PURPOSE: The purpose of my Action Research is to establish a peer-to-peer support group within my place of employment [WestEd] that will help to alleviate an overburdened help desk.

PROBLEM/SITUATION: I would like to find a solution to a common problem that occurs in both the business and academia worlds—timely answers to computer-related questions. Many of the larger institutions try to meet this need with internal help desk support. Studies have shown that help desks, in general, are not always the optimal choice for first level support when employees are faced with computer problems or software issues. Even though WestEd has an excellent Information Service department (IS) with capable help desk staff, too often employees cannot readily get the assistance they need in a timely manner. When an employee calls the help desk, often they are not able to get through, are put on hold, or do not get the kind of answers they are seeking. Help desk staff are very competent at handling server outages, compatibility and connectivity issues, installation difficulties and hardware problems. Unfortunately, they are not that knowledgeable when it comes to software solutions that can include: selecting appropriate applications, document preparation, standardized templates, working with functions, editing, formatting, working with images, styles, fonts, etc. Finding the right combination of people, training and technology to maximize the speed and quality of help desk response is a major problem for most institutions. According to research, peer-support networks improve practice. It is my desire to enhance my own job performance and that of my fellow employees by establishing a peer-to-peer support system across various WestEd offices. This will be my primary focus for my action research project.

MISSION/PASSION: I believe, and expect my action research project to confirm, that by inspiring fellow employees to help themselves and each other in a collaborative arena will provide a more positive, productive and rewarding work environment. Strengthening and motivating others to share their knowledge will no doubt benefit me
as well. I will gain understanding and insight into the growing body of exceptional work produced by WestEd’s expansive community of professionals. Within WestEd exists a body of diverse, intelligent individuals with multiple and varied talents and skills. A successful organization is characterized by workers who feel empowered and take ownership and pride in the things they do. Establishing a collaborative environment will inevitably further the organization’s overall mission. It is my belief that this objective aligns with Pepperdine University’s charge of strengthening students for lives of purpose, service and leadership.

RESEARCH QUESTION: My possible research question is — Will establishing a peer-to-peer support group within WestEd be an effective alternative to an overburdened help desk?

BACKGROUND RESEARCH:
Greer et al., at the University of Saskatchewan, developed a prototype system called “PHelpS.” Basically, PHelpS is a very complex, peer-helper network with four very strong elements in its construct, but it is only the fourth element that captured my interest—the “human peer.” One of the strengths (and expense) of the PHelpS system is that peer helpers are automatically selected (via specialized software) based on a volunteer’s willingness, ability and availability to help. Except for the automation of selection, these are the same fundamental essentials that I would like to utilize in a peer-to-peer support group at WestEd. PHelpS requires too much training, is far too costly to operate and would take excessive time to establish. I hope to find an existing system that is much more simplified, less costly and more user friendly.

A study conducted at Southern Cross University in Australia, Group for Accountability and Support (GAS) (Fisher, Bennett-Levy & Irwin, 2003) examined a peer support group constructed within an action research framework. Some of the basic elements of the success of GAS were dependent on a number of factors that could be beneficial in my
action research project. The GAS support group was based on friendship where the participants shared similar values, respect, passions, understanding and commitment. Members of this community believed in the importance of self-reflection with regard to personal and professional development. They had a universal openness to feedback and were prepared to be honest and straightforward with each other. Each pledged a willingness to commit the time required to prepare, meet, document and reflect on the process. The process was most important as it enabled team members to focus on tasks, provide personal support and dedicate quality attention to each other without reservation. This philosophy aligns with not only my own values, but with those of our textbook authors, McNiff and Whitehead, that action research is a “purposeful, morally committed practice.”

An article entitled Peer-to-Peer Adaptive Awareness (Ye, Boies, Huang, Tsotsos, 2001) helped me identify and define which method, or combination of methods, would guide my proposed peer-supported network. The authors offered a wealth of relevant terminology and a valuable concrete understanding of the social aspects of collaboration. Putting a name, “distributed synchronous mode,” to my project was an important step in the process and learning the difference between synchronous mode (activities occur at the same time and in the same place); distributed synchronous mode (activities occur at the same time but in different places); asynchronous mode (activities occur at different times in the same place); and, distributed asynchronous mode (activities occur at different and places) was extremely helpful.

The outcome of a study entitled, The Kindness of Strangers: The Usefulness of Electronic Weak Ties for Technical Advice (Constant, Sproull, Kiesler, 1996) was very encouraging. The researchers provided ways in which the exchange of questions and answers might be effective. The study looked in-depth at a system that had been in place for over six years. The fact that it has been working successfully for a number of years provides stability for a peer-to-peer support system. Tandem Computers
exclusive use of a “second class” email that is broadcast to the entire company differs from my proposed method of interaction. I will not be utilizing WestEd’s email structure as a platform for peer-to-peer networking. My preference is to use innovative, web2.0 tools that I have been using in the OMET program.

Although the researchers offered five theories, they called attention to obvious weaknesses in their hypotheses. Concerns such as, is the information reliable, will strangers be motivated to help, is it cost effective, etc. I have already anticipated and addressed some of these questions in my force field analysis.

After reading, *A Relational View of Information Seeking and Learning in Social Networks* (Borgatti & Cross, 2003), I recognized, almost immediately, that the authors’ study was a near perfect match for my action research project. Borgatti and Cross proposed a formal model of seeking information (from another person) as a function of: 1) knowing what that person knows; 2) valuing what that person knows; and 3) gaining timely access to that person’s thinking.

The idea of “collectively solving complex tasks” implies “having the ability to leverage the expertise of others in an accurate and timely fashion.” The authors indicated that accessibility is a major factor in peer support groups. Someone can be an expert in a specific area, but if they are consistently unavailable to be of assistance—they are useless. The authors also bring up another very valid concern; the ability of the “actor” (person who needs help) to frame the question properly in order to ask for help. Valuable time is lost, and frustration builds, if someone does not know how to ask for help. Another major concern is that of building trust. Admitting that you don’t know something and have to ask for help, or are called on for assistance and cannot provide the correct answer, can be extremely uncomfortable and has the potential to lower self-esteem. With a Bachelor of Arts in Psychology, I can understand how this could be a problem for some individuals.
I share similar concerns with those of the authors. Much of WestEd staff is unavailable due to travel demands, busy schedules, lengthy vacations, doctor appointments, sick leave, etc. In order for this action research project to work, participants have to be available in order to be of help to each other. This equates to having enough people committed to this venture for it to work.

Trust is always an issue in any relationship but can hopefully be resolved with time. Developing sustainable, trustworthy relationships may take weeks, even months to establish. The truth is that everyone in the support group, at some point, will need each other. Gaining the confidence to both ask and answer questions will help foster mutual respect (and trust) for each other.

A Learner Support Model Based on Peer Tutor Selection (Van Rosmalen, Sloep, Kester, Brouns, De Croock, Pannekeet, and Koper, 2008) offered a support model, illustrated in a Venn diagram, “A Learning Network for domain D.” Until this article, I hadn’t thought of my project in terms of how to frame it as a model to better demonstrate my conceptual design. I think this could provide a visual means of understanding my objectives.

One of the potential problems, as indicated by not only these authors but others as well, is that the same handful of altruistic members will be the only contributors. On the other hand, the potential for individuals to abuse the generosity of their peers could also be an issue. Hopefully, repetitive use without reciprocation can be diminished by providing a clear set of guidelines, the proper screening of participants, insuring a wide range of skills, and offering clear incentives for active participation. Another important factor presented in this article is how to determine the optimal number of participants. Researchers contend that a support group should be large enough to guarantee an answer quickly, but small enough to avoid multiple duplications of an answer.
Penuel et al, in *Designing Learning: Cognitive Science Principles for the Innovative Organization*, assert that learners can master a particular domain through “active monitoring.” Active monitoring occurs when “learners have the opportunity to share their knowledge.” The model they propose is “social construction of situated knowledge,” where building understanding in a community-based learning environment is at the heart of the social process. The information in this article was valuable in confirming the use of technology for my support network. These authors were insightful, warning that offering high-ranking managers membership in the support network (at least initially) is not a good idea.

Some of these issues will be resolved over time as participants become comfortable with each other. The concept of *norms of reciprocity* will hopefully provide for an even exchange of sharing knowledge. A suggested “skill-profiling system” will provide a knowledge base of “who knows what” that will aid in understanding to whom a question should be directed.

These resources have helped me understand that there is a possible solution to the problem of obtaining proper help in a timely manner. Just knowing that other people have tried doing something similar with impressive results, gives me confidence that I am on the right path. It is far too demanding to expect the company’s overworked and understaffed help desk to always be available to answer a plethora of questions. It is my contention, that with the wealth of knowledge, experience and expertise of inter-office peers, employees should be able to assist each other and decrease the use of WestEd’s helpdesk.

COMMUNITY OF PRACTICE: My membership/position in the community of practice that I am working in can be described in the following way: I am a Program Coordinator in the Mathematics, Science and Technology program at WestEd. Our department, with over 60 staff stretching from California to Maine, is a growing, vital community
within the WestEd organization. I report directly to Dr. Steven A. Schneider, Senior Director of the MST program who currently manages twelve, multi-million dollar projects.

I will establish the peer support group, and draft the initial criteria for membership and guidelines for participation. In addition, I will also be an active member in the group.

MY ACTIONS (Cycle 1): The first action that I will be taking is to form an advisory committee. The first meeting is tentatively scheduled for mid January 2009. At this first meeting, I will be sharing my proposed peer-to-peer support group action research project, force field analysis, and literature review draft. I have asked the following individuals to be on the advisory panel:

**Dr. Steven A. Schneider**, Senior Director, Mathematics, Science and Technology. Schneider has served as the evaluation chairperson for National Network of Eisenhower Mathematics and Science Consortia and Clearinghouse and also represented the Network on the ED's Mathematics and Science Expert Panels.

**Dr. Edys Quellmalzt**, Director of Technology Enhanced Assessments & Learning Systems at WestEd. Quellmalzt, a national leader in the field of technology supported performance assessment, directs research, development, and evaluation projects related to the designs of technology-based student learning environments and assessments.

**Dr. Cathy Ringstaff**, Senior Research Associate at WestEd with the Math, Science, and Technology program. Ringstaff has worked extensively on evaluations in the areas of science and mathematics and has also worked on numerous projects related to technology use in education.
Dr. Ted Britton, Associate Director, National Center for Improving Science Education. Britton is a Principal Investigator for several major research projects, including an international study of new ways to support beginning mathematics and science teachers, and a national review of curriculum materials in technology education. Britton has authored or edited almost 20 books, reports, and curriculum products and has written more than 30 articles and papers.

ARTIFACTS COLLECTED: After giving my presentation, I will be requesting written opinions/advice/suggestions from the advisory panel regarding the following questions:

1. Does the panel think the peer-to-peer support group (PPSG) is a viable action research project?
2. What strengths and weaknesses do they perceive in my action research project?
3. Is it within WestEd’s policy to use SurveyMonkey to poll WestEd employees to seek feedback and solicit potential volunteers for the PPSG?
4. Should I seek the input from the WestEd help desk management before proceeding with my proposed project?
5. What questions would be appropriate and useful for the survey?
6. Given the literature review synopsis, what criteria should be used to accept (or reject) volunteer members into the PPSG?
7. Should the PPSG be limited to 25 participants?
8. Would the panel support the idea of a pilot study of four to five employees first as a way to measure the effectiveness of a fully operational PPSG?

EVALUATION: I will evaluate the outcomes and reflect on this action by employing the advice of the advisory panel before planning my next action (cycle). I am relying on
their expertise to provide me with the guidance I need to have a successful action research project. I am optimistic that the advisory panel will provide helpful answers to the above questions. Depending on their responses, my next action will be to continue with my project, modify it, or start all over with a new research question.

PLAN (Cycle 2): While the outcomes and my reflections on them may change my plans dramatically, my current thoughts on my second cycle of action are....