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Abstract

The objective of this article is to present the Pre-Conceptual Map methodology as a formalized way to identify, document, and utilize preconceived assumptions on the part of the researcher in qualitative inquiry. This technique can be used as a stand alone method or in conjunction with other qualitative techniques (i.e., naturalistic inquiry). This document explains how to utilize the process and includes specific examples based on a formal study of the pilot of The Drama Discovery Curriculum. The article highlights the Pre-Conceptual Map methodology for use by other researchers by examining: the need for the methodology, how it is related to the literature, the implications for other professions, and the contribution to the field of qualitative methodology.

Keywords

Pre-Conceptual, Map, Qualitative, Methodology, Assumptions, Bias, and Research

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The objective of this article is to present the Pre-Conceptual Map methodology as a formalized way to identify, document, and utilize preconceived assumptions on the part of the researcher in qualitative inquiry. This technique can be used as a stand alone method or in conjunction with other qualitative techniques (i.e., naturalistic inquiry). This document explains how to utilize the process and includes specific examples based on a formal study of the pilot of The Drama Discovery Curriculum. The article highlights the Pre-Conceptual Map methodology for use by other researchers by examining: the need for the methodology, how it is related to the literature, the implications for other professions, and the contribution to the field of qualitative methodology. Key Words: Pre-Conceptual, Map, Qualitative, Methodology, Assumptions, Bias, and Research

The Gap in Traditional Qualitative Methodologies

How does a researcher who is personally and professionally connected to the subject matter, present findings in a valid way in spite of the possibility of bias? This question needed to be answered for the qualitative study of *The Drama Discovery Curriculum* because I was both an administrator at the school for the piloted program and the creator of the curriculum.

Qualitative Validity and Credibility and the Role of the Researcher

Qualitative narratives invite readers to enter into and experience the worlds of the participants (Ely, Vinz, Downing, & Anzul, 1996). As the researcher presents findings to the reader, it is vital that the study is credible. Concepts such as reliability and rigor, value and validity, criteria and credibility, and description and coding techniques, for both ensuring and recognizing good studies, have all been examined by scholars (Devers, 1999; Emden & Sandelowski, 1999; Seale, 1999; Sparkes, 2001; Whittemore, Chase, & Mandle, 2001). Researchers from various disciplines have worked to define what is a good, valid, and/or trustworthy qualitative study. Standards for qualitative research have variously emphasized the literary and scientific criteria, the methodological rigor and conformity, the real world significance of the questions asked, and the practical value of the findings.

The relationship that the researcher has with the subjects can affect the results (Emden & Sandelowski, 1998; Heron, 1996; Lincoln & Reason, 1996; Richardson, 2000a, 2000b; Whittemore et al., 2001). For instance, if the person who is conducting the research is also the supervisor of the staff that he or she is studying, the results could reflect the tone that is created. This role could lead the researcher to bring to the writing of presumptions and emotions that a researcher who did not know his subject prior to the study would not convey.

Many traditional quantitative researchers express concerns because they believe that when scholars write based on feelings and emotions the results can be skewed. This is because the researcher's worldview and biases are necessarily brought to bear on their own work (Denzin & Lincoln, 1998). When the researcher judges study findings as dynamic or lifeless, coherent or confusing, or as being true or false, he or she is ultimately making a personal statement on the findings (Richardson, 2000a).

Bracketing to Address Bias

In order to suspend the presuppositions of those being studied, phenomenologists utilize a concept called bracketing in order to begin to address these assumption issues (Ashworth, 1999; Drew, 2004). To use this method, the researchers place pre-conceived notions in the text of the document in brackets or in a special section, illustrating the researcher's self-reflection and analysis of his or her own preconceptions.

The bracketing technique is used to establish the phenomenological epoche, which allows the reader to see a reality that also reveals the researcher's efforts to put aside assumptions and presuppositions. However, what goes into the actual brackets tends to be interpreted in multiple ways by authors. Some theorists (e.g., Denne & Thompson, 1991; Vacek, 1989) who have incorporated bracketing believe that the investigators should bracket scientific theories and research so that the remainder outside of the brackets is the new data. Conrad (1990) bracketed the natural attitude of the subject in his study on artistic creativity, and Moyle and Clinton (1997) chose to bracket the patient's common sense knowledge and their understanding of symptoms of the depressive state for their study. The guidelines for the author for what should be bracketed appear to be loosely established since studies place a wide variety of concepts in brackets including: research, attitude, and common sense. Assumptions that are examined by bracketing are based on pre-conceived notions of people who are being studied as opposed to the researcher's bias.

The Pre-Conceptual Map

O'Day and Killeen (2002) recognized that some qualitative researchers try to report on their own assumptions, values, and biases. The Pre-Conceptual Map provides a specific framework in which to make this possible, in a way that does not take away from the study. Authors researching topics for which they may have a predisposition towards, the subject matter based on a personal connection, such as being the creator of the product, can conduct their research using the tool of the Pre-Conceptual Map.

The original study that utilized the Pre-Conceptual Map concept was conducted at a small alternative education private school in Western Pennsylvania. This campus is for 1st through 12th grade and serves students with emotional and behavioral disabilities from forty-two school districts in Pennsylvania. The population sample included twelve students from a middle school classroom. The students who participated in the pilot study were all in an alternative school for students with emotional and/or behavioral disabilities.

My initial thought was that simple case studies would be the most appropriate qualitative method for the study in which the first Pre-Conceptual Map would be used. This was based on the subject matters that were to be examined. Multiple other studies in the arts (Mills, 2001; Redfield, 1990), special education, (Reis, Neu, & McGuire, 1997), and the combination of both the arts and special education (Benjet, 1993; Carrigan, 1993; Graham, 1994; Kraft, 2001), utilized the case study method. Action research, combining case studies, was also another qualitative option, which was appropriately used in Gallagher's (2001) collaborative action research study that investigated the implementation of pedagogical and curricular change in an Ontario eighth grade history classroom. It looked at the use of drama in the classroom for students with exceptional needs. This type of fieldwork that includes a participant as an observer came close to meeting the needs of the study, yet I was not the one presenting the curriculum that I wrote. The teacher in the classroom took that role, and therefore I needed a methodology that was better tailored to examine my bias as the author of the curriculum.

I created the Pre-Conceptual Map with the guidance of Dr. Gary Shank from Duquesne University, in order to study the pilot of *The Drama Discovery Curriculum* (Hipsky, 2006) that I authored. The curriculum involves students acting out characters in children's literature that have story lines about the type of disability that the students can personally relate to their own lives. This combination of dramatic arts and bibliotherapy is a unique one. The study was rooted in my personal experience as a teacher and was grounded in data and a solid literature review.

The Pre-Conceptual Map defined

The Pre-Conceptual Map was created in order to establish my potential bias in *The Drama Discovery Curriculum* and the rationale behind the study, which investigated the effect of the curriculum on the self-efficacy of students with emotional disabilities related to their own exceptionality (Jacobs, 2005). As was stated by Glaser (2002), in regards to bias from a social constructivist perspective, "Remember bias is just another variable and a social product. If the researcher is exerting bias then it is a part of the research in which bias is a vital variable to weave into the constant comparative analysis" (p. 3). Therefore, bias can be an inevitable and positive component of research as long it is acknowledged by the author. The Pre-Conceptual Map allows for a systemic way to present this information to the reader.

The Pre-Conceptual Map served as a reference point for reflection as I categorized the data that was written under two main sections. The first category in the qualitative recording included those points that directly correlated to my original belief of what would happen based on my own research and my experience as a past special education teacher of students with emotional disabilities, a teacher of students from

kindergarten to graduate level (both here in America and abroad), and my work at the administrative level at a school for students with emotional and behavioral disabilities. The other category explained the surprises that surfaced as the study took place that would not have been conceptualized prior to the collection of field notes from observations, student journals, audio taped documentation, and interviews

Reason for the Pre-Conceptual Map

The conscious choice to create this form of qualitative reporting instead of using a widely used method of coding findings (i.e., Naturalistic Inquiry which was created by Lincoln & Guba in 1985) derived from a need to establish, in a declarative statement, an acknowledgement that the creator of the curriculum and the author of the study were the same person. Also, my credentials (including my education and experience) that contributed to my credibility to investigate the product's effect on students' self-efficacy, needed to be established to validate the study. It also aimed to present my potential biases and assumptions regarding this study prior to analyzing what would come from the observations and interviews. I veered from the traditional style of coding because this framework best suited the needs of the study and as Shank (1995) explained,

> …qualitative research and qualitative researchers are most likely on the edge of a divergent explosion into inquiry, covering artistic, investigative, clinical, and many other directions. More than any other mode of inquiry, qualitative research by its nature demands diversity. (p. 4)

Data Analysis

Analysis of the qualitative data involved multiple tasks throughout. This included data collection (e.g., observation logs, audiotapes of lessons, student journals, and notes from the teacher/student interviews), analysis, and writing the findings (Creswell, 1994; Strauss & Corbin, 1990).

In order to utilize the Pre-Conceptual Map technique it is important to understand the steps that were taken during the initial study. The analysis of the data after the collection for the original study was written based on the categorized themes. It was categorized based upon the Pre-Conceptual Map, which examined the fact that I was both author of the study and the curriculum that was being analyzed. It looked at what I believed the results of the study would be after the literature review and yet prior to the data collection. This information was presented in the results section and then conclusions were drawn in a narrative format. This allowed the reader to gain a deeper understanding of the effect of *The Drama Discovery Curriculum* on the students' self-efficacy.

Organization of the Pre-Conceptual Map

The layout of a study that utilizes the Pre-Conceptual Map methodology follows a specific, yet simple design. The Pre-Conceptual Map can be written in first person narrative so that the reader can establish a connection between the author and the

individualized nature of the information that is being divulged. After implementing the traditional structure of a researcher paper (i.e., population/sample), the researcher begins to categorize the various viewpoints and potential biases that will be brought to the study. For example, the original study labeled the subsections as *Pre-Conceptual Map Personal Background* and then a specific title. Those titles dictated what was in the dedicated sections regarding factors the researcher was bringing to the study based on her experiences as a teacher, researcher and advocate, an administrator, and as the creator of the curriculum that was being studied. Within the sections, I recounted my personal experiences, my credentials in this area, and began to allude to potential biases that I would be bringing to the study.

The second part of the Pre-Conceptual Map lays out, in a list format, the general assumptions about the topic that is being studied. The assumptions are derived as a direct result from the prior section of the Pre-Conceptual Map. For example, in the initial study, my personal background as a teacher led to this statement, which was one of five assumptions,

> Initially, the students will pull away from learning about their own disabilities because they will not want to face the issues. This may resurface throughout the program for some students. I think that it will be a particular issue for students that function relatively well academically and do not feel that they have a "disability."

The results of data analysis in the third section of the Pre-Conceptual Map are organized according to the Pre-Conceptual Map and common themes that arise through the data collection during the research study. The Pre-Conceptual Map is used as a guide for categorizing the responses that directly correlate to the initial assumptions. The other category in the results section contrasts those findings that do not match with the original assumptions.

Data that directly correlate to the Pre-Conceptual Map can be categorized into a table that precedes the findings and sets the stage for the findings from the study. The table's columns are sectioned into title, assumptions, and findings. The assumption section is transferred directly from the list of assumptions from earlier in the Pre-Conceptual Map. The title section is a short label created from the assumption. The findings section is a bulleted list of the themes that emerge, which correlate with each of the titles and assumptions. The steps to create a Pre-Conceptual Map are:

1. Title and categorize the author's viewpoint and potential biases.
2. List the general assumptions about the topic that is being studied.
3. Categorize themes that emerge from the responses that directly correlate to the initial assumptions.
4. Categorize the results that contrast with the original assumptions.
5. Create two tables that will be summative of the data, in both of the categories in the Pre-Conceptual Map.
6. After the categories of findings are established, the information that is found during the data collection stage is written out in narrative form below the two tables.

The following table demonstrates the chart from the original Pre-Conceptual Map study (Table 1).

Table 1
Pre-Conceptual Map Confirmed

Figure 2. An example of a pre-conceptual map table that positively correlated with the author's assumptions.

Title	Assumptions	Finding
1. *Disability Awareness*	Initially, the students will pull away from learning about their own disabilities because they will not want to face the issues. This may resurface throughout the program for some students. I think that it will be a particular issue for students that function relatively well academically and do not feel that they have a "disability."	• *Special Education: Character Connection* • *Special Education: Emotional and Behavioral Needs* • *Special Education: Learning Issues* • *Special Education: Other Exceptionalities* • *Alternative Placement* • *Medication*
2. *Roller Coaster Kids: Emotional Highs and Lows*	Some of the class days will be extremely emotionally charged due to the disability and the nature of the program. I will witness dramatic highs and lows, acting out, and refusal from some of the students.	• *Therapist-in-a-Box* • *New Trust* • *Emotional Needs* • *Behavioral Needs* • *Internal Pain Becomes External* • *Self-Goals*
3. *Unforeseen Changes for the Classroom*	Due to the transient nature of the school and placements into the program, there will be some changes in the classroom's makeup during the period of time in which the study takes place.	• *Student Changes* • *Staff Changes* • *Unexpected Hurricane* • *Bus Accident*
4. *Exposure Through Acting*	Students will enjoy the dramatic games and exercises included in the curriculum, but some will experience shyness, anger, and frustration with the exposure to seeing themselves in this new light.	• *Self-Discovery Through Drama*

5. *Character Connections*	The students will see elements of themselves in the characters in the book and with time they will be able to tell stories from their personal lives that will parallel the characters' lives and issues.	• *Bibliotherapy: Relating to the Characters in the Literature* • *Family Connections* • *Drugs and Alcohol* • *Teacher Modeling* • *Enhanced ReadingSkills*

After the categories of findings are established, the information that is found during the data collection stage is written out in narrative form. By focusing this section on the findings that directly correlated to the researcher's assumptions, a framework for reporting the study becomes clear.

The most significant and unique aspect of the Pre-Conceptual Map is the ability to analyze those findings that were not foreseen in the Pre-Conceptual Map. By listing the categories that emerged throughout the study, as originally unknown and unimagined by a person who has an established expertise and a preconceived notion about the outcome, the methodology does justice to the original question. The question that no longer remains now that the Pre-Conceptual Map has been created is, "How can the researcher who has an established bias on the subject matter of study examine the topic in a scholarly way that takes into account the prior assumptions of the author?" It has been determined through this framework that the prior assumptions of the author can be challenged by the research and data found.

Limitations of the Methodology

It is important to remember that when using the Pre-Conceptual Map as described in this paper, it is still the researcher him or herself who reviews the credibility of the map. Such a structure does not eliminate the possibility of biases still affecting the course of the inquiry, but the process of making transparent what biases are recognized by the researcher help readers to understand better the perspective of the researcher. Other researchers using the Pre-Conceptual Map may choose to utilize a third-party observer to review the Pre-Conceptual Map so that a discussion can be raised regarding previously unidentified bias.

Pre-Conceptual Map in a Variety of Professions and Academic Disciplines

The Pre-Conceptual Map allows the researcher to recognize a preconceived notion due to experience related to the subject matter. For instance, John F. Jacobs, M.D. explained that he could use the Pre-Conceptual Map to evaluate the impact of a software program called Renal Trax that he invented, to run his own nephrology office prior to marketing it for national distribution. (J. F. Jacobs, personal communication, December 29, 2006). An exercise physiologist could use the Pre-Conceptual Map for the qualitative section in a study on diet pills that she participated in designing. The businesswoman who devises an inventive strategy for team building in the work place will now have a tool to investigate the potential for the plan. The professions that could potentially

employ studies based on the Pre-Conceptual Map would be many. According to conversations that have taken place with people in other disciplines, the outlook for the wide spread use of the methodology is encouraging. The Pre-Conceptual Map is a new qualitative methodology that provides a lens with which to closely view a study that could have previously been seen as tainted by unacknowledged bias. Now authors have the choice to deliberately put forth credentials and prior assumptions before examining the data. These facts are now supporting information for the study rather than being a hindrance. By deeply examining the assumptions based on the author's experiences, a unique form of qualitative inquiry titled the Pre-Conceptual Map provides a new tool for expanding the field of qualitative study.

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