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Peer Coaching & Change Implementation

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PEER COACHING

AND

CHANGE IMPLEMENTATION

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The process of change implementation and the measurement of concerns of those involved in change using the C.B.A.M. model have been the topics of many studies conducted during the past two decades. Peer coaching is a relative newcomer, yet has been the focus of several studies. To date, however, comparative information about the change process and its affect on the concerns of teachers involved in peer coaching has not been analyzed.

This study examines and compares the Stages of Concern regarding an innovation of teachers with and without peer coaching partners. After a review of significant research, the paper analyzes the effect peer coaching experience and peer coaching team configurations may have on the Stages of Concern about an innovation, and how development through the Stages of Concern differ between peer coaches and non-peer coaches.

The Stages of Concern Questionnaire was mailed to all current peer coaches and to a randomly chosen sample of teachers not involved in the peer coaching project at Ft.

Knox Community Schools at Ft. Knox, Kentucky. The data was collected and presented in tabular form to analyze the impact of peer coaching on the Stages of Concern regarding the innovation, process writing.

A comparative synopsis of the findings suggest that peer coaching teams may have a tendency to impact the development through the Stages of Concerns. The results were not statistically significant (chi square). No statistical significance was found in comparisons of the effect on the Stages of Concern regarding process writing between first and second year peer coaches and peer coaching team configurations.

It was recommended that further research be made into factors that relate to the peer coaching environment's affect on teachers' concerns while implementing change in schools. Six tables and three pages of references are appended.

CHAPTER I

INTRODUCTION

Since Sputnik, an increased federal and public interest in the improvement of schools has existed. The existence of this interest has correlated with, and, perhaps, caused a myriad of changes to be introduced that affect what American teachers teach and how they teach. Yet, often, very little return has been gained from the investment of time, money, and professional effort.

Historically, a new idea (innovation, technique, curriculum, change) was introduced at the beginning of the year, usually through a workshop. It was implemented in some manner and its effectiveness was measured at the end of the year, usually by a measurement of student achievement. Neither the effectiveness of the original presentation nor how the innovation was being used in the classroom was considered in measuring innovation effectiveness. Most often the innovation was then discarded and replaced with a different one.

Reseachers began to study change and the effect of change from a variety of perspectives (organizational, administrative, teachers', etc.) to explain the total disappearance of so many innovations within the school system.

Principals have a crucial role in successful change implementation (Marsh, 1983), yet may often lack time to be directly involved in supporting and guiding successful

change in their schools (Manasse, 1985). Principals must provide the context or setting for change (Miles, 1983), but others may effectively supply the individualized support teachers need for successful change implementation (Hord, Rutherford, Huling-Austin & Hall, 1987).

Change facilitators may use the formal Concerns-Based Adoption Model (C.B.A.M.) developed by Hall, Wallace and Dossett in 1973 to probe and monitor an individual teacher's level of use of an innovation, a user's concerns, and the configuration of the innovation within the classroom. This data is utilized to plan interventions to meet the needs of individuals, to aid growth from non-user to user, from inappropriate to acceptable use (as defined by the district and/or the publisher or designer of the innovation), and from non concern/self concern through collaboration with others to concern with refocusing change to benefit students.

As teachers become aware of an innovation or change, learn more about it and use it, they develop different, measureable concerns relating to themselves, the task or management of change, or how others are affected by the innovation.

Teachers developmentally progress through seven Stages of Concern as they gain experience with an innovation: awareness--stage 0, informational--stage 1, personal--stage 2, management--stage 3, consequence--stage 4, collaboration--stage 5, and refocusing--stage 6 (Hord,

1981). These Stages of Concern (S.o.C.) will be focused on in this study.

To insure transfer from inservices to classrooms, teachers must receive personalized support. Change facilitators such as principals, outside facilitators, central office staff, and resource teachers may provide the necessary interventions, or peer coaches may be used to provide non-evaluative, cost effective support and assistance to teachers as they learn new skills. Peer coaching teams reinforce each other through the awkward initial learning stages until student achievement can be seen and the new skill becomes self sustaining.

STATEMENT OF THE PROBLEM

Investigation revealed that no research is available that compares peer coaching and its effect on teachers' stages of concern during change implementation.

The peer coaching process is experimental in nature and design, and separate from supervision and evaluation cycles. Peer coaches engage in a continuous study of new innovations related to teaching (Joyce & Showers, 1988). This setting allows and encourages peer coaches to collaborate--the sixth Stage of Concern.

Peer coaching teams, once established, should provide a forum for collaboration and assistance to enable teachers to develop mastery of the innovation--change, skill or

innovation. As peer coaches work together they should increase one another's awareness of the change and share their knowledge about the change (Stages 0 and 1). Their personal or management concerns and the effect the change is having on their students (stages 2, 3 and 4) could easily be topics of conversation team members share as they collaborate and work together on an innovation.

By design, peer coaches are involved in working through self (stages 0, 1 and 2), management and consequence concerns (stages 3 and 4) as they collaborate (stage 5). They should progress to higher stages of concern than teachers not involved in a peer coaching program.

Change implementation can only be accomplished when different needs of teachers are met as they emerge (Loucks & Melle, 1982). Teachers cannot be pushed through the Stages of Concern (S.o.C.). Encouragement, support, and individualized, appropriate interaction that focuses on resolving lower order concerns may allow higher order concerns to predominate (Snyder, 1980).

Because principals may lack time to offer support for change in the classroom themselves and/or the resources to bring in outside facilitators, coaching teams may provide a cost effective way to bring about change in a manner acceptable to teachers and principals.

HYPOTHESES

The major purpose of this study is to determine the affect of peer coaching on change implementation as measured by the Stages of Concern Questionnaire from the Concerns-Based Adoption Model. Three questions are germane to this task:

1. Will greater numbers of peer coaches show further development in Stages of Concern than non-peer coaches, given the same amount of time to institute the change?

2. Will experienced (two year) peer coaches exhibit higher order stages of concern in greater numbers than first year coaches?

3. Will peer coaching team configurations affect Stage of Concern profile results? This includes teams with only first year members, only second year members, or mixed teams with first and second year members.

It is assumed the subjects of the study were aware of the school district's goal mandating a curricular change. It is also assumed that the subjects had the knowledge base to successfully include process writing in the teaching of their grade level or subject area.

The research is expected to reveal that the face-to-face support and collaboration that are the mainstays of peer coaching assist peer coaches as they work through awareness and knowledge concerns (stages 0 and 1). Through comparisons of daily classroom occurances (stage 5), peer coaches may work through personal and classroom management

concerns (stages 2 and 3) and discuss the consequences (stage 4) of the use of an innovation in their classrooms. They may ultimately decide to experiment with an alternative to or a change in the original innovation, the last stage of the Stages of Concern. Therefore, peer coaches should exhibit higher order (stages 4, 5, and 6) stages of concern in greater numbers than teachers without the benefit of a peer coaching partner.

Second year peer coaches are expected to exhibit higher order Stages of Concern than first year peer coaches. It takes time to develop a peer coaching network. Peer coaching can be an innovation itself with its own set of concerns to be worked through by teachers. Experienced teams of peer coaches who have already taken time to develop a working relationship with their partners, should have more time to spend on innovation concerns, as opposed to relationship concerns. Members of experienced peer coaching teams are expected to display higher order stages of concerns with greater frequency than new teams or teams that have new members incorporated into them.

INSTRUMENT DESIGN AND PROCEDURES

A 35-item Stages of Concern questionnaire designed by Hall, George and Rutherford in 1979 is used to gather information on the teachers' end of the year stages of concern about the curricular change, process writing.

The questionnaire, eliciting specific information about concerns regarding process writing, was mailed to twenty-six peer coaches and twenty-six teachers not involved in the peer coaching program. Non-peer coaches were selected from an alphabetical list of all teachers in the Fort Knox, Kentucky, School District.

STATISTICS

Descriptive statistics were cross tabulated manually and from the S.P.S.S. software package. The Chi Square test was also utilized.

BACKGROUND AND LIMITATIONS

The four year old reading program adopted by Ft. Knox Community Schools District in Ft. Knox, Kentucky, includes a requirement for daily written composition. A key objective for school year (S.Y.) 1988-89, as approved by the school board, mandated that all teachers of grades k-12 use content area writing at least once a week. All teachers of grades k-6 and language arts teachers of grades 7-8 had to use process writing on a daily basis. Students were required to complete all five steps of the writing process each week--prewrite, write, revise, proofread and publish--in all subject areas. Two steps of the writing process, proofreading and publishing, determined the year before to be areas of weakness, were highlighted.

Process writing, as defined, was more of an extension of the previous reading program and not a pure, or totally new, innovation. The innovation, process writing, may not be potent enough to elicit the prediction of advanced Stages of Concern for peer coaches.

Ft. Knox's peer coaching program has been in existence for two years. There were eleven, two-person teams formed in nine schools--one high school, two middle schools and six elementary schools--during the first year. The peer coaching project initially focussed on effective teaching techniques, models of teaching, and the development of techniques and strategies for effective peer coaching networks. Peer coaching teams were given structured assignments related to the monthly lesson to work together on in their classrooms.

Nine peer coaches were added the second year while four people dropped out of the program. Some teams remained unchanged. Team memberships varied from one to four members with a variety of configurations of experienced and inexperienced team members.

Peer coaches met as a district group approximately every six weeks; less frequently than the first year. The focus of the meetings was on teaching the adult learner. Peer coaches were not given structured assignments to be fulfilled by collaborative meetings as in the previous year. The possible infrequent collaboration of peer

coaches during the second year may affect the prediction of advanced Stages of Concern for peer coaches.

SUMMARY

The survey was designed to provide insights into the progression of peer coaches versus non-peer coaches along the Stages of Concern. If peer coaching is effective in meeting the concerns of teachers, it may prove to be a cost-effective method to implement change within schools.

An outline for the discussion in this paper is as follows: first, a brief review of change implementation, institutionalization, change facilitators, and the Concerns-Based Adoption Model. Next, based on this background and research conducted, an analysis of some of the major variables involved in change implementation will be compared to peer coaching strategies and techniques.

Finally, case study examples will be presented illustrating the usefulness of peer coaching networks for facilitating change implementation.

CHAPTER II

REVIEW OF THE LITERATURE

The purpose of this chapter is to review the literature related to this study. Peer coaching is the focus of several studies in the 1980's. Though the subjects change implementation and the Concerns-Based Adoption Model (C.B.A.M.) provided many studies in the past two to three decades, there is no research to be found on the effect peer coaching may have on change implementation, specifically on teachers' concerns as measured by the Stages of Concern in the C.B.A.M. model.

This chapter explores the role of principals as change facilitators and the possible need for and effectiveness of others as change facilitators.

Permanence of an innovation must be attended to. The various roles and needs of administrators and teachers to ensure institutionalization will be explored.

Support for change may come from personalized interventions diagnosed by the C.B.A.M. model or from peer coaching partnerships. Research on how both of these strategies relate to teachers' concerns and support for successful change implementation will be presented.

Principals as Instructional Leaders

Effective schools are headed by principals who are regarded as strong instructional leaders (Hord & Hall,

1984; Dagley & Gazda, 1984; Vaughn, 1983). Their judgments of conditions required for effective instruction are the basis of decisions affecting scheduling, experimentation, observation, evaluation, discipline and behavioral policies in a school (Manasse, 1985).

Effective principals plan and support change and monitor teachers' activities (Hord, Rutherford, Huling-Austin & Hall, 1987). They have a significant impact on the implementation and continuation of an innovation (Marsh, 1983). From an organizational perspective, during change implementation the principal must clarify communication, establish goals, detect and work to solve conflicts, improve group procedures in meetings, solve problems, make decisions, and assess change (Hord, Rutherford, Huling-Austin & Hall, 1987; Rutherford, Hord, Huling & Hall, 1983).

The principal is the single most influential person for facilitating successful improvement or change within a school (Aquila & Galovic, 1988; Rutherford, Hord, Huling & Hall, 1983).

Other Responsibilities of Principals

Overseeing change or instruction is not the only responsibility of principals. They must manage the physical plant and ensure the safety of school occupants.

They also make resource allocations and management decisions relating to personnel and community relations.

Principals spend 80% of their day in face to face interchanges, 8% on the telephone and 12% on desk work. A principal's day can consist of anywhere from 50-100, up to 400, separate events or interactions which are often uninitiated and of short duration (Manasse, 1985).

Although principals are designated instructional leaders, much of their time is occupied with organizational management. Their day includes dealing with multiple plan changes and unplanned events to meet the spontaneous needs of others in the organization.

Traditional Change

Traditionally, teacher support during implementation of an innovation or change was usually limited to presenting new techniques or a new program in a short workshop format and providing the teaching materials and required resources for the innovation or change (Parish & Aquila, 1983). Help was offered by the principal or central office personnel only when a teacher requested it. Infrequent "pop in" visits were used to check on progress. More than one innovation was often introduced at a time. Research shows that people, including teachers, cannot effectively implement multiple or closely spaced innovations, especially if they are complex (Rutherford, 1986).

In the past, innovations disappeared or diminished in importance as other innovations were introduced. Some teachers became reluctant to take change too seriously or become deeply involved. Other teachers saw no reason to change since their instructional programs seemed successful (Rutherford, Hord, Huling & Hall, 1983). Though some teachers seem to resist change, the desire for approval and the need for personal accomplishment are strong human drives. Humans seek change but resist a material or personal loss (Aquila & Galovic, 1988).

Any success of change implementation in the past may have been due to the informal networks teachers formed (Parish & Aquila, 1983).

Teachers and Change

Teacher commitment and personal involvement correlated highly with outcomes in school improvement (Crandall, 1983).

Teachers usually represent a vital link in the change process. If they fail to use an innovation or if they use it poorly then no productive outcomes will result (Rutherford, 1986). Innovations can lose effectiveness because they are changed beyond recognition (Crandall, 1983). Some teachers, superficially appearing to use an innovation, either modified or routinized the innovation, or used it minimally or not at all (Rutherford, 1986).

Teachers view changes in terms of consequences for themselves. If they view an innovation as practical and of potential value, they are more likely to become involved with using it (Rutherford, 1986).

Teachers are more likely to be recipients than initiators of changes that impact their own classrooms (Rutherford, 1986). When teachers' responses to five factors of change--the source of the change, required or optional change, requirements for effective and appropriate use, degree of change (major or minor), and the target of the change (the individual teacher, curriculum etc.)--were compared, teachers reacted most strongly to the source of change. Teachers were found to respond more positively to bottoms up change (87%) as compared to top down change (52%), but top down was not necessarily viewed negatively by teachers (Rutherford, 1986).

Several authors in treatises on change stressed the desire of teachers to overcome a lack of sense of ownership and have a leading role in the change process (Casner-Lotto, 1980; Futrell, 1985; Rallis & Highsmith, 1986; Shanker, 1985). A 1978 contingency model of change assumed that followers would be more motivated to implement a change if they felt they were instrumental in making it (Rutherford, Hord, Huling & Hall, 1983).

There is some evidence that teachers will more eagerly participate in change if they are actively involved in the development or selection of the innovation, but it is not

possible to develop widespread ownership of innovation (bottoms up) that is oriented to an entire district or large school. Intensive involvement in innovation development does not ensure ownership and is time consuming (Rutherford, 1986).

While Purkey and Smith (Crandall, 1983) also suggest the need for teachers to be involved in problem solving and decision making and in developing new materials and strategies, they emphasize the importance of leadership, training and support. They suggest that change will not take place without the support and commitment of teachers. They found the development of teacher commitment to be a cyclic process; that commitment or a sense of ownership to an innovation or a change comes only after implementation, experimentation, and practice mastery that is followed by observable student results. Positive results reinforce the teacher's efforts and create a self-sustaining cycle.

Institutionalization

A change is not successfully implemented unless it gains permanence over time. Change implementation creates a feeling of discomfort, ineffectiveness, and stress that must give way over time to acceptance of the change and a feeling of ownership and mastery. If the change implementer is rewarded by positive student results, the change or innovation can then gain permanance and become institutionalized; the innovation becomes a part of the

classroom routine. To get to this point administrators and teachers fulfill different roles and needs.

Administrators' Role in Institutionalization

A research-based model of institutionalization that includes positive supports for institutionalization and an essential defense against potential threats to the durability of the innovation was developed by Miles (1983). He emphasizes the necessity of administrative commitment for institutionalization to occur. This commitment leads to administrative pressure on teachers to use the innovation and administrative support, which may be in the form of assistance to the innovation users. The assistance and administrative pressure combine to increase the innovation users' effort. Increased user commitment to the innovation followed from a combination of effort and increased technical mastery of the innovation. As teachers gained and felt increased commitment to the innovation, use of the innovation stabilized.

If administrators mandate the use of the innovation the percentage of staff using the innovation increases which encourages institutionalization (Miles, 1983; Rutherford, Hord, Huling & Hall, 1983). But assistance to users is crucial for institutionalization to occur, whether the innovation is mandated by administrators or not.

Assistance serves to increase practiced mastery and, subsequently, teachers' commitment.

Thus, in Miles' model, administrative commitment begins a chain of events which leads to institutionalization. But this positive support must be coupled with the warding off of threats to the institution such as staff turnovers, equipment loss, and budget cuts (Loucks & Zacchei, 1983; Miles, 1983; Rutherford, Hord, Huling & Hall, 1983). Administrators must ensure that the new practice gets included in training cycles, job descriptions, regulations, and budgetary cycles.

Institutionalization From the Teachers' Perspective

From the teacher's perspective, Loucks and Zacchei (1983) require a well defined, effective innovation with continuous assistance from a variety of people and clear direction from administrators. Attention must be given to institutionalization by ensuring transfer from training situations to the classroom. A skill or technique may be learned in a workshop yet not be successfully included in the classroom routine. Few people automatically transfer newly mastered skills into their teaching repertoire (Joyce & Showers, 1982). Peer coaching, which will be discussed in a later section, provides a structure for a follow-up to training that assists in transferring new skills or strategies to the classroom.

Joyce and Weil (1986) share five strategies that may be included in training programs to increase the probability of successful transfer from the workshop to the classroom:

1) Teachers must be taught about the transfer process. Experimenting with and learning a new technique causes discomfort, a feeling of loss of control and ineffectiveness. Teachers must accept the challenge of working through those feelings while practicing and gaining mastery of a new skill.

2) A very high degree of skill must be developed during training, before classroom practice. New teaching strategies may take fifteen to twenty demonstrations and twelve or more opportunities to practice a skill in a controlled or safe setting, such as peer teaching, before a teacher may be ready to try the new skill on students in the classroom.

3) Teachers must gain a deep understanding of how the new skill works, how it can fit in to their instructional repertoire, and how the skill may be adopted to students. This allows for adaptation with different types of students. Discussions with experts and fellow teachers exploring the new technique may help accomplish this goal.

4) Classroom practice must follow immediately after a new skill has been learned to prevent loss of or knowledge about the skill. Teachers must not avoid practicing even though they may feel uncomfortable with the new skill.

Joyce and Weil (1986) estimate that it takes fifteen trials in the classroom before a new strategy feels as comfortable as one already established in a teacher's instructional repertoire.

5) Coaching during practice in the classroom is essential for transfer to be achieved.

Coaching provides companionship and support to reduce feelings of inadequacies in the early trials of skill acquisition. Teachers receive support as they learn a new skill and implement it in the classroom. Once teachers observe a positive effect on students, continued use of the skill, and a sense of efficacy and ownership in the change results (Joyce & Showers, 1988).

Teachers, Administrators and Institutionalization

Teacher/administrator harmony was found to be critical for successful institutionalization (Miles, 1983). Administrative support and help to stabilize innovations were needed but teacher mastery and commitment were equally important. The organizational changes provide the setting but teachers need the opportunity to discuss the implementation of change and receive feedback and reinforcement.

Howes' findings (Miles, 1983) stress the importance of a supportive informal network, open detailed communication, cordination of efforts and technical supports.

Aquila and Galovic (1988) encourage principals to work with teachers to establish a climate conducive to change. Structural change, as opposed to superficial change, is a risk-taking event and may cause fear in both administrators and teachers. The school climate must be developed to encourage and support change. Principals must individualize change efforts, check for understanding, be supportive, and provide for individual differences such as age, health, energy levels, motivation, educational background and personal experience.

Wolf (1981) and Mickler (1981) describe inservice training based on individual needs. Both stress allowing time for change, and including follow-up to training in which participant feedback is used to design interventions.

Hord, Huling and Stiegelbauer (1983) found that schools that were more successful in implementation of change balanced materials and training with interventions directed to consultation, reinforcement and problem solving. They noted that changing teacher responses over the year were indicative of reactions to both the innovation and the actions taken by the facilitator. Principals must be adaptive to the differing needs of different teachers and to their changing needs over time. Principals must know their audience and consider individual and group factors.

One method principals may use to probe and monitor teachers' concerns or needs over time is use of the Stages

of Concern (S.o.C.) Questionnaire developed by Hall, George and Rutherford in 1977. It is a psychometric device developed as part of the Concerns-Based Adoption Model (C.B.A.M.). The next section describes the development of C.B.A.M. and how the model can be used to meet individual needs of teachers involved with change implementation.

Development of a Concerns-Based Adoption Model

How a change is implemented and the reactions of the people involved have gained importance over the years (Pelland & Huling-Austin, 1985). The need to personalize interventions is being recognized. There has been a move to view educational change as first done with people and then with organizations and innovations.

This shift in thinking began with Frances Fuller in 1969 (Pelland & Huling-Austin, 1985). Fuller found levels of concern that teachers in training expressed at different points in their teacher education program.

Concerns are the motivations, attitudes, feelings, perceptions, thoughts and reactions an individual has, related to an innovation or some new idea, program, process, or practice, which affects and, thus, becomes part of the change process (Hall, 1978).

Initially, the preservice teachers expressed concerns unrelated to teaching (I hope I get a ticket to the rock concert.), then progressed to concerns about self in relation to teaching (Can I do this?) to task concerns

about teaching (I have to work all night to prepare the next day's lessons.) to impact concerns (What will the effect be on my students?) (Pelland & Huling-Austin, 1985).

Application of Fuller's concept of concerns was made to educators as they were involved in implementing various educational innovations (Hall, 1978). An individual's concern about an innovation paralleled Fuller's three categories of concerns: self, task and impact.

In the 1970's research on the process of change isolated four factors found to exist during implementation of various curriculum projects, that were seen as responsible for ineffective implementation (Marsh, 1983):

1) Change was conceptualized as a single unique event to be accomplished by edict. It was not a developmental process.
2) On-going, focussed, people-based support was absent or infrequently provided during implementation.
3) The importance of the effect of school climate and system on implementation was ignored or down-played.
4) The nature, scope, and expectations of innovations were frequently unclear.

Each of these factors, significantly impacting upon effective implementation, was addressed by the Research on Improvement Process (R.I.P.) program staff at the Research and Development Center for Teacher Education at the

University of Texas at Austin (Stiegelbauer, Muscella & Rutherford, 1986). They directed their efforts to understanding the process of implementing improvements in schools. This research began with building a knowledge base and an understanding of the change process. It then expanded to include tools and assistance for change makers in schools.

Hall, Wallace and Dosset formulated the Concerns-Based Adoption Model (C.B.A.M.) in 1973 after extensive research on implementation of educational innovations in schools and college settings (Marsh, 1983). Diagnoses of user concerns about an innovation, user behaviors involved in change, and a clear, detailed definition of the innovation being implemented are used in the model by change facilitators to design staff development that will facilitate implementation.

Assummptions of the C.B.A.M. Model

Underlying the C.B.A.M. model are several research-based assumptions (Hord, 1981; Hord & Hall, 1984; Marsh, 1983; Stiegelbauer, Muscella & Rutherford, 1986):

1) Change in schools is a process, not an event. It occurs over time and requires personal effort and resources to support it.

There is a gradual change in behavior or attitude regarding a new innovation. Individuals involved in change

developmentally progress through stages in their perceptions and concerns about an innovation, as well as in their skill and sophistication in using the innovation.

Short and long range, planned learning activities need to be paced in response to the changing concerns of the individuals involved. Consideration of the complexity of change, the amount of support, the skill of the individual, and the characteristics and conditions of the user system may affect the time line (Hall, 1977).

2) The individual needs to be the primary focus of interventions for change (Joyce & Showers, 1982). Other change models (such as organizational development) view the institution as the primary focus of intervention techniques, such as improving communications and organizational norms and behaviors.

C.B.A.M.'s emphasis on the interaction between change facilitator and teacher rests on the belief that institutions cannot change until the individuals within them change.

3) Change is a highly personal experience. Since change is brought about by individuals, their personal concerns, frustrations, perceptions and motivations affect the success or failure of change implementation. Each individual reacts uniquely to a new program or practice, individuals change at different rates and in different ways.

C.B.A.M. emphasizes the need to focus on the individual for diagnosis and assistance, and diminishes the importance of organizational or technical support for the innovation. In addition to considerations of implementing the change, the feelings and skills of the teachers need to be considered when designing interventions to support the process of change. In this model, change must be related to people first and then to programs or procedures.

4) Individuals experience indentifiable stages and levels of the change process. As an innovation or a change is implemented, an individual, the change implementer, developmentally grows in skills and concerns.

5) A detailed description of the innovation as it appears when operational is necessary. Teachers are often expected to implement a process (such as team teaching) or a product (such as a new science text) without knowing what the innovation looks like when fully operational. Variations of an innovation may exist. Change facilitators must define the innovation and what variations, if any, are allowed.

6) Change can best be facilitated when interventions are targeted to the diagnosed concerns, behaviors or needs of the individual involved in the change process. C.B.A.M. is a client centered, diagnostic/prescriptive model. To ensure delivery of relevant and supportive inservice training, change facilitators need to diagnose and adapt

interventions to the differing needs of individual teachers and to their changing needs over time.

7) Staff developers as change facilitators need to work in an adaptive yet systematic way. They must constantly assess and reassess the progress of individuals during the change while maintaining awareness of the larger context of the total organization. Change facilitators must adapt their interventions to meet and balance the needs of the larger system or innovation and the needs of the individuals implementing the change.

To summarize, the C.B.A.M. model emphasizes that change implementation takes time. Although it is important for the innovation to be defined and presented clearly, the individuals implementing the change must be the primary focus. Change facilitators must continually evaluate progress by probing and diagnosing the user group. Interventions and interactions, based on developmentally changing behaviors and affective reactions to the innovation and to the change facilitator's interventions, are then planned. The larger organization must support the change and the people-based support.

Concerns-Based Adoption Model (C.B.A.M.)

The Concerns-Based Adoption Model consists of three interactive systems: a user system, a resource system and a change facilitator system (Marsh, 1983).

The user system is probed by the change facilitator system to determine and monitor an individual's level of concern toward the innovation and the innovation's level of use, and its variations. The facilitator system then links the user system with a resource system to provide individualized, prescribed assistance. The resource system provides change facilitators with ideas and options for planned interventions.

The C.B.A.M. model was designed to focus on one innovation at a time and to structure quantifying information about the change process by monitoring user's attitudes, the variations of an innovation, and the level of use. This information is then used to encourage the change process (Marsh, 1983; Stiegelbauer, Muscella & Rutherford, 1986).

Three field-tested tools were developed for staff developers to use for planning, facilitating, monitoring and evaluating change in schools: Stages of Concern (S.o.C.), Level of Use (L.o.U.), and Innovation Configuration (I.C.). Each tool provides continuous, changing information to the change facilitators so they can better plan their actions, diagnose, and monitor progress. Information gathered through probing continuously changes in response to the innovation and facilitator interventions. The facilitator uses the information to design interventions to meet the needs of the individual

and promote a positive response to the change by the user group.

The attitudes of innovation users as measured by the Stages of Concern (S.o.C.) Questionnaire is of concern in this study and deserves an indepth discussion.

Stages of Concern

"Stages of Concern" describes the types of concerns an individual has across time relative to an innovation (Hord, 1981). Hall and Rutherford's Stages of Concern, developed in 1976, range from unrelated concerns (Stage 0) to self concerns (stages 1 and 2) to task concerns (stage 3) to impact concerns (stages 4, 5, 6) (Hord, Rutherford, Huling-Austin & Hall, 1987; Marsh, 1983). They support Fuller's findings of a developmental progression from self to task to impact.

Stage		Typical Comments
0	Awareness	I don't know about this innovation.
1	Informational	Tell me about the innovation and how it works.
2	Personal	How will I be affected by this innovation?
3	Management	What can I do to make this innovation work?
4	Consequence	How are my students affected by this innovation?
5	Collaboration	I need to talk to others about this innovation.
6	Refocusing	I have some ideas about changes or substitutions that might improve or be better than this innovation.

Teachers who are non users of the innovation are more concerned than users about learning about the innovation (stage one) or how using the innovation will affect them personally (stage 2). As use of innovation increases, management concerns (stage 3) strengthen. When teachers become experienced and skilled with an innovation, concerns at stages 0, 1, 2, 3 decrease while stages 4, 5, 6 become most intense (Hord, 1981).

The concentration of concerns at a particular stage over time varies (Eastcott & Hall, 1980; Hord, 1981). Teachers seldom have concerns at only one stage but tend to have more intense concerns at one of the stages depending on knowledge of the innovation, past experience with change, and status as a user or non user. These concerns will predominate the individual's perception of the change process.

Change in concerns is not accomplished quickly. Change involves dealing with stress. Individuals can become fixated or regress in a stage. In a study of teaming it took three years to decrease management concerns to less than the fiftieth percentile (Eastcott & Hall, 1980).

Change facilitators have concerns, too. They must be careful to design interventions to match their clients' and not their own stage of concern (Aquila & Galovic, 1988; Eastcott & Hall, 1980).

Assessment of Stages of Concern (S.o.C.)

There are several ways to assess concerns (Hord, 1981). An informal one-to-one interview provides change facilitors with a quick, though rough, view of the stage of concern of each individual interviewed. A brief conversation (How are you feeling about...(the innovation)?) may effectively elicit the concerns of the individual. A limitation of this method is the time required for its use.

Another informal method to find out teachers' concerns is the Open-ended Statement of Concern About an Innovation developed by Newlove and Hall in 1976 (Hord, 1981). Complete statements are written to answer a question such as...When you think about (the innovation), what are you concerned about?

Sentences are evaluated and scored separately to form a profile of stages of concerns of the individual toward the innovation. Though relatively informal, this method and the following formal one were found to be valid and reliable (Marsh, 1983). A manual for assessing Open-ended Statements of Concern About an Innovation provides more information about interpreting concerns statements (Marsh, 1983).

A third process for assessing concerns is the use of the more formal Stage of Concern About the Innovation Questionnaire developed by Hall, George and Rutherford in 1977. Individuals respond by indicating their degree of

concern on a Likert scale for each of the thirty-five items. Scoring these data by computer program, or manually, results in percentile scores and a profile of concerns for the individual or for groups. It may be used to monitor an individual's growth or to generate a concerns profile for a group (Hord, Rutherford, Huling-Austin & Hall, 1987; Marsh, 1983). This paper and pencil measure is especially important for research and program evaluation.

All three methods allow principals to diagnose and plan interventions to meet individual concerns.

Principals and a Concerns-Based Approach

Using C.B.A.M. allows principals to personalize change facilitation by structuring interventions to meet the needs of individuals and promote a positive response to the change by the user group (Hall, 1978). Teachers are treated as individuals essential to the success of the change process.

Although principals are needed to sanction and support the change effort (Hord, Rutherford, Huling-Austin & Hall, 1987), they do not often have time to individually assist each teacher in implementing a change. Consider, too, the disparity in research on the effect of a direct or indirect emphasis of the role of the principal in supervising teachers in the classroom. Principals who promote attainment of educational goals, who give support and

resources, and who monitor the outcomes of instructional programs are appreciated by teachers. Closely supervising the techniques of teaching may not be as popular (Manasse, 1985).

Principals who focus on helping individual teachers affected teacher/classroom level outcomes. Teachers mastered the innovation as it was designed, and felt the value of the innovation. School-level outcomes such as changes in the school and, indirectly, institutionalization of the change were found when principals focussed on leadership and guiding the general direction of change (Cox, 1983).

These findings suggest school improvement needs support at two levels: 1) assistance directed at teachers implementing the innovation provided by change facilitators, and 2) resources, facilities, approval, and personnel to ensure continuation and institutionalization of the innovation. The last is best provided by the principal; the first may be fulfilled by others with the support and sanction of the principal.

Other Change Facilitators

Hall and Hord found that the principal's most important role in successful change was to continually sanction the change and support for teachers (Hord, Rutherford, Huling-Austin & Hall, 1987). Principals also need to provide resources, approve adaptations and take

care of external communication. In these four areas no other change facilitator was as effective as the principal.

The entire responsibility of the role of change facilitator does not have to rest with the principal (Hord, Rutherford, Huling-Austin, Hall, 1987). Change facilitators may be from a variety of levels and sources: administrators, principals, assistant principals, resource teachers, grade level or department chairpersons, external facilitators and classroom teachers.

Other change facilitators were as effective as principals in monitoring and pushing. These secondary change facilitators were more effective than principals in roles of providing technical coaching and reinforcement to teachers. External change facilitators were most effective providing training.

Efforts to actually work through the specifics of using the practice in the classroom was found to be the most helpful activity for teachers (Cox, 1983). The amount of help teachers received in actually implementing a change in classroom practice impacted on the amount of change that occurred, as well as, the level of mastery and commitment teachers developed. Teachers receiving assistance also perceived increased benefits from the new practice.

Though the principal must complete certain functions for successful change implementation, other people may assist the process by working to encourage, remediate or

enrich teacher understanding of the use of an innovation or change.

Peer Coaching

To promote transfer from a workshop to the classroom, inservice training must include study of the new skill or innovation and its rationale, demonstration, practice in a controlled setting, and instruction on how to give feedback to others to foster a high degree of skill development. Skill is increased through practice compared to expert models, analysis of the variations of a strategy, and application of the skill in the classroom (Joyce & Showers, 1988). Coaching provides the context for comparisons, analysis, and practice with support.

Administrators, curriculum supervisors, or college professors may be effective coaches, but, because of their shared experiences and close proximity, teachers are in an excellent position to do most of the necessary coaching.

Cox, Crandall, and Loucks (Joyce & Showers, 1988) promote teacher networks through teaming, demonstrating, coaching and similar techniques. They describe a support system that requires a variety of supportive people and time for teachers to practice and gain mastery. The amount of practice required to master a new skill varies with the complexity of the skill. To bring a model of teaching of medium complexity to the point of teacher control requires

20-25 trials in a classroom over an eight to ten week period (Joyce & Showers, 1988).

Teachers need support through the change cycle to the point where they are rewarded by observable growth in students which then reinforces the continued use of a skill and promotes a sense of efficacy and ownership in the change (Joyce & Showers, 1988).

Peer coaching's major purpose is to provide a structure for the follow-up to training that is essential for the acquisition of new teaching skills and strategies. Teachers benefit from assistance, discussions about optional uses of a new skill, the provision of ideas and feedback, troubleshooting, and encouragement to continue their efforts until the effect on students reinforces the change process and the process sustains itself.

Teachers must install innovations and adapt them to fit personal and student needs. Personal concerns can be resolved when teachers provide asistance to each other by observations, problem solving meetings, and arranged opportunities to give and receive advice and support (Joyce & Showers, 1982; Marsh & Jordon-Marsh, 1985).

Coaching provides companionship and support to reduce feelings of inadequacies in the early trials of a new skill. Skill expertise develops with modeling, technical feedback and the assistance in analyzing adaptations of the skill (Joyce & Showers, 1988). Peer coaches learn by

watching the demonstrations rather than by criticizing another's behavior or performance.

Coached teachers generally practice new strategies more frequently and will develop greater skill than non coached teachers (Joyce & Showers, 1988). Coached teachers exhibited greater long term retention of knowledge about a strategy (Joyce & Showers, 1988).

The ability to master an even greater range of skills and strategies is increased as teachers develop more and more skills (Joyce & Showers, 1988). Coaching helps teachers learn how to learn. Teachers, who have received training as peer coaches, know that a new skill will cause greater discomfort than a skill that is similar to one in their existing repertoire. They realize that they must work through the uncomfortable beginning stage and give themselves time to learn (Joyce & Showers, 1988).

Joyce and Showers (1982) recommend creating a coaching environment where teachers regularly observe one another and consider one another as peer coaches. This would create a self-fueling environment for the continual assessment and improvement of teaching strategies and skills, and the support necessary for successful change implementation.

CHAPTER III

METHODS AND PROCEDURES

Setting and Subjects

The study was conducted in nine schools--six elementary schools, two middle schools and one high school--at Ft. Knox, Kentucky. The study population consisted of twenty-six teachers involved in a peer coaching project. Seventeen teachers were second year peer coaches. Nine teachers were finishing their first year with the project. A group of twenty-six teachers not involved in the peer coaching project was randomly selected from an alphabetized list of currently employed teachers in the school district.

The Innovation

Proofreading and publishing had been identified by teachers and administrators the previous year as areas of weakness in the district. The Ft. Knox School District initiated an innovation which focussed on process writing. It is a sequential, five step approach to writing--prewriting, writing, revising, proofreading and publishing. This innovation was reflected in a key objective statement for S.Y. 1988-89 (as approved by the school board): "...All teachers k-12 use content area writing at least once a week; all teachers k-6, and language arts 7-8, use process writing on a daily basis."

Design of the Survey Instrument and Study

The Stages of Concern (S.o.C.) Questionnaire was used to collect data on the concerns of peer coaches and teachers not involved in the peer coaching program regarding the innovation, process writing. It is a research-based, thirty-five item, psychometric instrument developed by Hall, George and Rutherford, copyrighted in 1974 (Hord, Rutherford, Huling-Austin & Hall, 1987).

The project measured teachers' concerns relative to the innovation, process writing, once, at the end of the year. The project design allowed for the comparison of the measurements of concerns toward the innovation of peer coaches and non-peer coaches. Both groups were introduced to the innovation at the beginning of the school year.

Data Collection Procedure

All procedures and the instrument used in the collection of the Stages of Concerns were prescribed by the 1974 Concerns-Based Adoption Model (C.B.A.M.) project of the Research and Development Center for Teacher Education at the University of Texas at Austin (Hord, Rutherford, Huling-Austin & Hall, 1987).

The questionnaire was mailed to twenty-six peer coaches and twenty-six teachers not involved in the peer coaching project. The questionnaire was administered in

May at the end of the first school year involving the innovation, process writing.

Completed surveys were analyzed manually. Peak S.o.C. scores were chosen for comparison since S.o.C. profile interpretations are based heavily upon the definition of the stage with the highest score (Hord, Rutherford, Huling-Austin & Hall, 1987). Lower scores may account for some concerns of the respondent, but must be within twenty percentile points of the peak score to account for many of a respondent's intense concerns.

Limitations

Due to the type and the nature of this study, it was limited in several ways. First, the survey was designed and sent only to teachers (peer coaches and non-peer coaches) at Ft. Knox Community Schools, one district in Kentucky. Second, how the district reacted to previous adoptions of innovations had not been examined. Third, the peer coaching and non-peer coaching groups were not matched. Non-peer coaches were randomly chosen from an alphabetical list of all teachers in the district. Fourth, the S.o.C. Questionnaire was designed and validated for interval use to show a comparison of concerns over time. This study used the questionnaire to provide an end of the year snapshot of a teacher's concerns. Fifth, there was an eighty-eight percent response ratio to this survey. Sixth, four questionnaires were unusable due to such errors as

omissions in the data. Seventh, the results can be shared only on the assumption that the questions were answered honestly.

Despite these acknowledged limitations, the results are considered an accurate measure of these teachers' end of the year Stages of Concern regarding process writing. Since the sample size is small (N = 42) and from only one district, the results are intended as indications deserving more study.

CHAPTER IV

FINDINGS AND DATA ANALYSIS

Introduction

The findings of the S.o.C. Questionnaire were summarized in the following tables. Forty-two usable questionnaires were returned, including twenty-one from peer coaches and twenty-one from teachers not involved with the peer coaching program. Because of the small sample size (N = 42) and narrow parameters (one school district), the results are intended as indications deserving more study.

Methodology

The information from the study is presented in tabular form to make the information easier to read and to analyze. Comparisons of the peak Stages of Concern for peer coaches and non-peer coaches, first year and second year peer coaches, and their peer coaching teams' configurations are displayed. The frequency of response and the computed percentages for each category is presented.

Findings

The following tables summarize the findings of this study:

TABLE I

Frequency and Percentage of Peer Coaches
and Non-Peer Coaches with Peak Scores
at Each Stage of Concern (S.o.C.)

Peer Coaches			Non-Peer Coaches		
Stage	N	Percent	Stage	N	Percent
0	5	23.81%	0	8	38.10%
1	1	4.76%	1	2	9.52%
2	3	14.29%	2	3	14.29%
3	2	9.52%	3	3	14.29%
4	3	14.29%	4	2	9.52%
5	4	19.05%	5	0	0.00%
6	2	9.52%	6	2	9.52%
tie--stages 1, 2 & 3	1	4.76%	tie--stages 0 & 1	1	4.76%
Total	21	100.00%	Total	21	100.00%

TABLE II

Frequency and Percentage of Peer Coaches and Non-Peer Coaches with Peak Scores at Each of Fuller's Stages of Concern*

Peer Coaches			Non-Peer Coaches		
Stage	**N**	**Percent**	**Stage**	**N**	**Percent**
self	9	42.86%	self	14	66.67%
task	2	9.52%	task	3	14.29%
impact	9	42.86%	impact	4	19.05%
tie--self & impact	1	4.76%			
Total	21	100.00%	Total	21	100.00%

*
Fuller's stages of concerns:
self = (S.o.C.) stages 0, 1 and 2
task = (S.o.C.) stage 3
impact = (S.o.C.) stages 4, 5 and 6

TABLE III

Frequency and Percentage of Peer Coaches with Peak Scores at Each Stage of Concern (S.o.C.) According to Team Configuration

	First Year Members Only		First and Second Year Members--Mixed		Second Year Members Only	
Stage	N	Percent	N	Percent	N	Percent
0	0	0.00%	3	25.00%	2	33.33%
1	0	0.00%	1	8.33%	0	0.00%
2	0	0.00%	2	16.67%	2	33.33%
3	0	0.00%	2	16.67%	0	0.00%
4	0	0.00%	1	8.33%	1	16.67%
5	2	100.00%	1	8.33%	1	16.67%
6	0	0.00%	2	16.67%	0	0.00%
Totals *	2	100.00%	12	100.00%	6	100.00%

* N = 20 peer coaches for this computation. One form was improperly filled out and had to be removed.

TABLE IV

Frequency and Percentage of Peer Coaches with Peak Scores at Each of Fuller's Stages of Concern* According to Team Configuration

	First Year Members Only		First and Second Year Members--Mixed		Second Year Members Only	
Stage	**N**	**Percent**	**N**	**Percent**	**N**	**Percent**
self	0	0.00%	6	50.00%	4	66.67%
task	0	0.00%	2	16.67%	0	0.00%
impact	2	100.00%	4	33.33%	2	33.33%
Totals **	**2**	**100.00%**	**12**	**100.00%**	**6**	**100.00%**

*
Fuller's stages of concerns:
self = (S.o.C.) stages 0, 1 and 2
task = (S.o.C.) stage 3
impact = (S.o.C.) stages 4, 5 and 6

**
N = 20 peer coaches for this computation. One form was improperly filled out and had to be removed.

TABLE V

Frequency and Percentage of Peer Coaches with Peak Scores at Each Stage of Concern (S.o.C.) According to Years of Experience as a Peer Coach

	First Year Peer Coaches		Second Year Peer Coaches	
Stage	N	Percent	N	Percent
0	2	28.57%	3	23.08%
1	0	0.00%	1	7.70%
2	1	14.29%	2	15.38%
3	1	14.29%	1	7.70%
4	1	14.29%	2	15.38%
5	2	28.57%	2	15.38%
6	0	0.00%	2	15.38%
Totals *	7	100.01%	13	100.00%

* N = 20 peer coaches for this computation. One form was improperly filled out and had to be removed.

TABLE VI

Frequency and Percentage of Peer Coaches with Peak Scores at Each of Fuller's Stages of Concern* According to Years of Experience as a Peer Coach

	First Year Peer Coaches		Second Year Peer Coaches	
Stage	**N**	**Percent**	**N**	**Percent**
self	3	42.86%	6	46.15%
task	1	14.29%	1	7.69%
impact	3	42.86%	6	46.15%
Totals **	**7**	**100.01%**	**13**	**99.99%**

*
Fuller's stages of concerns:
self = (S.o.C.) stages 0, 1 and 2
task = (S.o.C.) stage 3
impact = (S.o.C.) stages 4, 5 and 6

**
N = 20 peer coaches for this computation. One form was improperly filled out and had to be removed.

Analysis of the Data

Table I indicates that the mode of peak scores on S.o.C. profiles for peer coaches and non-peer coaches was at stage 0, the awareness stage. One peer coach had a S.o.C. profile with the same high score in three stages--1, 2 and 3. Stages 0 and 1 received the same peak score for one non-peer coach. Stages of Concern correspond to Fuller's stages of concern in the following way: 1) self = S.o.C. stages 0, 1 and 2; 2) task = S.o.C. stage 3; 3) impact = S.o.C. stages 4, 5 and 6. Table II reflects the peak scores of peer coaches and non-peer coaches. Slightly more than 42% of the peer coaches had peak scores at the self and impact stages of concern. Two thirds of the non-peer coaches peaked at the self stage of concern.

Table III displays a comparison of the peer coaching team configurations. Both teams with only first year members reported intense concerns at stage 5, the collaboration stage. Twenty-five percent of peer coaching teams with a mixture of first and second year peer coaches peaked at stage 0, followed by almost seventeen percent of the same group at each of stages 2, 3 and 6. One third of the peer coaching teams with second year members peaked at either stages 0 or 2.

Table IV indicated one hundred percent of teams with first year members had peak concerns in the impact stage. Half of the mixed teams peaked on self concerns, with one

third reporting peak impact concerns. Two thirds of experienced teams, with two year members, had self concerns; one third reported peak concerns at the impact stage. No experienced teams indicated peak concerns at the task stage. Equal numbers of first year peer coaches peaked at stage 0 (awareness) and at stage 5 (collaboration). Over twenty-three percent of second year peer coaches indicated peak concerns at stage 0 followed by slightly more than fifteen percent at each of four stages--2, 4, 5, and 6.

Both first and second year peer coaches indicated peak concerns at the self and impact stage.

CHAPTER V

SUMMARY AND CONCLUSIONS

Introduction

This chapter includes a brief summary of the findings as well as the conclusions drawn from the study. In addition, recommendations are made based on the research, the data, and the findings from this comparison of peer coaches and non-peer coaches regarding their concerns about an innovation at Ft. Knox, Kentucky.

Summary of the Findings

The research questions which focussed the study were:

1) Will greater numbers of peer coaches show further development in Stages of Concern than non-peer coaches given the same amount of time to institute the change?

2) Will experienced, two year, peer coaches exhibit higher order stages of concern in greater numbers than first year coaches?

3) Will team configurations (all first year members, all second year members, and mixed first and second year members) affect Stages of Concern results?

Twice as many peer coaches had peak S.o.C. scores in stages 4, 5 and 6 than non-peer coaches. This tendency for peer coaches to work through the initial Stages of Concerns at a quicker pace than non-peer coaches was not found to be statistically significant.

It was predicted that first year peer coaching teams would have to spend more time than experienced teams developing a working relationship with their partners, and would have less time to spend on concerns about the innovation. The sample size was small (N = 2), but 100% of peer coaching teams with first year members only indicated peak concerns at stage 5 (collaboration) and Fuller's impact stage. Over eighty percent of the members of the second year members only teams and mixed teams reported high concerns in either self or impact stage. Neither of these findings was statistically significant (chi square).

Both first and second year peer coaches indicated intense self and impact concerns, with only one person in each group scoring high on task concerns. This was not found to be statistically significant.

Conclusions

While this study resulted in a limited sample, it raised some interesting questions and suggested some possibilities for further investigation.

It was concluded that peer coaching did not have the positive affect on concerns regarding implementation of an innovation that was predicted. At least five factors may be accountable for the lack of anticipated outcome.

It is possible other influences, such as inservice, videos or books, or collaboration with other teachers may

have diluted or interferred with any effect peer coaching may have had on concerns about the innovation.

Peer coaching is an innovation with its own set of concerns to be worked through by teachers. The peer coaching teams had been in existence, at most, two years. Perhaps teams need longer to develop a powerful helping and support network.

The second year of the peer coaching project was focussed on teaching the adult learner and not on models of teaching as in the first year. Structured lessons to be fulfilled by collaborative meetings were not made the second year as they had been in the first year of the project.

Peer coaching teams may not have met as often during the year of this study as in the previous year. It is possible that peer coaches may not have discussed process writing with their partners. They may not have spent time building or strengthening their working relationships.

The innovation, process writing, may not have had a great enough impact on the teachers to warrant discussion among peer coaching members. It was an extension of a previous reading program and was not totally new. Yet, awareness concerns (stage 0) were high for 25% or more of peer coaches and non-peer coaches, mixed teams, second year teams, and first and second year peer coaches.

Secondary concerns within twenty percentile points or less of the peak score may impact on a respondent's

concerns about an innovation. Respondents may have awareness concerns strongly relating to another stage of concern. For example, teachers may desire more information in which to increase the benefit of the innovation to the students (stage 4) or may simply not be aware of the innovation (stage 0). Further study is needed into how the information respondents seem to need to reduce their concern relates to other Stages of Concern.

Recommendations

The questions relating to the interrelationship of the above factors and their combined effect upon peer coaching and change implementation need further study.

Studies have demonstrated the effectiveness of peer coaching in assisting teachers to transfer new knowledge to the classroom and master new skills. It, also, provides non-evaluative companionship and support while teachers work through the uncomfortable beginning stages of learning a new skill. Peer coaching in these studies was structured into the staff development process.

In this study the innovation was introduced as a district goal with no related district level inservice, a change incidental to the peer coaching process since it was not part of the peer coaching structure for the year.

Though not statistically significant, there was a tendency for peer coaches to develop higher order stages of concern than non-peer coaches. It seems that a well

developed peer coaching environment would encompass all changes--structured or incidental. Though not conclusive, the results indicate a need for further study into the factors that relate to peer coaching's affect on implementing change in schools. Peer coaching as a self-fueling environment for continued assessment and improvement of teaching strategies and skills may prove to be a powerful, cost-effective method for successful change implementation in schools.

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VITA

Jolene Black was born October 5, 1951, in Seattle, Washington. She received her early years of education in the public schools of Seattle, Washington, and was graduated in 1969 from Franklin High School in Seattle, Washington. She attended the University of Washington in Seattle, Washington. She finished her undergraduate studies and graduated Cum Laude in June of 1973 with a Bachelors of Science degree in Psychology with a minor in Education.

After graduation Ms. Black transferred to Seattle Community College in Seattle, Washington to study environmental technology courses.

She entered teaching as a substitute teacher for Seattle School District #1 in 1974. At the end of the school year Ms. Black accepted a position as first grade teacher in a Cree Indian bush school at Gift Lake, Alberta, Canada in the Northland School District.

In 1976 Ms. Black accepted a position with the King Cove City School District teaching an experimental, combined preschool and kindergarten class at King Cove, Alaska. The next year she taught a kindergarten class for King Cove City School District.

From 1978 to 1980 Ms. Black taught a combination first/second grade class in a bush school in Tyonek, Alaska, for the Kenai Peninsula Borough School District.

During the following two years, Ms. Black taught first grade to military dependents in Schweinfurt, Germany, for the Department of Defense Dependent Schools (DODDS-South).

After getting married, she moved to Kentucky in July 1982 and accepted a position as a preschool teacher for Creative Care Inc. in Radcliff, Kentucky. While teaching, Ms. Black began work on her Master's Degree at Western Kentucky University by attending night and summer classes. She completed her Master's Degree in Education with an endorsement in Reading at Western Kentucky University in June, 1983.

In August, 1983 Ms. Black accepted a position as a first grade teacher with Van Voorhis Elementary School at Ft. Knox, Kentucky. In 1986 Ms. Black became a Reading Coordinator for grades three through five at Van Voorhis Elementary School. In October, 1987 Ms. Black accepted a position as Administrative Intern at Van Voorhis Elementary School.

In January, 1988 Ms. Black began work on her Rank I and Educational Specialist Degree in School Administration. In the fall of 1988 she accepted the position of Reading Specialist at Macdonald Middle School at Ft. Knox, Kentucky.

During the summer of 1988 and the following fall, Ms. Black earned her Rank I and completed endorsements for elementary principal and instructional supervisor.

With the completion of this research project, Ms. Black will have completed the requirements for her Educational Specialist Degree in School Administration.

Ms. Black is married to Roy Edward Black of DeWitt, Arkansas. Mr. Black recently completed his Masters in Computer Data Management at Webster University, Jeffersonville, Indiana. The Black's have one child, Erin Michelle Black.

APPENDIX A

May 4, 1989

Dear _____,

Attached to this letter is a questionnaire to determine what people who are using various programs are concerned about at various times during the innovation or change adoption process.

The Ft. Knox School District has initiated two innovations within the last two years: peer coaching teams and process writing. These two innovations were reflected in two key objective statements for S.Y. 1988-89 (as approved by the school board):

"2. ... All teachers k-12 use content area writing at least once a week; all teachers k-6, and language arts 7-8, use process writing on a daily basis.
3. Expand and refine the Peer Coaching project."

Research points to the positive effect a non-evaluative facilitator of change (someone to give feedback, listen, demonstrate etc.) has during times of change. This survey will be used to measure the effect of the peer coaching teams in implementing curricular change by comparing peer coaches and teachers not involved in peer coaching.

As a peer coach your feedback is vital to the success of this study. Peer coaching results will be compared to the results of a control group made up of teachers not involved in the peer coaching project. Please take time out now to complete the attached survey. Understand that the survey will be used to improve the quality of assistance during times of curricular change in the future.

Your anonymity will be protected. The survey is not coded in any way to individually identify survey participants. The number code attached to the questionnaire will only be used to follow up responses and will not be used to identify respondents. Once the information has been received the code will be destroyed.

This survey should be completed by May 10. Please return it in the enclosed envelope.

Thank you for your cooperation.

Sincerely,

Jolene Black

Jolene Black
Reading Specialist
Macdonald Middle School

APPENDIX B

May 4, 1989

Dear _____,

Attached to this letter is a questionnaire to determine what people who are using various programs are concerned about at various times during the innovation or change adoption process.

The Ft. Knox School District has initiated two innovations within the last two years: peer coaching teams and process writing. These two innovations were reflected in two key objective statements for S.Y. 1988-89 (as approved by the school board):

"2. ... All teachers k-12 use content area writing at least once a week; all teachers k-6, and language arts 7-8, use process writing on a daily basis.
3. Expand and refine the Peer Coaching project."

Research points to the positive effect a non-evaluative facilitator of change (someone to give feedback, listen, demonstrate etc.) has during times of change. This survey will be used to measure the effect of the peer coaching teams in implementing curricular change by comparing peer coaches and teachers not involved in peer coaching.

You have been randomly chosen to be a control group representative. Peer coaching results will be compared to the results of this control group made up of teachers not involved in the peer coaching project.

You are the key to the success of this study. Please take time out now to complete the attached survey. Understand that the survey will be used to improve the quality of assistance during times of curricular change in the future.

Your anonymity will be protected. The survey is not coded in any way to individually identify survey participants. The number code attached to the questionnaire will only be used to follow up responses and will not be used to identify respondents. Once the information has been received the code will be destroyed.

This survey should be completed by May 10. Please return it in the enclosed envelope.

Thank you for your cooperation.

Sincerely,

Jolene Black

Jolene Black
Reading Specialist
Macdonald Middle School

APPENDIX C

BIOGRAPHICAL DATA

Your anonymity will be protected. An analysis of this data will be used to measure the effect peer coaching teams may have had on implementing a change in the curriculum.

Check one.

1. Gender: A ___ male B ___ female

2. Primary teaching area:
   A ___ elementary
   B ___ middle school (Which subject? Check below.)
   C ___ high school (Which subject? Check below.)

3.

A __	Science	F __	Reading/English
B __	Social Studies	G __	Math
C __	Music/Art	H __	P.E./Health
D __	Shop/Home Ec	I __	other _____
E __	Resource		

4. Number of years teaching experience: _____ years

5. Number of years teaching at Ft. Knox: _____ years

6. Number of years at your present school: _____ years

7. How did you go about incorporating process writing (as stated in the district's objective statements for S.Y. 1988-89) into your classroom practice? (Check as many as apply.)
   A __ collaborated with other teacher(s)
   B __ read about it
   C __ saw a video about it
   D __ received information from an outside facilitator
   E __ received information from principal
   F __ received information from inservice or staff meeting
   G __ received assistance from _____
   H __ other _____

8. How much impact has process writing on your subject area?

__ 1 none __ 2 __ 3 __ 4 __ 5 extreme

9. How much of a change was process writing from what you had done in the past?

__ 1 __ 2 __ 3 __ 4 __ 5
none extreme

10. How comfortable are you with experimenting or implementing a change of this type in the classroom?

__ 1 __ 2 __ 3 __ 4 __ 5
not extremely

If you are not a peer coach, please turn this page over and take five minutes to fill out the questionnaire printed on the back.

Peer coaches only ...
Please answer the following six questions:

Check one.

11. How many years have you been involved in the peer coaching project?

A ___ one
B ___ two
C ___ other _____

12. How did you originally get involved in peer coaching?

A ___ volunteered
B ___ was assigned
C ___ other _____

13. Are you a member of a peer coaching team that has:

A ___ two first-year members?
B ___ two second-year members?
C ___ three members with two second-year members?
D ___ three members with two first-year members?
E ___ other _____

14. How many times a month (average) did you meet with your partner(s) during this past year (S.Y. 1988-89)?

_____ times

15. How many times a month (average) did you meet with your partner(s) last year (S.Y. 1987-88)?

_____ times

16. Did you discuss the writing process with your partner(s)?

A ___ yes
B ___ no

Please turn this page over and take five minutes to answer the questionnaire printed on the back.

APPENDIX D

COLLEGE OF EDUCATION

THE UNIVERSITY OF TEXAS AT AUSTIN

Office of the Dean · Education Building 210 · Austin, Texas 78712 · (512) 471-7255

April 10, 1989

Jolene Black
715 Cynthia Court
Radcliff, KY 40160

Dear Ms. Black:

I am pleased to approve your request to use the instruments, "Stages of Concern Questionaire and Manual; Open-Ended Statements of Concern About an Innovation and Manual," published by the Research and Development Center for Teacher Education here at UT Austin and the quck scoring device and profile of results.

Since the publication is one which was developed here, I know that you will show this reference in your bibliography.

Best of luck with your study for your school district.

Sincerely,

Waneen W. Spirduso
Interim Dean

APPENDIX E

ADDITIONAL READINGS

Barth, R. (1985). Outside looking in - inside looking in. Phi Delta Kappan, 66, 356-358.

Ellis, S. (1982). Matching evaluations to the type of staff development activity at the building level. The Journal of Staff Development, 3 (1), 48-55.

Freiberg, J., Buckley, P. & Townsend, K. (1983). Improving a school through field-based clinical instructors. The Journal of Staff Development, 4 (1), 78-94.

Hammond, J. (1983). School improvement using a trainer of trainers approach: Reducing teacher stress. The Journal of Staff Development, 4 (1), 95-100.

Hord, S. & others (1980). Anatomy of incident and tactic interventions: Dimensions, design. Paper presented at the annual meeting of the American Education Research Association, Boston, MA (ERIC Document Reproduction Service No. ED 206 108)

Loucks-Horsley, S. & Cox, P. (1984). What the national commission and studies of education overlooked: The "how" of school change. The Journal of Staff Development, 5 (2), 21-28.

Olson, J. & Besch, M. (1983). Teachers teaching teachers: An inservice model for staff development and school improvement. The Journal of Staff Development, 4 (1), 78-94.