Crossing the Bridge of Change: Measuring Instructional Change Using the Concerns Based Adoption Model

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Abstract

The purpose of the study was to determine the efficacy of a specific instructional change by engaging teachers in reflecting on the change process using the Concerns Based Adoption Model (CBAM) as an instrument of measurement. Data were collected and analyzed using Stages of Concern questionnaires and Levels of Use surveys as well as interviews to determine what methods of interventions are necessary to facilitate instructional change.

Introduction

Leading an initiative with the specific goal of transforming school culture deserves much attention (Fullan, 2002; Muhammed, 2009). An instrument that measures how employees perceive the status of a desired change can provide the district administrators with the feedback to adjust an approach and alter resources to help staff members tasked with implementing the change. Anthony Muhammed (2009) developed four educator classifications to describe how employees react to a change initiative: believer, tweener, survivor, and fundamentalist. Their goals vary respectively from academic success for each student, to solely focusing on organizational stability, to their own emotional needs, or to maintaining the status quo. An assessment of the individual and the collective mindset of employees can provide leaders with information to guide improvement efforts in their schools and districts. Specifically, the use of data from a CBAM can help administrators to identify needs for specific interventions.

The CBAM provides specific data to support the measurement of an identified change, instructional or otherwise, because it utilizes survey data to gather information regarding the employee mindset toward a specific initiative. In order for any instructional initiative to be successful, teachers must have a level of interest in the initiative's success. "Teachers' concerns have been conceptualized as classifiable into two types: concerns about benefit to self and concerns about benefit to pupils" (Fuller, 1974, p.1). Furthermore, Fuller suggested, "Concerns about teaching are expressions of felt need which probably possess motivation for relevant learning. Consequently, any regularities in the concerns of teachers are of interest to teacher educators. If motivation is to be harnessed for learning, curricula interventions should consider the felt needs or concerns of teachers" (p.2). The CBAM recognizes the components of change which need to be identified for successful reform to occur.

The Concerns Based Adoption Model was based on several important assumptions about the nature of change. These assumptions are: Change is a process, not an event. Change is accomplished by individuals. Change is a highly personal experience. Change involves developmental growth in feelings and skills. Change can be facilitated by interventions directed toward the individuals, the innovations, and the contexts involved (Hall & Hord, 1987).

Theoretical Framework

CBAM was selected as the conceptual framework for this study in order to assess the process of implementing change. In this case study, the change was the introduction and implementation of the Understanding by Design (UbD) instructional framework by teachers. The theoretical context for the model can be found in the work of counseling psychologist Frances Fuller's (1969) sequential developmental concept of concerns.

> Fuller conducted research on the concerns of student teachers and developed a model based on her empirical finding that student teachers' concerns moved through a natural development sequence of four stages: unrelated, self, task, and impact. Unrelated concerns are personal in nature and do not address the concerns of the teaching practice. Self-concerns, although focused on teaching practice, are egocentric in nature. Task concerns are logistical in nature, that is, they are directed towards the mechanics of instructional delivery. Impact concerns, the highest level in Fuller's hierarchy, address the impact of teaching practice on students (Young, 2005, p. 49).

Related Literature

Hall and Hord (1987) noted that educational reforms are often not implemented in the time frame envisioned by planners and policymakers. While that may be the result of structure or planning problems, resistance to change is frequently a factor in the timing of implementations (Christou et al., 2004). Both of these observations reinforce the importance of investigating the nature of teacher concerns during the innovation process.

Loucks-Horsley (1996) pointed out that learning brings change, and supporting people during change is critical to help the change take hold. It is, therefore, helpful that the CBAM applies to anyone experiencing change, be they policymakers, teachers, parents, or students. CBAM helps leaders prepare to meet the needs of the adopters. Recent research suggests not all teachers progress through all stages of the adoptive model. Some teachers become comfortable with the innovation (Stage 3) and do not progress to concern regarding impact on students (Stage 4 and beyond) (Malmgren, 2010, p. 73).

Research Questions

When teaching for meaning and understanding is introduced as an instructional change endeavor, how does the application of CBAM help to gather information on the progress of the change initiative? More specifically how do teachers respond to the following questions:

1. What concerns do teachers feel about Understanding by Design?

2. To what extent are teachers using Understanding by Design in their instructional practice?

3. What local interventions are needed to accelerate the pattern of adoption and effective use of the Understanding by Design instructional framework? (Young, 2005 p. 43).

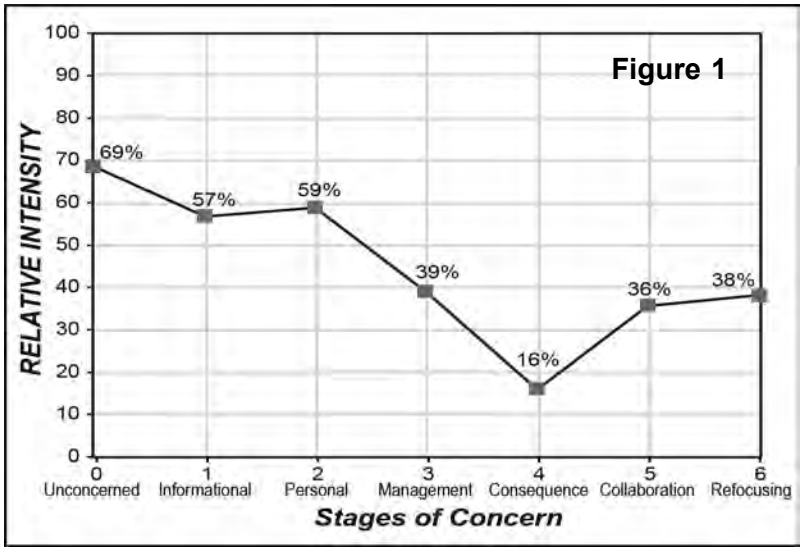
Methods

A mixed methodology of surveys, interviews and observations was utilized in the research data gathering design. Data were acquired to evaluate the efficacy of the UbD implementation plan in the suburban high school setting. Teacher understanding of and level of implementation regarding the UbD instructional framework were investigated through the use of the Concerns Based Adoption Model which included the use of the *Stages of Concern* instrument to evaluate the level of teacher concern with the implementation of the initiative. The concern was measured through three levels: 1. Concern for Self; 2. Concern for Task; 3. Concern for Impact. *Levels of Use* of UbD within instructional planning and practice were measured through survey and interview data. *Local Interventions* to advance the usage of the UbD instructional framework were measured through survey as well. There were 27 secondary school teachers who participated in this case study.

Data Analysis

A survey was used to collect data on the teachers' concerns about Understanding by Design implementation. The data were then graphed on a Stage 0 to Stage 6 continuum (see **Figure 1**). Stage 0 scores provide an indication of the degree of priority the respondent is placing on the innovation and the relative intensity of concern about the innovation. Stage 0 does not provide information about whether the respondent is a user or nonuser; instead, Stage 0 addresses the degree of interest in and engagement with the innovation in comparison to other tasks, activities, and efforts of the respondent. A low score on Stage 0 is an indication that the innovation is of high priority and central to the thinking and work of the respondent. The higher the Stage 0 score, the more the respondent is indicating that there are a number of other initiatives, tasks, and activities that are of concern to him or her. In other words, the innovation is not the only thing the respondent is concerned about. Demographic data and outside judgment are needed to determine whether an individual is using the innovation.

A high score in Stage 1 (Informational) indicates that the respondent would like to know more about the innovation. People with high Stage 1 concerns simply want more information. They are not concerned about "nitty-gritty" details but, rather, want fundamental information about what the innovation is, what it will do, and what its use will involve. Stage 1 concerns are substantive in nature, focusing on the structure and function of the innovation. The score in this stage does not indicate how much knowledge or understanding respondents have. It indicates whether they want to know more. Stage 2 (Personal) concerns deal with what Frances Fuller (1969) referred to as self-concerns. A high



Stage 2 percentile score indicates ego-oriented questions and uncertainties. Respondents are most concerned about status, rewards, and what effects the innovation might have on them. A respondent with relatively intense personal concerns might, in effect, block out more substantive concerns about the innovation. A high Stage 3 (Management) score indicates intense concern about management, time, and logistical aspects of the innovation. Descriptions and interpretations of peak scores on Stages 4 (Consequence), 5 (Collaboration), and 6 (Refocusing) follow directly from the definition of each stage. The higher the score, the more intense the concerns are on that stage (George, Hall, & Stiegelbauer, 2006, p. 33-34).

Seventy-three percent of the Birchfield teachers who responded to the *Stages of Concern* survey completed the *Levels of Use* "yes/no" responses (see **Figure 2**). These questions were asked to get a sense of the extent teachers are using Understanding by Design in their instructional practice. Eighty-five percent of the respondents stated that they are currently using UbD in their instructional planning. Additionally, 91% also believe that they are consistently making instructional decisions based on knowledge of short- and long- term consequences of students, and 87% claim that they consistently re-evaluate the quality of use of UbD and possible modifications to it to achieve an increased impact on students. However, only 48% claim to consistently collaborate with colleagues regarding their use of UbD, with only 63% re-evaluating the quality of UbD to achieve an increased impact as it relates to new federal, state, and/or local instructional goals.

After accumulating data regarding the *Stage of Concern* and *Level of Use* of the UbD instructional framework at the school, a follow up survey was emailed to the faculty at both schools to gather information regarding what *Local Interventions* would need to occur to continue the UbD implementation process. Teachers answered one question, "What kind of professional development do you need in order to advance your uses of the Understanding by Design framework?" There were six options provided: Informational Workshops; Interactive Workshops; Peer Study Groups; Mentoring or Coaching Relationships; Content Experts; Paired Collaboration. For each of those six possible *Local Interventions*, the teachers were asked to select: Lowest Priority; Low Priority; Moderate-Low Priority; Moderate-High Priority; High Priority; Highest Priority. Fifty eight (58) teachers from the High School agreed to participate in the *Local Interventions* survey. This represents 33% of the entire the high school teaching staff and is five more than the 53 teachers who agreed to participate in the initial *Stages of Concern* survey. The responses to the *Local Interventions* survey, when compared to the *Stages of Concern* survey, indicates a significant concern within the high school regarding the next steps of this initiative. The results (**Figure 3**) of the *Local Interventions* survey were based on assigning a number to each response: Lowest Priority =1; Low Priority= 2; Moderate-Low Priority= 3; Moderate-High Priority= 4; High Priority= 5; Highest Priority= 6.

Figure 2: Birchfield High School Levels of Use Survey Results

Question	# of "Yes" Responses	% of "Yes" Responses
Are you using Understanding by Design in your instructional planning?	23/27	85%
If you are not using UbD as part of your instruction, are you planning to acquire more information about UbD at a later date?	9/13	69%
If you are not currently using UbD as part of your instruction, are you actively planning to incorporate UbD into your lessons?	8/13	62%
If you are currently using UbD as part of your instruction, do you consistently re-evaluate the quality of use of UbD and possible modifications to it to achieve an increased impact on students? Particularly as it relates to new federal, state, and/or local instructional goals?	15/24	63%
If you are currently using UbD as part of your instruction, is your approach to master the tasks required to meet your own instructional design needs?	19/24	79%
If you are currently using UbD as part of your instruction, do you give consistent thought to improving its use or its instructional consequences?	18/24	75%
If you are currently using UbD as part of your instruction, do you consistently make instructional decisions based on knowledge of short- and long-term consequences for students?	21/23	91%
If you are currently using UbD as part of your instruction, do you consistently collaborate with colleagues to achieve a collective impact on students?	11/23	48%
If you are currently using UbD as part of your instruction, do you consistently re-evaluate the quality of use of UbD and possible modifications to it to achieve an increased impact on students?	20/23	87%

Teachers in the high school feel most strongly about participating in interactive workshops where teachers can get specific guidance regarding a particular component of the UbD instructional framework. A score of 4 indicates a "moderate-high priority," and the High School scored a 4.31 for Interactive Workshops. The highest priority for the continued implementation of the UbD framework is "Paired Collaboration," where teachers are expected to work through the application of UbD principles with a peer. Peer study groups and content experts to explore big ideas as well as key concepts related to a specific discipline scored at least "moderate-high priority." In addition, "Content Experts" and "Mentors or Coaches to Model UbD" also scored as at least a "moderate-high priority."

Discussion

For the implementation of the initiative to truly succeed, the district should utilize resources such as time during professional development, conference, and other meeting days to address the initiative and the expressed need for paired peer collaboration and interactive workshops. "Many change efforts fail because facilitation and assistance are not provided to all members of the organization…. Frequently, these leaders are without the tools or skills to do the job of supporting and assisting the staff well" (Hall & Hord, 2006, p. 304). The School District superintendent and Board of Education publicly supported the initiative. Resources, specifically time and money, were earmarked for the implementation of the initiative in year one. However as the initiative moved into years two and three, less and less of the resources had been allocated for the UbD initiative.

The teachers should be guided with consistent clear goals emphasizing the initiative as a priority over a period of 3-5 years, and there should be clear expectations regarding the implementation of UbD that focus on collaboration. The high school teachers responded to the initial questions regarding their *Stages of Concern* results by explaining that more common planning time was needed, specifically within the day to prepare lessons. This would prove to be an obvious additional financial cost to the district. However, this desire was reinforced with the results of the *Local Interventions* survey (**Figure 3**), where interactive workshops with an emphasis on the application of UbD principles need to be prioritized.

The facilitators at the High School need to provide opportunities for interactive workshops where specific questions about particular aspects of the initiative can lead to specific guidance regarding the implementation of the initiative. To assist in ensuring that the facilitator is providing the appropriate supports related to a teacher's concern and level of use of the initiative, a more representative sampling of the teachers need to be present when data regarding the initiative are collected annually.

Ultimately using the Concerns Based Adoption Model to measure the efficacy of the implementation of an initiative can certainly increase the likelihood of success as it guides the implementers, facilitators, and organizational leadership. The responsible change facilitator frequently asks: 'Is what I am doing right and best for everyone?'" (Hall & Hord, 2006, p. 305). The change facilitator needs to continue to listen to the feedback that is accumulated through using CBAM and then respond accordingly. "It is neither good nor bad for individuals to have certain concerns profiles. What is good or bad is the types of interventions that are made in response to each diagnostic profile. All interventions must be concerns based. They must be related to each client's current concerns and extent of use, not the change facilitators" (Hall & Hord, 2006, p. 305). During a period of years in which there is support for each individual to cross the implementation bridge, the implementation plan and an effective change initiative can be achieved.

Figure 3: Results of the Local Interventions Survey

Local Intervention	High School
Informational Workshops on UbD: Stand and Deliver	3.55
Interactive Workshops: Emphasis on the Application of UbD Principles	4.31
Peer Study Groups: Study the Principles and Application of UbD	4.09
Mentoring or Coaching Relationships: To model and/or coach the uses of UbD	3.86
Content Experts: To explore the big ideas and key concepts within the context of a specific discipline	4.29
Paired Collaboration: To work through the application of UbD principles with a peer	4.59
Total Participants from Each School	58 participants

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