowledge and skills	Did participants effectively apply the new knowledge? Did participants effectively apply the new skills?
5. Student learning outcomes	What was the impact on students? Did it affect student performance or achievement?

Source: Adapted from Tallerico (2005).

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