

# I. Introduction to the Problem

## Introduction

As we approach a new century, there is mounting pressure for changes to be made in our nation's schools. In the past decade numerous reports citing the shortcomings of our educational system and suggesting improvements for the system have been released. (e.g., SCANS Report, U. S. Department of Labor, 1991; Goals 2000, National Commission on Teaching & America's Future, 1996) A major emphasis of these reports is on skills that students need to develop in order to become active participants in a changing workplace. The job market that today's students will enter is anticipated to require higher levels of critical thinking and information management than in the past (U. S. Department of Labor, 1991).

Because our world is becoming increasingly complex and the amount of information available to people through the various information channels has grown too large to be learned by any one person; new approaches to teaching and learning have been gaining in popularity. Learner-centered classrooms (McCombs & Whisler, 1997) are being developed with increasing frequency because they offer an approach to meeting the demands of these changes. In the learner-centered classroom, the teacher no longer acts as the provider of all information for the students. Instead her

job is to push student thinking through questioning and planning of appropriate activities; to help students learn to identify and use resources that can help them explore various topics; and to promote a reflective environment in which students look at what they have learned and how they have learned it. The teacher shifts her focus away from simply covering content to a focus that includes a combination of introducing usable content knowledge and providing the students with the opportunity to learn how to learn – thus supporting the development of lifelong learners.

Central to the development of lifelong learning is the development of critical thinking skills as a primary goal for the students. Therefore much of the questioning and reflective activity requires students to learn to think. Simple memorization is not adequate in these classrooms. Instead, students' assignments focus on “Why?” questions – helping students understand not only key concepts, but also develop holistic understandings of how various components of our world are inter-related. These classrooms are the training grounds for the professionals who will meet the challenges outlined in the SCANS report and other reports forecasting workplace needs.

Unfortunately, too often, the students of at-risk school have been the students who suffer most in our educational system. They are less likely to be exposed to

learner-centered environments or even critical thinking skills or workplace preparation than students of well-to-do schools or students who show more academic potential (McBride & Bonnette, 1995). Teachers who work with the academically at-risk traditionally tend to focus on lower-order learning skills, reflecting the belief that the students must master certain information before they can learn to think critically (Levine, 1988). This leaves these students caught in a vicious cycle in which they never learn to use critical thinking or problem-solving skills because they never mastered the “basic information.”

### **Classroom, Inc.**

In response to the shortcomings of schools such as those cited in the various government-funded reports of the late 1980's (e.g., U. S. Department of Labor, 1991), a not-for-profit company was created as a collaboration between Morgan Stanley, Co., IBM, Bear Sterns, the New York City Board of Education, the Federal Reserve Bank of New York, the Mariposa Foundation, and Teachers College with the mission of improving education (Unknown, 1995). Through the development of a suite of workplace simulations, Classroom, Inc. (CRI) has attempted to bring critical thinking to the at-risk classroom (Classroom, Inc., 1998).

Each Classroom, Inc. simulation depicts a workplace and has the students, working in small groups, function as an employee in that workplace. For instance, in one simulation the students act as a bank teller; in another, they act as a hotel manager. The purpose of each simulation is to give students the chance to solve problems such as those found in the real world. Therefore, the teller works with customers who have various problems with their transactions; the hotel manager deals with financial, personnel, and guest relation situations; and the manager of the paper company has to weigh business, community, and environmental factors in making decisions that affect the mill. In every case, the students are provided with materials that emulate employee manuals and other important information. These materials have been simplified, but still provide students with an opportunity to learn how to find and interpret information to make a decision. These are skills needed in the everyday work world (U. S. Dept. of Labor, 1991). These simulations not only allow students to take on a realistic role, but also introduce students to the workplace and the basic skills necessary to be a good employee – skills the students often lack or do not realize are important.

Classroom, Inc. software is only distributed to schools who agree to participate in their training program for at least one year, preferably two or more years. Each teacher who uses the CRI simulations participates in a one-week training

workshop before receiving the simulation for classroom use. These workshops focus on orienting the teachers to the programs they have chosen as well as introducing them to CRI's benchmarks for teachers:

- Teachers acquire the technological knowledge needed to use the simulation productively.
- Teachers develop strategies promoting student collaboration on the simulation.
- Teachers create an environment that encourages students to problem solve productively
- Teachers are familiar with and fully understand the content presented in the simulation, and know how to relate it in a purposeful way to the curriculum they teach. (Classroom, 1999)

Traditionally, during the school year, a CRI staff member is assigned to each school and makes periodic visits to the classrooms to offer suggestions for improving the effectiveness of the simulation in the classroom and who acts as a technology troubleshooter for the teacher. These kinds of interactions with teachers supplement the original training program.

Teachers who have completed the initial one-week training session are periodically invited to participate in further training sessions. These sessions allow teachers to further their knowledge and understanding of individual topics such as problem solving, collaboration, and portfolio assessments. These training sessions are generally held after school and last approximately two hours each. From the CRI

perspective, attendance is desired, but not mandatory and they often cancel workshops due to lack of interest. The one exception to this is the workshops held for “systems initiative” schools. These workshops are generally held at the request of the teachers in the system and, unsurprisingly, have better turnout.<sup>1</sup>

While variations of this professional development approach have been in place for the first five years of Classroom, Inc.'s existence, new initiatives and changes in CRI's distribution have left many questions about teacher training and attainment of CRI's goals. CRI's new initiative for dissemination of their software and teaching philosophy is called the systems initiative. Through this initiative, CRI is changing from school-based adoption to district-wide or statewide adoption of their materials. In the systems schools, the training and support of teachers is the responsibility of a local school employee – in some cases this person is a computer support person, in some cases it is a lead teacher, and in other cases it is a district trainer. CRI staff members are also assigned to the school, but seldom visit individual classrooms; instead, they focus on developing skills through workshops

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<sup>1</sup> The systems initiative brings entire school districts into the CRI program. It includes individual districts, such as District 20 or District 10 in New York or Sioux Falls, SD School District. It also includes statewide adoption, which has been achieved in West Virginia. Because these systems schools include several teachers, it is more feasible for CRI to provide training more specific to those schools' contexts than it is for them to further focus the regular training sessions.

being offered to the teachers. CRI is shifting from teaching teachers how to use the simulations to focusing on the district-based support staff that will be teaching teachers. However, the professional development model to support these changes in the systems is still evolving.

In addition to changes in the training such as offering more customized workshops, the shift to the system schools has changed the characteristics of the teachers becoming involved in the program. Previously, when adoption was teacher-by-teacher or school-by-school, the teachers who came to the training sessions were there by choice — they had found a program that they wanted to use in their own classrooms. Now, with district-wide adoption, the teachers involved may not have any say in the adoption of the program they will be using. In a recent workshop, one school district had sent the district “trainer” and around five teachers, most of whom did not seem to believe in the program or the teaching styles being suggested. Further, they voiced their doubts about the credibility of the CRI staff members leading the workshop (Hawley, 1997a). This kind of audience is potentially a new concern to CRI in their professional development efforts.

## Research Question

Educational improvement is the central focus of this research. In this instance, improvement means creating learner-centered environments. As previously noted, the CRI simulations were designed to be a tool for creating these kinds of environments as much as they were meant to be learning tools for students (Anonymous, 1995). This makes the CRI simulations an interesting nucleus to classroom change efforts.

The focus of this study is to develop an understanding of what kinds of approaches can support teachers as they become more learner-centered (McCombs & Whisler, 1997) while they use CRI simulations. This means helping teachers shift from being didactic providers of knowledge to being facilitators. Teachers no longer know, or need to know, all of the answers. What they need to know is how to support their students' thinking through questions that establish where the student is conceptually and pushing the student forward. Further, teachers need to help guide students to learn how to use these information sources and to interpret the information they are finding. The teacher often must make a philosophical shift from seeing herself as the question-answerer to become the question-asker (e.g., Brooks & Brooks, 1993).

Our previous work showed that CRI's effectiveness in their training efforts has been less than desired (Hawley & Duffy, 1997; Hawley & Duffy, 1998b). Now, there is an added issue of CRI relinquishing the direct teacher contact aspects of their professional development efforts to outsiders because of geographical and practical constraints. This research effort is the first step in examining possible strategies for supporting the teachers' professional development.

Specifically, it was the goal of the research to explore the question: How can teachers be supported in becoming more facilitative and learner-centered as they use CRI simulations? To move toward answering this question, I first developed a framework that combined a series of strategies that had been successful in similar professional development efforts. This framework was centered on reflection and proximal goals developed by the teachers. In support of the reflection and development of the proximal goals, the framework listed a variety of resources. These included participation in a collegial group, reading materials related to the goals of the simulations as well as becoming more facilitative, and feedback on how classes went each day. Next, I focused on an implementation of these strategies to evolve my understanding of professional development. I considered the issues involved with professional development and teacher change in context in order to ensure that my evolving understanding of professional development was realistic and

holistic. This exploration was done through participant observation in which I acted as a researcher and a facilitator introducing the framework of strategies determined to be effective in other, similar efforts.

In addition to implementing the model, other variables that affected the teachers' perceptions and beliefs about learning, their interactions in the classroom, and their goals for their students were also considered. These variables included the school environment, the supportiveness of the administration and coworkers, and the culture of the community within which they teach. It was this whole set of influences — both their existing situations and the introduced as part of this research — that were at the center of this development of understanding.