Concerns of Teachers About Implementing Team Teaching

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The trauma of change is increasingly a part of our environment. For educators—whether they are classroom teachers, professors, or administrators—change has become a particularly demanding pressure. All are bombarded with new ideas and inventions (innovations) that promise to cure present ills easily. What happens when practical attempts are made to implement these innovations is not clear. All too often, innovation adopters are confronted with a morass of unanticipated happenings and deficiencies that make implementing the simplest innovation take on the appearance and effect of a poorly planned invasion. Major breakthroughs in understanding and managing change are critical if schools and colleges are to be the adaptive and responsive institutions that society is led to expect.

In this paper, we are reporting on one dimension of our research, which illustrates several of the reasons that change, through implementing products and processes, is often traumatic and that in many cases so little is actually different following the “adoption” of an innovation. The research is based on the assumption that meaningful change is a process that takes time (years) rather than being a singular event or decision point. We are hypothesizing that individuals have different kinds of concerns about their involvement with a change at different times. By being aware of the kind of concerns that an innovation user has at a given time, the person(s) managing the change process can better prescribe relevant interventions. Information about user concerns can be used as a diagnostic basis for selecting interventions and for delivering these in ways that users see as relevant.

An extensive body of research and theory already exists in relation to change in general, and the adoption of innovations in particular. Experts in rural sociology, marketing, and technological areas have researched the “diffusion” of many kinds of innovations (for example, Rogers and Shoemaker, 1971). Many of the ideas and findings from this research have been applied to the study and analysis of change in educational institutions (Miles, 1964; Havelock, 1973). Experts in administration research and theory have also addressed the phenomenon of change (Owens, 1970). For several reasons, much of the change research in education has been of the case-study type (Smith and Keith, 1971; Charters, Everhart, Jones, Packard, Pellegrin, Reynolds, and Wacaster, 1973). Unfortunately, it seems that application of these findings to practice has been spotty. This is probably due to inherent problems in communicating knowledge (which means that change researchers and theorists have not been any more effective in getting their ideas out and used than those researching other areas), as well as the limitations of generalizing to schools from case-study and non-educational-based research.

The recent development and spread of organizational development-type training experiences (Schmuck and Runkel et al., 1972) and the emphasis on the “innovation free” change agent (Havelock, 1973) have contributed insights into the identification of system-level problems and possible solutions to these problems. In all too

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Concerns Theory

The focus of the NIE-funded Procedures for Adopting Educational Innovations (PAEI) Project is on researching the highly personal experiences and phenomena encountered by individual educators in schools and colleges as they "adopt" educational innovations. Two key developmental dimensions of innovation user growth have been identified, described, and defined as basic independent variables for monitoring innovation implementation. These dimensions serve as cornerstones of the Concerns-Based Adoption Model (CBAM), which represents the process of innovation implementation as a systemic/adaptive/developmental process (Hall, Wallace, and Dossett, 1973). The two dimensions, Levels of Use of the Innovation (Hall, Loucks, Rutherford, and Newlove, 1975) and Stages of Concern About the Innovation (SoC), are hypothesized to be critical indicators of an individual's level of performance.

Based on research literature, the extensive field experiences of adoption agents, and the research of Frances Fuller (1969), seven different Stages of Concern About the Innovation were tentatively identified and defined. Expanding on Frances Fuller's findings on the concerns of teachers about teaching, the researchers hypothesized that innovation users' initial concerns about use of an innovation will be somewhat egocentric. Users initially will have more questions regarding what use of the innovation will actually entail and how it will affect them personally than questions about effects of its use. Following these "self" concerns, users will become more concerned about the "tasks" related to using the innovation. Once these concerns are resolved, users will become more concerned about the "impact" of the innovation on pupils.

Once the seven Stages of Concern were tentatively identified, they were then explored systematically through a set of case studies and critiques by researchers and adoption agents. Subsequently, development began on a quick-scoring, paper-pencil instrument that had a two-
fold purpose. First, it allowed us to attempt to measure SoC. Second, the data from the instrument were analyzed to determine if there may be more or fewer than seven Stages of Concern. Based on the previous research and clinical experiences, items for the instrument were generated that were thought to be characteristic of concerns at each stage. These items were then Q-sorted according to the SoC definitions by ten judges. Brief definitions of the hypothesized stages are listed in Table 1. A 195-item prototype measure using a seven-point Likert scale for each item was developed using those items that six or more of the judges agreed on as being indicative of a particular stage.

During the spring of 1974, the 195-item prototype measure was completed by a stratified sample of elementary school teachers in relation to the innovation of team teaching and by college professors in relation to the innovation of instructional modules. The samples were stratified according to years of experience with the innovation, ranging from never having used either teaming or modules to having had five or more years of experience with them. The samples were stratified according to years of experience in the hope of maximizing the chances of finding some individuals who represented each of the hypothesized Stages of Concern.

The resultant data (N = 366) were then factor analyzed. The first seven factors from the analysis clearly corresponded with the way the judges had previously Q-sorted the items. This analysis does not in itself tell us about the relationship of the Stages of Concern to years of experience. However, initially at least, the idea of there being identifiable clusters (factors) of concerns seems to have a quantitative basis. To provide even more precision in identifying the items that grouped for each stage, the factors were rotated toward the hypothesized structure (that is, the defined SoC). The 35-item Stages of Concern Checklist was then constructed by selecting from among the strongest items (factor loadings greater than 0.5) representing each of the rotated factors.

A reliability study of the SoC Checklist involving a total of 132 professors and classroom teachers was conducted in September 1974. The raw score test-retest correlations ranged from a low of .65 to a high of .86 on the seven SoC factors, and the internal consistency (alpha coefficients) of the factors ranged from .80 to .93. The alpha coefficient for the total score was .96.

The Study

During the fall of 1974, a total of 411 public school teachers from three states completed the SoC Checklist with regard to their use of teaming. The teachers represented a stratified sample according to their years of experience with teaming. The teachers sampled were in one of five groups: (0) no experience with teaming; (1) first year of teaming; (2) second year of teaming; (3) third year of teaming; or (4) fourth or later year of experience with teaming.

The resultant data were analyzed to answer two questions:

1. Do teachers have identifiable Stages of Concern about teaming?
2. How are Stages of Concern related to years of experience with teaming?

Findings

To answer the question, "Do teachers have identifiable Stages of Concern about teaming?" principal-components factor analysis of the cor-

### Table 1: Brief Definitions of Stages of Concern About the Innovation.

0. **Awareness:** Unconcerned about the innovation.
1. **Informational:** Concerns about general characteristics of the innovation and what is required to use it.
2. **Personal:** Concerns about one's role and possible conflicts between that role and anticipated demands of the innovation.
3. **Management:** Concerns about time, organizing, managing, and making the innovation work smoothly.
4. **Consequence:** Concerns about student outcomes.
5. **Collaboration:** Concerns about working with others in use of the innovation.
6. **Relocusing:** Concerns about finding another and even more effective way.
relation matrix with target rotation was done on the SoC Checklist data. Each of these factors was found to correspond clearly with one of the previously defined stages. Data gathered on a sample of 422 professors’ adopting instructional modules were also analyzed, yielding similar results. The correlations between the factor scores and the previously defined stages ranged from .67 to .96 with five of the seven correlations being above .83. Principal factor loadings of 27 out of 35 items were on the same factors for both sets of data. Thus, the seven Stages of Concern, as described in Table 1, and measured by the SoC Checklist, appear to exist across innovations—for teachers involved with teaming, as well as for professors adopting modules. Just how developmental these stages are remains to be seen. Available data indicate that each stage correlates more highly with adjacent stages than it does with more distant ones. Thus, the indicated order is consistent with the hypothesized order.

For purposes of scoring, the 35 items on the checklist were divided into seven scales consisting of five items each. Subjects could respond to each item on a 0 to 7 scale, greater concern being indicated by a higher number. Scale scores are the sum of the responses to the five items in the scale. These raw scale scores were converted to percentile scores, using a sample of 184 persons carefully stratified with respect to experience in the use of an innovation as a standard. The use of percentile scores facilitates the interpretation of individual concerns profiles. An individual’s highest percentile score represents his or her most intense concern. The percentile scores also provide automatic reference to the intensity of concern on each scale as compared with the standardization sample.

To answer the second question, the SoC percentile scores of teachers with different years of experience with teaming were compared. This comparison is graphically represented in Table 2. From Table 2, the following trends can be noted:

**Trend 1:** The most outstanding pattern in the data is the distinctive profile of those teachers who have not teamed. Their Stage-0, -1, and -2 concerns are particularly intense in comparison to those of teachers who are teaming and in comparison to their own scores on Stages 4, 5, and 6.

**Table 2. Distribution of Teachers’ Concerns About Teaming According to Years of Experience with Teaming.**

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**Trend 2:** Another identifiable pattern that the experienced adoption agent might predict is that, in general, it appears that the more years of experience teachers have with teaming, the less intense their concerns are about it. It seems that, after using teaming for a number of years, teachers no longer see it as an innovation. However, they still have concerns about teaming.

**Trend 3:** A third and less predictive pattern is the relatively low level of Stage-4 concerns for all groups. Stage-4 concerns deal with the impact and consequences of innovation use for clients. In this case, the clients would be pupils. Since we have not found this to be true in other innovations, the pattern may be unique to teaming. Perhaps, in general, teachers do not see teaming as directly affecting children that much, or maybe other Stages of Concern are more intense during the early years of the use of teaming.

**Trend 4:** The relatively low intensity of Stage-6 (Refocusing) concerns for all groups has
been further documented through our interviews with these teachers. Regardless of the reasons for beginning teaming, whether mandated or voluntary, teachers consistently report that they would not like to see teaming eliminated altogether or a return to the completely self-contained classroom. On the other hand, as is reflected in the continuing relatively high scores on Stage-3 concerns, teachers do have ongoing concerns about more efficient ways to organize and function within a teaming context, as well as about the time involved.

**Trend 5:** The intensity of concerns increased for all stages for those teachers in their fourth year or beyond of teaming over the third-year teamers. As is suggested in our summary discussion, it is possible that because teaming is a sufficiently "catalytic" innovation, more time is needed to establish an equilibrium level of operation, which can then serve as a stable platform from which varying use of teaming to increase impact can be launched.

**Individual School SoC Profiles**

The concerns profiles of the four schools shown in Table 3, present additional verification of the presence of Stages of Concern and their patterning over time. Furthermore, these profiles, coupled with a description of the situation in the schools, illustrate the significance of concerns for monitoring innovation implementation.

Schools A and B are in the same school district, thus under similar administrative conditions. Neither school was engaged in teaming at the time the data were collected but both were considering it. Theory and the norm data would suggest that teachers should have high concerns for Stage 0 (Awareness) and about substantive aspects of the innovation (Stage 1), as well as high concerns about self and one's role in relation to the innovation (Stage 2). This was true for School A, but School B concerns were markedly higher for Stage 2 (Personal). Anecdotal data suggest an explanation for this difference.

Teachers in School A perceived that they had the freedom to accept or reject teaming. Consequently, they were carefully, even excitedly investigating the characteristics of teaming, as well as their likely role if they were to use it. On the other hand, teachers in School B perceived that they were being pushed by the central administration to begin teaming. As a result, they had taken a stance of protecting their current status—self and role—and were giving limited attention to the real substance of teaming.

School C is a completely different situation. It had been open only two months when the data were collected. The school was staffed almost entirely by teachers who were transferred from other schools in the district, where they had been involved in team teaching. Thus, although experienced teamers, faculty members were functioning in a new setting, in new teams. Faculty members' high concerns in Stage 5 (Collaboration) reflected this situation, as they were struggling to develop working relationships with a new set of team members. At the same time, their Stage-3 (Management) concerns were relatively low, as might be expected of experienced teamers. These teachers felt quite comfortable with teaming, but they were not comfortable with their relationships with other teachers in the new
teams. Notice also that their Stage-4 (Consequence) concerns were relatively high, suggesting that the impact of their teaming on children was heavily on their minds.

Teachers in School D had been engaged in team teaching for at least five years and could be classified as veteran teamers. During the previous school year, a number of the teachers had become concerned over what they felt was a lack of in-depth contact with students. As a consequence, some teams had moved from a pattern where there was much movement of students among teachers to a pattern resembling, in many respects, self-contained classrooms. There were other teams questioning their use of teaming, but they had not yet made any changes in the way they teamed.

High concerns in Stages 3 and 6 and extremely low intensity concerns at Stage 1 are truly representative of teachers in that school. Those teachers who had already made a change in their teaming pattern had returned to concerns about management of the innovation since they were teaming in a considerably different way. It is interesting to note that they did not have the high concerns about working with others that were present in School C since their teams had remained intact. The high mean in Stage 6 reflects the concerns of those teachers who were still considering major changes in the way they teamed. The low Stage-1 scores suggest that these experienced teachers felt that they already knew all about teaming.

Implications

For those interested in implementing teaming, the findings of this study have several implications. In introducing the innovation, special attention needs to be given to pre-use, self-oriented exploration, and anticipation concerns. Our findings support the legitimacy of having "self" concerns when exploring use of an innovation. But not resolving them is likely to detract from or be an obstacle to implementing teaming and to developing high-level use of teaming. Addressing these concerns by using targeted interventions should make for a more personalized approach to implementing the innovation and should help teachers in pursuing the task. (We plan to report more about intervention theory in future papers.)

Another implication of these findings is that implementing teaming is not accomplished quickly. It was not until the third year that concerns about management (Stage 3) and concerns about working with others (Stage 5) dropped below the 50th percentile. It was not until the fourth year and beyond that the intensity of teamers' Stage-6 concerns about refocusing (improving the use of teaming) began to be relatively high on their profiles. At that time there was also an increase in management concerns (Stage 3), which seems to be related to proposed changes in teaming. Up until that time, working out a survival level of use of teaming seemed to occupy most of the teamers' thoughts. Perhaps, with the appropriate adoption strategy (overall implementation plan) and personalized interventions, the time could be shortened; however, in the 39 schools in which we collected data, no such implementation strategies were employed.

A key point to be remembered is that effective adoption of complex innovations such as teaming may take several years. Administrators
who ignore this are deceiving themselves and endangering the innovative thrust.

Furthermore, many kinds of training inputs about use of an innovation will not be relevant until after two or three cycles of use (that is, interventions are often not related to the most intense concerns of the user and, therefore, not seen as "helpful"). For example, promoting the implementation of teaming because it will be good for pupils will not at all address or resolve the initial high "what does it mean for me?" and "what is it?" concerns that are the most intense concerns of people considering a change. Also, training in setting agendas and problem solving are going to be seen as most relevant when teachers are already teaming and have high Stage-3 (Management) concerns.

As a research note, determining "how developmental" users' concerns about an innovation are will need to await further study and data analyses. Based on their analysis of many different hierarchical theories, Phillips and Kelley (1975) have suggested that developmentality is not a clear-cut phenomenon. Perhaps their generalization also applies to the developmentalness of concerns. However, in our parallel study of college professors' implementing instructional modules, the nonuser concerns profile is identical to the nonuser profile in this study, but many more module users indicated high Stage-4, -5, and -6 concerns profiles.

Whatever the inherent nature of progression in concerns is, other factors—such as characteristics of the innovation and the quantity and quality of implementation support—are sure to affect the intensity and rate of movement from concern stage to stage. Therefore, in their planning for and managing of change, adoption agents, administrators, and policy makers need to face these and other data regarding teacher concerns if they are going to increase the efficiency and rewards of change while reducing the trauma.

References


