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Beliefs of Preservice Teachers

Toward Art Education

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ABSTRACT

The purpose of this study was to discover and categorize the beliefs toward art education that prospective teachers bring to teacher certification programs and how or whether these change, so as to understand the interaction between what student teachers believe and what and how they teach. An analysis of the teacher education literature on subject matter knowledge, beliefs and art education formed the theoretical framework.

The research employed a case study method which included both quantitative and qualitative methodologies. The bounded system under analysis was the set of teacher education candidates in a post degree teacher certification program who were involved in art education methods courses. Survey data from the Eisner Art Education Belief Index were combined with qualitative data including interviews and observations, during and post practicum, of a purposeful sample of four elementary generalist preservice teachers and four secondary art specialist preservice teachers.

The thesis which emerged from this study is that subject matter knowledge and beliefs of preservice teachers toward art education form a dynamic and evolving relationship. Participation by prospective teachers in their teacher education programs and school-encultured practice affected the development and evolution of this relationship.

Four main themes emerged from the data which led to conclusions in the areas of beliefs and: pedagogical content knowledge and discipline based pedagogy; personal competence and conceptions of teaching; practicum experience and the context of teacher education programs. Implications for theory, practice and research are addressed.
DEDICATION

To the three men who make my life complete,
Peter,
Taylor and Alexander
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This dissertation would not have been possible without the generous support of colleagues, friends and family.

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CHAPTER 1 • INTRODUCTION TO THE RESEARCH PROBLEM

Background to the Problem

The impetus for this study was born of a desire to understand the education of prospective teachers with specific reference to their beliefs toward art education. My twenty years as a teacher, an art education consultant and teacher educator, had confirmed the presence of a common theme from my work with preservice and inservice teachers. Beliefs about education and especially beliefs about what constituted the subject matter of a domain were powerful sources of influence on teaching and on further professional development. Teachers' knowledge about art, for example, did not seem as strong an indicator of willingness to learn about art education as were the teachers' beliefs about what art education entailed. In my experience with preservice teachers, their beliefs about subjects seemed to be largely neglected by teacher educators yet appeared to strongly influence what they learned and what and how they taught. Among preservice teachers, beliefs about what was appropriate subject matter and the ways it should be taught often seemed to take precedence over their willingness to acknowledge or accept the values subscribed to in the educational literature. This seemed especially true in the area of art education. As a pragmatist, I felt that any area of study that had implications for planning and structuring courses in art education and that might lead to a greater degree of attainment of the course goals was worth pursuing. These observations caused me to examine the assumptions and suppositions that were common among program planners in teacher education.

Education courses are based on the assumption that beginning teachers will be influenced by the knowledge and understandings they bring to the
program but more importantly, they are expected to subscribe to, and put into practice, the goals of the field. While the content of art education programs and courses is planned to introduce prospective teachers to a variety of art processes, to a consideration of pedagogical issues and to an understanding of what constitutes artistic learning, it is also expected to inculcate attitudes and foster beliefs about the values of art education. Professional socialization in art education, like that in other fields, is not value neutral (Eisner, Laswell, & Weider, 1973).

In spite of the fact that this process is important in the field of what prospective teachers believe art education, there is scant empirical evidence of what it is about the teaching of art that when they enter a program or whether those beliefs are challenged or fostered by their preservice teacher education art programs. As D. Jack Davis notes in the *Handbook of Research on Teacher Education*, "Practice will continue to be guided for the time being by philosophical position rather than by empirical evidence. Likewise, the research literature is void of data supporting particular teacher education programs, practices, and techniques in the preparation of Visual Arts teachers." (Davis, 1990 p. 754). This concern is echoed by Zimmerman (1994) in her article on current research and practice in preservice art education. She demonstrates that there is a paucity of research about preservice art education and concludes that research about subject matter knowledge in art education needs to be explored through a carefully constructed research agenda. The National Art Education Association targeted preservice art education as one of the areas needing study in their research commission report (NAEA, 1993).

While there is a lack of studies in the field of art education that assess student teachers' beliefs about the teaching of art, there is a large body of literature which describes teachers' and prospective teachers' beliefs about
teaching in general. A number of researchers suggest that attention to the beliefs of preservice and practicing teachers should be a focus of educational research (Clark, 1988; Fenstermacher, 1979, 1986; Nespor, 1987; Pajares, 1992). Almost twenty years ago, Lortie (1975) observed, "One's personal predispositions are not only relevant but, in fact, stand at the core of becoming a teacher" (p. 229). Fenstermacher (1979) predicted that the study of beliefs would become the single most important consideration for educational research. A growing number of researchers argue that understanding the belief structures of preservice teachers is essential to improving their educational preparation and teaching practices (Ashton, 1990; Feiman-Nemser, 1986; Fenstermacher, 1979; 1986; Goodman, 1988; Hollingsworth, 1989; Munby, 1984; Nespor, 1987; Pajares, 1992; Weinstein, 1988; Wilson, 1990). Moreover, there is a substantial increase in the literature devoted to the subject matter knowledge of prospective teachers and practicing teachers which acknowledges the impact of beliefs and preconceptions about specific subjects on learning to teach (Ball & McDiarmid, 1990; Grossman, 1990; Grossman & Stodolosky, 1994; Mayer-Smith, Moon, & Wideen, 1994; Shulman, 1986; Wilson, Shulman, & Richert, 1987; Wilson & Wineburg, 1988). As Pajares (1992) asserts, "Attention to the beliefs of teachers and teacher candidates can inform educational practice in ways that prevailing research agendas have not and cannot. The study of beliefs is critical to education" (p. 329).

There has been little research to suggest what prospective teachers believe about art education, how their own art education has influenced those beliefs, and whether their beliefs or their experiences influenced what they do in a classroom. That record appears to be changing as issues in preservice education have become more prevalent in the literature and in the emerging
special interest groups formed through the National Art Education Association and the Canadian Society for Education through Art. Of the few studies related to beliefs and attitudes of preservice teachers toward art education, the most pertinent research includes Eisner et al's (1973) early work in developing and testing a Belief Index, which provided both a partial methodology and a theoretical construct from which to develop this current research. Eisner postulated that the beliefs of prospective teachers toward art education could be categorized on a continuum between "tender-minded" or child-centered beliefs and "tough-minded" or subject-centered beliefs. By establishing where prospective teachers' beliefs fell, it would be possible to plan programs that were responsive to understanding student teachers' incoming beliefs, and to assess whether those beliefs changed as a result of participating in art education courses. The PROACTA studies (Gray & MacGregor, 1987; 1990; 1991a; 1991b) explored practicing teachers' attitudes toward the value of their own preservice education. Galbraith's case study research on her own primary art methods courses (1988; 1990; 1991) and study of the beliefs of secondary art teachers (1992) have some implications for a research agenda that incorporates student teacher beliefs. The recent dissertations of Myers (1992) and Smith-Shank (1992) likewise expand the base of knowledge and the conceptions of the issue. Few, however, go beyond the university to observe how these beliefs are influenced by practice.

The desire to provide some resolution to the relationship of beliefs toward art education held by preservice teachers, their experiences in teacher education, and their classroom practice as exemplified in their practicum experience, is one of the major motivating factors for this study.
Statement of the Problem

An assumption of this study is that beliefs about art education form a powerful sieve through which prospective teachers filter new information about art education. The problem is to discover and categorize the beliefs that students bring to teacher certification programs and how or whether these change, so as to understand the interaction between what student teachers believe and what and how they teach. This may be achieved by examining, at several points in teacher preparation, beliefs about what constitutes knowledge in art, beliefs about instruction and evaluation in art, and beliefs about the roles of the art teacher and the art student. Understanding beliefs toward art education held by preservice teachers would not only inform teacher education programs but could ultimately change practice in the schools.

Research Questions
1. What beliefs do prospective teachers hold toward art education, on a continuum between child-centered and subject-centered, prior to and following the teacher practicum?
2. What factors are reported by prospective teachers as influencing the formation of these beliefs? (i.e. background, gender, age, previous courses)
3. Which beliefs were fostered in their teacher education programs?
4. Which beliefs were challenged in their teacher education programs?
5. What relationships are apparent between prior beliefs and classroom practice?

Research Methodology- Design of the Inquiry

The research employs a case study method (Merrian, 1988; Schumacher & McMillan,1993; Stake, 1988 ). The "bounded system" under analysis is the
set of teacher education candidates in a post degree teacher certification program who were involved in art education methods courses. Qualitative and quantitative methods were necessary to answer the research questions. Survey data from the Eisner Art Education Belief Index were combined with qualitative data, including interviews and observations pre and post practicum of a purposeful sample of secondary art specialist and elementary generalist preservice teachers.

Survey methods are seen as complementary to qualitative methods by a number of education researchers (Eisner, 1981; Glesne & Peshkin, 1992; Jick, 1979). The strength of multiple approaches to the collection and analysis of data lies in the concept of "triangulation", obtaining information in many ways rather than relying solely on one, thus increasing the credibility of the data and enhancing understanding of the phenomena. In this case, data were collected and analyzed from the total sample through use of the Belief Index and a thorough analysis of the context of the case. As well, data were gathered and analyzed from a purposeful sample through the use of the Belief Index, semi-structured interviews, practicum observations, field notes, photographs and collected documents. Purposeful sampling or "selecting information-rich cases for study in-depth" (Patton, 1990, p. 169) of eight prospective teachers allowed in depth data collection and analysis that yielded insights beyond the constraints of the survey instrument. The purposeful sample in this case was chosen to represent both the extremes and the averages of response to the survey instrument.

Informants were selected by providing the option to participate to all students who were enrolled in art education courses in the one year teacher certification program. This population included all the elementary generalist teachers and the secondary art specialists. The number of art education
specialists involved was limited because of the size of that program, and the fact that several students did not return after the practicum experience. The total sample of ninety-eight students represented a wide spectrum of the preservice population in terms of age and background. The purposeful sample for the interviews and observations was drawn from consenting students who scored at the extremes of the survey data, as well as those students who achieved the group mean scores. During the interviews and observations, the researcher did not know the scores of the student teachers from the survey, as those results had been tabulated and the sample chosen using an outsider to cross reference scores. Pseudonyms were assigned to those interviewed and to those providing detailed observation material.

Interviews and observations provided greater flexibility to uncover unanticipated factors and the particulars of the bounded system under study. Informants were interviewed after practicum teaching episodes and again at the end of their teacher education program. All interviews were recorded and transcribed. Recordings were also made of the teaching episodes and field notes were taken by the researcher both during and after each observation. Participants were not given the transcriptions to verify their comments as the researcher felt that they might then be unduly influenced to reiterate the same thoughts in subsequent interviews. As change in belief was the emphasis of the study, the lack of participant review was deemed acceptable in the interests of the authenticity of the study.

Each of the purposeful sample of subjects was analyzed separately, by studying the survey form data and the transcriptions and records of interviews and observations. Patterns that emerged from each separate subject were than analyzed to uncover larger patterns and possible relationships. Quantitative interpretations from the survey data were also included to offer
further support for the findings of this study. Finally, cross referencing of the collected data with the conceptual framework developing from the literature review was undertaken.

Limitations and Delimitations of the Study

This study is limited in its statistical generalizability as it was conducted at one location and the sample findings cannot be generalized to other universities' programs. However, as a case study design, the aim of the research is not generalization of results but the extension of understanding to enable others to make sense of similar situations. Stake (1986) argues for what he terms "naturalistic generalization", in which the study creates a harmony with the reader's experience and thus provides a natural basis for generalizability. Put differently, Kennedy (1979) suggests, "generalizability is ultimately related to what the reader is trying to learn from the case study" (p.672). A case study is valid to any reader to whom it gives an accurate and useful representation of the bounded system under study. The reliability of the case is enhanced by the explicitness of the research techniques and the careful design of the study.

The researcher's role in this study was not one of a true "outsider". However, to mediate observer bias, the researcher was not an instructor in any of the art methods courses offered during the time of the study, nor directly involved in supervising any of the students during their practice. In terms of their beliefs about art education, the participants had no reason to prejudge their responses to fit those of a perceived authority.

All the participants had encountered the researcher in the teacher education program as the coordinator of a cross disciplinary course entitled "The Principles of Teaching". Although this somewhat modified the status of
the researcher with the group of participants, it also seemed to provide a shared sense of the structure of their teacher education program and an acceptance that the researcher could be trusted to observe them in a non evaluative way.

To increase the reliability of the study, a variety of data collection techniques were employed. Combining quantitative and qualitative measures had limitations and assets. Using the Eisner Art Education Belief Index allowed the researcher to collect systematic information from a large sample of people in a relatively short period of time, and to collect pre and post data. The validity and reliability of the survey had been secured in previous research and it could be adjusted for the current study. The weakness of the survey as a data gathering instrument is the limited nature of the questions and the possibility of inaccurate responses by the participants. The set of statements listed may be confusing to some participants and the range may or may not be consonant with an individual's beliefs about professional reality. Any instrument that employs a Likert type scale has a tendency to encourage polarity and does not completely reflect the complexity of the issues. Data analysis of the survey was limited to participants who responded to all three administrations: before, during and at the end of the teacher education program.

Organization of the Thesis

Following this introductory chapter, Chapter Two presents a review of the literature from which the study was conceptualized. It outlines the premises for the study, and selectively surveys the literature on teacher education reform, subject matter knowledge and research on beliefs in teacher education, and the corresponding research in the art education literature. The design and methodology of the study are the focus of Chapter Three. Chapter
Four provides the social and programmatic context of the case and the instrumental context is developed through analysis of the *Eisner Art Education Belief Index*. In Chapter Five, each of the purposeful sample of eight student teachers is analyzed separately with reference to: overall place within the larger population; characterization of prior beliefs; characterization of post methods course beliefs; practicum experience; and a summation of relevant issues. Chapter Six presents the discussion and interpretation of the findings by contextualizing beliefs into four main themes that emerged from the analysis: subject matter knowledge; competence; practicum context and programmatic context. The final chapter attempts to offer understandings gained in the study by revisiting the research questions and addressing conclusions related to the four themes as well as suggesting implications for theory, practice and research.
CHAPTER 2 • REVIEW OF THE LITERATURE

This chapter provides a review of the literature from which the present study was conceptualized. The first section outlines the premises for the study. Subsequent sections review the literature on reform in teacher education; the role of subject matter knowledge; research on beliefs in teacher education; conceptions of art education and research on preservice teachers' beliefs in art education. A summary of the main points completes the chapter.

Introduction and Underlying Premises

This study is predicated on the notion that teacher education must "challenge prospective teachers' cherished notions and beliefs about teaching and schooling, and it must provide a context in which their further development can take place" (Liston & Zeichner, 1991 p.56). Beliefs and attitudes about teaching specific subject areas are powerful influences on the practice of future teachers. Beliefs about the nature and content of a discipline can influence what knowledge and understanding from teacher education courses are incorporated into beliefs and attitudes about that discipline. These beliefs are also likely to influence decisions of practice.

An underlying premise of this study is that teacher education in art should be more than training in specific skills and knowledge. Personal beliefs about the subject should be challenged or fostered in light of the values and theories that are part of the field. It is not enough for preservice teachers to replicate their own education in art, or even to preserve the status quo in schools. Rather, preservice teachers should be able to reflect on their own beliefs in light of the values in the field as expressed in their teacher education courses, and reach informed conclusions on what is appropriate to teach.
Beliefs are the lenses through which preservice teachers develop a vision of teaching and learning. In art education there is very little evidence of the magnitude of those lenses, whether they alter the vision of art education that is subscribed to within the teacher education program, or how they affect the practice of teaching art. Ultimately, the beliefs of the individual teacher dictate what, or if, art education will take place. Fullan's (1982) view that the teacher in the classroom is the most important agent of change, is confirmed in the case of the art teacher by Gray and MacGregor (1987,1991). If art educators see beginning teachers as agents of change, then understanding the beliefs of preservice teachers may allow for prediction on the direction art education is likely to take, as these teachers join and contribute to the profession.

Reform of Teacher Education

Reform of teacher education has been a major focus of reports and research in the past few years in North America. Studies and reports (Carnegie Forum on Education and the Economy, 1986; Goodlad, 1990; Holmes Group, 1986) have advocated a major restructuring of teacher education. In Tomorrow's Teachers (Holmes Group, 1986), the Holmes Group recommended abolishing undergraduate majors in education and moving professional teacher preparation to the graduate level. The assumption by University faculty and policy makers who follow the Holmes Group tradition, is that a liberal arts education will improve academic preparation of teachers. The philosophical argument (Dewey, 1904; Peters, 1977; Scheffer, 1973; Wilson, 1975) is that a liberal arts education provides the intellectual resources, the essential spirit of inquiry, and the intellectual dispositions, skills, and knowledge necessary as preparation for teaching. A solid liberal arts education
would allow students to develop a substantive knowledge of subject matter in a number of disciplines and provide the foundation for pedagogical studies. There is, however, some serious debate (Fenstermacher, 1986; Zeichner, Tabachnick, & Densmore, 1987) that a liberal arts education will result in better preparation for teaching. McDiarmid (1990) argues that there is often not subject area understanding on the part of students at the conclusion of liberal arts programs, even in the disciplines that are most commonly studied.

The importance of this discussion in the context of this study is that substantive programmatic changes along Holmes Group lines were implemented in the university site used for the research. In 1986, the teacher education program was completely revamped from an undergraduate and fifth year certification program to a one year post degree program. Although the university is not officially a member of the Holmes Group consortium, many of the conceptual justifications for a post degree teacher education program apply.

Any discussion of knowledge in the discipline of art must be contextualized for this study by drawing attention to a lack of formal art education on the part of students prior to their enrollment in the Faculty of Education. Art specialists, especially at the secondary level, typically enter teacher certification programs with an undergraduate degree in studio art and/or art history. Their emphasis has been to specialize in the subject, and not necessarily develop the knowledge, skills or conceptual understandings necessary to teach. Most art history or studio art programs do not develop the sort of comprehensive knowledge base necessary for a well educated art teacher. Instead of a broad based conceptual understanding of issues in art, current undergraduate programs tend to focus on technical mastery of art production or factual learning in art history (Detmers & Marantz, 1988). Most
BFA or BA programs fail to make any substantive connection between a liberal education core and a broad based knowledge of the discipline of art. If "teachers should know their subjects thoroughly and have the intellectual qualities of educated, thoughtful, and well informed individuals" (Holmes Group, 1986, p.46) as the Holmes Group suggests, then radical restructuring of most undergraduate programs in art would have to occur before these criteria were met.

Students entering the elementary generalist program have only the slightest possibility of experience in university undergraduate course work in art. The visual arts are not generally one of the areas of study in most liberal arts education programs and therefore there is little likelihood that prospective generalist teachers will be exposed to any subject matter understanding of art during their time at university. Even if a student has taken an art course, it is unlikely that this would equip a future teacher to make informed choices about the range of content appropriate for study in art or as the Holmes Group suggests, "developing the skills in transforming and using subject matter knowledge in teaching." (Holmes Group, 1986, p.50.)

Understanding of subject matter can be acquired in significant ways outside of colleges and universities, however. Everyday experience and cultural traditions are significant though overlooked sources of peoples' subject matter knowledge (Ball & McDiarmid, 1990). For preservice teachers, much of their understanding in art is a result of their elementary school experience. When preservice teachers think of teaching a school subject, they are responding to more than their personal ideas about that subject. They are also responding to their school-enculturated form of that subject (Doyle, 1990). How substantial this form of knowledge is in creating a basis for anything other than an idiosyncratic knowledge of art is one of the issues addressed
later in this study. That existing knowledge and beliefs act as a strong influence on acquiring new knowledge is especially relevant to the study of teacher education. There is a growing body of research to support the idea that teachers' prior subject matter knowledge represents a critical foundation in the practice of teaching (Elbaz, 1983; Feiman-Nemser & Parker, 1990; Grossman, 1990; Shulman, 1986).

The Role of Subject Matter Knowledge

The idea that subject matter knowledge is an essential component of teacher knowledge is neither a new nor particularly controversial assertion. "If anything is to be regarded as a specific preparation for teaching, priority must be given to a thorough grounding in something to teach." (Peters, 1977, p.151) as cited in Ball and McDiarmid, 1990.

In recent years there has been a substantial increase in attention to the subject matter knowledge teachers need to represent and convey subject matter to students (Ball & McDiarmid, 1990; Grossman, 1990; Shulman, 1986; Wilson, Shulman, & Richert, 1987; Wilson & Wineburg, 1988). There are three important strands to this research. The first is focused on the key role of content knowledge itself. To teach at all, Shulman (1986) argues, a teacher must "understand the structures of the subject matter, the principles of conceptual organization, and the principles of inquiry that help answer two kinds of questions in each field: What are the important ideas and skills in this domain? and How are new ideas added and deficient ones dropped by those who produce knowledge in this area? That is, what are the rules for good scholarship or inquiry" (p.9). Investigators have found that the content of instruction is shaped by what teachers know and don't know about the subjects they teach. "Knowledge or lack of knowledge ...can affect how teachers
critique textbooks, how they select material to teach, how they structure their courses, and how they conduct instruction" (Grossman, Wilson & Shulman, 1989, p.28).

In art education, subject matter knowledge allows teachers to connect and relate knowledge of art history, aesthetics, media, technique, cultural and social context and image development strategies to the problem at hand. Lack of subject matter knowledge can cause teachers to misinterpret and misinform students about art (Korososcik, 1990).

Pedagogical content knowledge is defined as "the capacity of a teacher to transform the content knowledge that he or she possesses into forms that are pedagogically powerful and yet adaptive to the variations and abilities and background presented by the students" (Shulman, 1987, p.15). The key to pedagogical content knowledge is for the teacher to be able to represent subject matter knowledge to students in a way that they can understand. Teachers use their understanding of teaching to select and interpret subject matter that they assume will lead to student learning and Grossman, Wilson, and Shulman (1989) suggest that content knowledge, substantive knowledge, and syntactic knowledge and beliefs about the subject are all dimensions of pedagogical content knowledge. Content knowledge refers to the facts, principles and concepts of a domain. Content knowledge allows individuals to make connections between concepts in the field and concepts or events in other fields. Substantive structures guide inquiry in the discipline (Schwab, 1978). A variety of substantive structures can exist at the same time within a discipline. The move in art education toward a discipline based notion which includes inquiry in art history, aesthetics, criticism and studio production demonstrates that more than one mode of inquiry may exist in a domain. Syntactical knowledge is defined as the way new knowledge is brought into the field.
While teachers hold beliefs about the nature of teaching and learning that influence how they approach instruction, beliefs about subject matter are often treated as knowledge. These beliefs affect teaching as well (Grossman, Wilson, & Shulman, 1989).

Research on beliefs in teacher education

Nespor (1987) has argued for a theoretically grounded model of belief systems that would serve as a framework for understanding research in teaching and teacher education. Developed from a body of field-based research on teacher thinking, the theoretical model he proposes acknowledges that belief systems rely heavily on affective and subjective components rather than solely on knowledge systems. A less obvious arena in which affect was found to be important was that of teachers' conceptions of subject matter. The values placed on content by the teachers in the field often influenced how that content was taught.

Nespor argues that beliefs draw their power from previous episodes or events. This might suggest that previous school experience in a subject would provide a strong basis for beliefs about the content of that subject. His concluding implications are similar to Fenstermacher's (1979) intentionalist approach to teacher education. Fenstermacher suggested that teachers' subjective beliefs, if reflexively recognized, could be transformed or altered by objective argument. Nespor would qualify this to suggest that in order for change to take place, not only do prospective teachers need to become reflective and self conscious of their beliefs, but they need to be presented with means to replace old beliefs with new variations. Much the same argument is presented by Prawat (1992) who maintains that the way to help teachers change their beliefs is to provide them with ways in which to link new beliefs
with earlier conceptions. The idea of structuring and inculcating certain kinds of beliefs does, of course, raise fundamental questions for teacher education that are far from resolved.

A different challenge to prior beliefs and their consequences for teacher education is presented by Hollingsworth (1989) in her study of fourteen elementary and secondary preservice reading teachers in a fifth year teacher education program. Qualitative data in the form of interviews and observations was analyzed to determine the effects of prior beliefs and cognitive change on learning to teach. Again, the results clearly indicated that faculty of preservice programs should come to understand the incoming beliefs of prospective teachers, as these beliefs played a critical role in conceptions of subject content and pedagogy. Hollingsworth suggests that subject-specific content and pedagogical knowledge could not be separated from classroom management concerns, however. Although there was some evidence to support belief change, what was advocated was a more flexible approach in teacher education that would help incoming candidates with differing beliefs understand the complexities involved in classroom life over a number of dimensions.

Kagan (1992), in her review of research on the professional growth of preservice and beginning teachers, concludes that "the personal beliefs and images that preservice teachers bring to programs of teacher education usually remain inflexible. Candidates tend to use the information provided in course work to confirm rather than confront and correct their preexisting beliefs" (p. 154). What Kagan failed to take into account in her analysis of the literature on preservice teachers was the body of research which deals with teachers' growth in their understanding of subject matter. As Grossman (1992), notes, the missing paradigm of subject matter, so long absent from the research on
teaching (Shulman, 1986) is still missing in Kagan's review" (Grossman, 1992, p.172). The major strand emerging in this area is the way in which teachers' beliefs affect their teaching of a subject. Teachers frequently treat their beliefs about subject matter as knowledge and these beliefs affect their teaching. Although this is relatively unexplored territory in the research on teaching, the work of several researchers (Abelson, 1979; Ball & Feiman-Nemser, 1989; Feiman-Nemser & Parker, 1990; Grossman, Wilson, & Shulman, 1989; Wilson & Wineburg, 1988) indicate that teachers' beliefs about teaching and learning are related to how they think about teaching, how they learn from their experiences, and how they conduct themselves in classrooms.

Moreover, it is not just as a consequence of adult learning that people hold the beliefs they do. Prior school experience, not only with the subject directly but also with the way it is taught, the attitudes of peers and adults to its worth (Lortie, 1975) and a myriad of other factors play a part in the formation of attitudes and beliefs. Often these personal conceptions of a subject and the way to teach that subject function as personal theories. These beliefs and assumptions guide decisions and determine teaching practice (Anderson, 1989; Elbaz, 1983; Munby, 1984).

Studies of school subjects such as reading (Hollingsworth, 1989; Richardson, Anders, Tidwell, & Lloyd, 1991), English, (Grossman, 1991) social studies (Wilson & Wineburg, 1988), mathematics (Ball, 1990; Brown, Cooney, & Jones, 1990) and science (Munby, 1984; Moon, Mayer-Smith & Wideen, 1993) have found that students and teachers alike hold beliefs and attitudes of which they are not aware, yet which influence their learning and behavior with regard to the subject. These beliefs, although often tacit (Polanyi, 1966) in the sense that they are often unstated and unexamined, can nevertheless be examined in the light of observations and interview data. Studies with a
comparative subject matter perspective (Stodolsky & Grossman, 1992; Mayer-Smith, Moon, & Wideen, 1994) found that beliefs about subjects were part of a subject culture world view. These world views held by preservice teachers in the humanities and sciences were quite different.

Much of the research on preservice teachers' beliefs is focused on the impact of these preconceptions on the effectiveness of teacher education programs. Many of these studies have reaffirmed the notion that teacher education courses or programs have had little influence on the students' belief systems (Britzman, 1986; Bullough, 1989; Goodman, 1988; Hollingsworth, 1989; Myers, 1992; Zeichner, & Gore, 1990).

Other studies provide results which make a contrary case. In these studies, preservice teachers' beliefs do appear to be significantly influenced by their university course work. Grossman and Richert (1988) found that beliefs about subject matter, pedagogical content, and pupil understanding were positively influenced by teacher education course work. Peer teaching sessions were cited by Morine-Dershimer (1989) as one of the techniques that led to a change in preservice teachers' views of planning as evidenced in their concept maps in a generic methods course.

Regardless of the particular model that these studies represent, there is general agreement that teacher educators must acknowledge the effect that preconceptions and beliefs of preservice teachers can have in shaping experience in teacher education programs. The goal, then, is one of being responsive to prior beliefs so that further development can take place. How to accomplish that goal is still in question.
Conceptions of Art Education

Two main constructs have dominated thinking about what constitutes education in art. They parallel the two classical tensions in North American education. In one view, the starting point for educational decision making is the subject-matter to be learned. This is exemplified in art education by an emphasis on the systematic planning of art programs around the discipline of art.

Ideas of what art is or should be have evolved quite significantly, from Walter Smith's 19th century ideal of a curriculum tied to the production of "masters of industrial drawing" (Efland, 1976) to the current emphasis of discipline-based art education as exemplified in the materials developed under the auspices of the Getty Trust (Clark, Day, & Greer, 1987; Getty Center for Education in the Arts, 1989; Greer, 1984). Current discipline-based art education subscribes to an ever widening view that encompasses art making, aesthetics, art criticism, and art history in a multicultural and non gender biased context (Hamblen, 1993). What has remained constant is the emphasis on specific curriculum intentions, evaluation of artistic outcomes and aesthetic learning and the rational construction of art programs.

At the other end of the spectrum is the orientation that falls within the child-study movement. The contention here is that the artistic process is a creative and natural condition of the developing child. From Froebel in the 1880s and the metaphor of the "child garden" where the naturally unfolding child flourishes, through the writings of art educators such as Lowenfeld (1947) and Read (1945), the child is viewed as an artist and the teacher as a guide. The primary responsibility in art education is to nurture the development of the child and to protect the child from adult influences and the world of adult art. Read (1945) writes:
Generally speaking, the activity of self-expression cannot be taught. Any application of an external standard, whether of technique or form, immediately induces inhibitions, and frustrates the whole aim. The role of the teacher is that of attendant, guide, inspirer, and psychic midwife. (p.206)

Eisner (1971) characterized this view in his seminal article on the seven myths of art education: children should be left to their own devices; when it comes to art teaching, love and materials are enough; art education is synonymous with teaching "creativity"; what counts in art is the process not the product; children perceive more clearly than adults; art work by children does not, and should not be evaluated; talk about art work is unnecessary and/or impossible; and the best program of art education for young children is one which a wide range of materials is present.

A return to creativity at the center of the art education experience has been advocated by contemporary art educators such as Peter London (1988) and George Szekely (1991).

Given these very different views about the nature of art education, the substance of the curriculum and the role of the teacher, it seems important for teacher educators to ascertain what beliefs are held by beginning teachers and whether these beliefs had been challenged or fostered in the course of their preservice experiences. As Gray and MacGregor (Gray & MacGregor, 1987; 1990; 1991) assert after studying teaching practices in secondary art classrooms across Canada"to hire an art teacher is to hire a curriculum" (Gray & MacGregor, 1987 p.24). One of the goals of teacher education is to encourage teachers to be aware of their beliefs toward art and how these influence their teaching. By examining the congruence between the values of teacher education programs and those of graduates of those programs, educators can
better plan to develop the beliefs that reflect what they consider to be the best of educational worth.

Research on Beliefs in Art Education.

Although the importance of research on preservice teachers' beliefs towards art education was identified by Eisner et al (1973), there has been almost no research published that addresses this issue until the last few years. Zimmerman (1994), after reviewing current research about pre-service art education in general, demonstrates the paucity of literature in the area and makes the case for a carefully constructed research agenda. While there have been a number of studies that survey the content and characteristics of art methods courses (Jeffers, 1993, Zimmerman, 1994), there is little research on how methods courses impact on preservice teachers' views of art education. However, some art educators are now becoming increasingly focused on the need for a research agenda and for a more comprehensive understanding of teacher education issues in art. Moreover, the National Art Education Association and the Canadian Society for Education through Art have both recently struck committees to outline a research agenda for issues in art teacher education.

Over twenty years ago, Eisner (1973) developed and tested a survey instrument designed to assess beliefs about art education along a continuum from child-centered or "tender minded" beliefs to subject-centered or "tough minded" beliefs. As a diagnostic tool, it was to enable teacher educators to understand preservice teachers' beliefs and to examine to what extent those changed over time. Unfortunately, this research was not followed through beyond the initial stages and lack of publication of the instrument and dissemination of the information ended what could have been a valuable line
of research for art teacher educators. Further discussions of the *Eisner Art Education Belief Index* and preliminary results from this research are contained in Chapters 3 and 4.

If no research on preservice teachers' beliefs occurred in the intervening years between 1973 and the late 1980s, there was at least an acknowledgment of the importance of understanding practicing art teachers' beliefs.

Di Blasio (1978) has written of the need for critical examination of the often fallacious beliefs held by art educators. In *Instant Art Instant Culture: The Unspoken Policy for American Schools*, Chapman (1982) identifies unexamined beliefs and attitudes of art teachers and the general public as the most critical issue in the demise of art education in the American schools.

Our research offers little insight into the way the art teacher's beliefs and preferences may influence what students study, of the character of interactions in the classroom, or what students learn. Research on the teacher's own artistic and educational philosophy is of special importance in the visual arts precisely because the art teacher is relatively free to invent the art curriculum— to determine the objectives, content, and activities available to children. (p.107)

This view of the magnitude of the influence of the beliefs of art teachers on the practice in classrooms is shared by the research done in the PROACTA study (*Personally Relevant Observations about Art Concepts and Teaching Activities*) by Gray and MacGregor (1987, 1990, 1991). Three propositions formulated by Gray and MacGregor, namely "to hire a teacher is to hire a curriculum"; "teaching is idiosyncratic activity" and "the visual arts are complex phenomena" were supported and confirmed by their findings. Gray and MacGregor questioned their subjects about preservice education. They found that teachers in this study translated knowledge into classroom
practice as a consequence of personal preference, rather than as a result of undergraduate or teacher education courses or programs.

The issue of moving prospective teachers beyond the traditional assumption that art education as a child-centered activity that needed no content knowledge, was raised again by Galbraith (1990), "To put it simply, some preservice teachers may need to suspend their own beliefs about what art education should comprise, or may have to change their notions entirely if current art education reforms are to take place in the schools" (p.55). In her case study research of her own primary art methods course, Galbraith (1988, 1991) identifies many of the same issues of concern that led to the formation of this study. The assumptions and beliefs about art education that her students brought with them into the art methods course militated against them accepting or acknowledging the worth of the course goals. Galbraith calls for further research to examine the assumptions and beliefs of student teachers toward art education.

Two recent doctoral dissertations have tackled the issue of preservice teachers' beliefs about art education from very different conceptual and theoretical bases and methodologies. Smith- Shank (1992) explored the issue by eliciting and examining the accounts of preservice teachers of their own experiences with art education. Written self reflections, semi-structured interviews and focus groups were analyzed from both structuralist and post structuralist perspectives. Narratives about art experiences were treated as folk tales where "dragon" stories of art teachers and art experiences highlighted the anxiety many of the subjects felt about doing and teaching art. These personal experiences then were analyzed to form recommendations for art teacher education programs.
Myers (1992), on the other hand, was concerned with the connection between personal beliefs and preconceptions and current values of the field. She used semi structured interviews of teacher candidates entering and exiting from an undergraduate teacher education program. Like Galbraith, her goal was to examine the relationship between the preservice teachers' beliefs and preconceptions and an art education program that emphasized a discipline based model of art education. The student teachers in this study entered the program with many of the beliefs identified by Eisner (1973) as child-centered. Although some students appeared to accept a discipline based paradigm shift in their beliefs about art, most students' preconceptions remained unchanged by their experience in the art methods courses.

None of these studies has gone beyond the university to question how the espoused beliefs of preservice teachers might affect their practice.

Summary

The beliefs and attitudes of prospective teachers toward teaching and learning in particular school subject areas are powerful indicators of classroom practice in those subject areas. While many reforms of teacher education have argued that a liberal arts education prior to teacher education will provide the necessary knowledge to understand school subjects, several rather serious contradictions are evident in the case of art education. Very few students entering post degree teacher education programs have had sufficient courses in art to adequately understand the structure of the discipline. Moreover, their beliefs about art are largely formed by their own school experience with the subject and their content knowledge is nearly non existent. Beliefs about art education are often erroneously treated as knowledge about art. Even the art specialists have come from an educational background that emphasizes...
specialty within the discipline and militates against a broader conception. The assumption in teacher education programs that student teachers will acquire pedagogical content knowledge presupposes adequate content knowledge to build upon and a belief system that supports the values of the field. While there is a growing body of literature that addresses the role of beliefs in teacher education, research in the area of art teacher education especially as it relates to these issues has been quite limited.
CHAPTER 3 • METHODOLOGY

Study Design and Methodology

This case study focused on students enrolled in a one-year teacher certification program, with a required art methods course, at a western Canadian university. This study was designed to investigate five research questions:

1. What beliefs do prospective teachers hold toward art education, on a continuum between child-centered and subject-centered, prior to and following the teacher practicum?
2. What factors are reported by prospective teachers as influencing the formation of these beliefs? (i.e. background, gender, age, previous courses).
3. Which beliefs were fostered in their teacher education programs?
4. Which beliefs were challenged in their teacher education programs?
5. What relationships are apparent between prior beliefs and classroom practice?

Qualitative inquiry may use several forms of representation to develop the case (Eisner, 1991). In this study the research drew on survey and participant-observation data of the entire sample, as well as participant-observation and interview data of a purposeful sample of four generalist and four art specialist prospective teachers. The study probes prospective teachers' beliefs toward art education prior to the art methods course, post course and post practicum. This chapter is organized to make explicit: the role of the researcher; the nature and selection of the participants; the particular characteristics of setting; the research design and methodologies and a review of the process of data analysis.
Researcher's Role

Because of the nature of qualitative inquiry, the role of the researcher should be clearly delineated to increase both the validity and reliability of the study (Schumacher and McMillan, 1993). My role in this research may be examined from the perspectives of the qualities and experience I bring to the role as a participant observer, and as a collector and interpreter of data.

Prior to the study in question, I spent ten years as a teacher and a Supervisor of Instruction predominantly in the area of art education in the public school system and then eight years as a teacher educator at two universities in the area where the study took place. I had also completed some case study research in California as part of my graduate studies. I bring to the role of researcher an extended history in observing teaching practice, both of practicing and prospective teachers.

During the time of the study, I was actively involved as the coordinator and main lecturer of the Principles of Teaching course, a core course that all participants in the study took in their first term. Although this involvement at the research site had the disadvantage that I was not a true outsider, it also had some decided advantages. I had an intimate knowledge of the teacher education program, though with no vested interest in the change that had transpired in recent years in the philosophy or design of that program. The decisions about program structure and content had been made prior to my arrival at the university. I was aware of the ebb and flow of the program through numerous sources, from weekly meetings with faculty, faculty associates and sessional instructors to formal and informal interactions with the student teacher population. As the coordinator of one of the key courses, I had knowledge of the other components of the program and worked closely with the faculty and staff in the teacher education program. The
perception that I was an open and approachable teacher, (as evidenced in university peer evaluation reports and student assessment instruments) helped create a collegial relationship with the participants for the data collection. I was very aware of my special status as a faculty member and attempted to ease any tensions that might be associated with that role. I also made every attempt to reflect on my own assumptions and biases during data collection and analysis.

Although in the past, I had taught elementary and secondary art methods courses and been directly involved in supervising student teachers on practicum, my involvement with art education courses was limited during the study. I did not teach the art methods courses, nor was I involved in school supervision. The students in the program had no reason to subscribe particular evaluative or judgmental motives to my interest in their beliefs toward art education. The elementary generalist group for the most part did not identify me with the art education department. The specialists knew that I had a significant role in that program, but I did not have direct contact with them in a teaching or supervisory role during the period of the study.

Participants

Informants were selected by providing the option to participate to all students who enrolled in art education courses in the one year teacher certification program at the university research site. After university ethical review clearance, I approached all the art education course instructors (six) and asked to speak to the students in the art methods courses at the beginning of the new term. Each class of students was briefed about the purpose of the study, which was to conduct research in preservice teachers' beliefs toward art education. Participation would include answering three surveys and the
possibility of being the subject of practicum observation and interviews. Time was set aside to administer the first survey at this point. Students were informed both orally and on the written instructions for the survey form that they had the right to refuse to participate in the research or withdraw at any time without jeopardizing their class standing (Appendix A contains a copy of the approved survey form). Consent was indicated by the return of the completed questionnaire. One hundred and thirty students participated in this first survey. The number of elementary generalists was one hundred and fifteen and there were fifteen secondary art specialists. To ensure that the longitudinal analysis of the subjects actually compared the scores of the same student teachers, only ninety-eight students who participated in all three administrations of the survey formed the final sample. As well as the decision not to participate, the drop off rate can be attributed to absenteeism in any of the courses where the survey form was administered; to the fact that some students did not return to the university after their practicum experience; and to incomplete or incorrect identification on returned surveys so that a match could not be found.

The student population shared some common characteristics. The average age for the population was twenty seven and the grade point average for admission was the highest for any post degree program on campus in that year. Competition to be admitted to the teacher education program was fierce, with three times more applications than spaces available.

The generalist preservice teachers had had little or no art background. Only two people with Fine Arts degrees were admitted to the elementary program in that year. An art background inventory completed at the same institution in the two years previous to the research, found that preservice teachers as a group had little post secondary art studies (Helgadottir & Gray,
Of the less than twenty percent who had acquired courses beyond high school, the majority had taken an introductory art history course to fulfill the history component of their liberal arts degree.

Prospective teachers came from across Canada and also included a small percentage of international students. Local provincial residents made up the majority of the population. The ethnic background of students was mixed. Although no specific data were taken to signify ethnicity, the use of the respondents' mothers' maiden name as an identifier indicated a wide variety of Caucasian and Asian nationalities. For example, fifteen names were easily identifiable as Chinese, Japanese or East Indian. Approximately twenty five percent of the candidates in the sample (24/98) were male. The same percentage of males was reflected in the total population. The percentage of males in the secondary program, exclusive of the art specialists, was much higher, at forty nine percent.

The enrollment in the secondary art specialist program was small in number, as fewer candidates finally enrolled in the program than were admitted. Of the fifteen original respondents, three withdrew from the program during practicum and two were absent during one of the two follow-up surveys. Ten students answered all three surveys. Seven were double art majors and three had other subject concentrations. As with the elementary group, their prior degrees were from across North America. Six students had taken undergraduate courses in art education as well as their Fine Arts course work. All had studio and art history courses in their university degrees. Their ages ranged from twenty-five to over forty years old and one quarter of the initial sample was male. The ethnic background of these students was predominantly Caucasian. English was the first language of all art majors.
Purposeful Sample

The purposeful sample was selected at the time of the second administration of the Belief Index. A form which asked whether the students would be willing to participate in interviews and observations of their practicum was distributed during class time. Students were to respond yes or no, provide their own first name, telephone number and mother's maiden name (their mother's maiden name was also their identifier on the survey). Seventy-five percent of the students in the generalist group and eighty percent of the secondary group indicated that they were willing to participate further. The results from the first administration of the survey were tabulated and ranked. A graduate student provided a cross reference of names of students who had scored at the group norm and at the extremes of the Belief Index. Representation by gender was also taken into consideration for the final choices. To guard against bias in the observations and interviews, I did not have knowledge of which scores related to which individual subjects when contacting people to consent to the interviews and practicum observations. It was only in the data analysis phase, that those initial scores were paired with the specific subjects. All of the subjects who were initially contacted agreed to continue to participate in the research.

The Setting

The site of the study was the Education Faculty of a western Canadian university and three adjacent school districts that accepted the university practicum students.

The teacher education program at the main site had undergone radical restructuring in the ten years prior to the study. An internal committee, chaired by the Dean had set forth a series of recommendations that were
debated and then finally approved by the faculty after extensive consultation with the field. Although not officially associated with the Holmes Report, many of the changes can be directly linked to the same rationale and philosophical base.

The major features of the teacher education program for the year of the study, can be summarized by examining the overall program features including admission requirements; subject matter studies, pedagogical studies, and the school experience component.

The minimum post-secondary preparation for beginning teachers, both elementary and secondary, is five years. The pedagogical phase of initial teacher education presupposes the completion of a minimum of four years of post-secondary general education and subject studies. The assumption is that a four year degree in the liberal arts or sciences will provide adequate time for candidates to achieve an education with both breadth and depth. For secondary teachers a degree in the selected teaching field(s) is required.

The pedagogical phase of initial teacher education extends over a minimum of 12 months. The one year (12-month) elementary program was a recent innovation. The original two year option is still available but does not figure in this study. The rationale put forth for the need for an extended academic year was to provide adequate time for candidates to acquire and assimilate the knowledge, skills, and attitudes necessary to begin a teaching career and to become accustomed to the standards and practices of the teaching profession.

As part of admission requirements, all prospective teachers complete introductory or survey courses in English and in as many as possible the major fields of human inquiry. Some studies should have a significantly Canadian content or approach. Where possible, the preparatory program
should include a second-level course in English composition or writing. Informal experience in teaching children is highly recommended.

Each prospective elementary teacher completes at least a one-term course related to each of the core subjects in the B.C. elementary school curriculum (mathematics, a laboratory science course, and courses in history and/or geography in addition to the English requirement noted above). A fine arts requirement that had been part of the initial changes was removed because of the small number of prospective applicants likely to have met this requirement in the course of a liberal arts or science degree. Prospective teacher candidates are expected to have subject-matter strength in one selected elementary school subject. This consists of 18 credits (3 full courses) at the third or fourth year level in addition to introductory or survey courses in that subject. Art is one of the subject areas acceptable for admission.

Secondary teacher candidates are expected to achieve depth of knowledge and understanding in at least one, and preferably two, secondary teaching subjects.

Initial teacher education includes a blend of pedagogical courses and educational foundation and psychology courses. Teaching methods courses encompass both general (Principles of Teaching course) and subject-specific (art, math, science, language arts, etc.) studies. In the elementary program, preservice teachers must take eight subject specific methods courses. Secondary teacher candidates must complete subject matter methods courses and electives in their teaching field(s).

The selected program of studies is tightly structured and sequenced with opportunity for some electives during the final term. As noted earlier, all the subjects in this study were enrolled in an art methods course. The basis of the courses followed a discipline based art education philosophy but
variation within courses was accepted. The theoretical basis for discipline based art education was advocated at the same time that student teachers were encouraged to examine their own beliefs and values and develop a philosophy that was consistent with their own understandings. This tension between a particular orientation and issues of uncertainty, openness and diversity is more thoroughly examined in the profiles of the purposeful sample. A more complete analysis of the content features of the program and the art methods courses in particular is found in Chapter Four.

The student handbook provides a strong statement of the underlying premises of the program," subject matter and pedagogy are equally crucial to successful teaching. If one has nothing to teach one cannot teach; but, equally, one cannot teach without carefully nurtured pedagogical knowledge and skills." (Elliott, 1992, p.16).

During the twelve month program, there are three possible school experience components. Initial half day school observation experiences were cut from the secondary program due to placement difficulties and on campus orientation lectures were put in place instead. The weekly half day placement remains as part of the first term of the elementary program. A two week practicum is integrated into the first term for secondary student teachers and at the beginning of the second term for elementary students. The final practicum extends for a full term of 13 weeks.

The setting for the thirteen week practicum observations and initial interviews for this study was three school districts in close proximity to the university site. Ethical review clearance was completed with each district separately. The student teachers were placed in their practicum placements without the placement officer's awareness that they were involved in the research. The record of any particular sponsor teacher, school or district was
Research Methodology

As noted previously, the research employs a case study method (Stake, 1988) which involves both quantitative and qualitative research methodology. The "bounded system" under analysis is the set of teacher education candidates in a 12-month post degree teacher certification program who were involved in art education methods courses. This included both the full set of elementary generalist preservice teachers and a sub-set of the secondary specialist program who were preparing to become art teachers. Survey data from the Eisner Art Education Belief Index was combined with interviews and observational data of a purposeful sample of the preservice teachers in both the generalist and art specialist programs.

Quantitative Methodology

To secure information on beliefs about art education held by prospective teachers, the Eisner Art Education Belief Index was chosen. It contains 60 items which are designed to elicit the extent to which the respondent is influenced by subject-centered beliefs or child-centered beliefs about art education. Each question elicits a response on a five point Likert-type scale, from strongly agree to strongly disagree. Content validation was secured by an initial review of the items by six professionals in the area of art education in North America and Great Britain. Internal consistency was measured by the Cronbach Alpha and a coefficient of .88 was secured for the total index. A stability coefficient was calculated by correlating the scores of 59
subjects from a pilot study at two points in time extending over a three month period (Eisner, 1973).

Similar methods were employed in the current study to ensure content validation and internal consistency. The items on the Index were reviewed by the instructors in the art methods courses under study, as well as by two other art education professors. A Cronbach Alpha measured the internal consistency of each of the tests for each administration. A range of coefficients from .83 to .77 was secured. Internal consistency was higher for the first two administrations of the Index than the last, but the coefficients are sufficiently high to have confidence about the reliability of the Index.

Although the original 80 item Index was further divided into four subtests, this was not possible with the most recent Index. Mean scores in this case were calculated separately on the 30 items that showed agreement with the two orientations of subject-centered beliefs and child-centered beliefs. A Pearson Product correlation between the two dimensions was calculated for all three administrations. A significant negative correlation to the -.001 level was secured for the first two administrations and a significant negative correlation to the-.01 level was secured for the final administration. This result suggests that the Belief Index could provide an accurate representation of the student teacher's beliefs toward art education on a continuum between child-centered and subject-centered responses. An item analysis of the individual items on the Index suggests that there were no items that were inconsistent across the three administration for a significant segment of the responses of the population. The statistical information is consistent and corroborated with the qualitative information provided by the analysis of the interviews of the purposeful sample. More detail of this analysis is included in Chapter Six.
Background data identifying age, gender and general attitudes to previous art experiences and were also included in the current version used in this research (Appendix A).

**Qualitative Methodology**

Although the Belief Index provided a satisfactory source of analysis for many predetermined variables, it was unsuitable for examining complex or intricate patterns of interaction and for analyzing the congruence between espoused beliefs and actual practice. Munby (1982; 1984) observed that inventories are limited and should be augmented with additional measures such as semi-structured interviews and observation of behavior if richer and more precise inferences are to be made. Wilson (1990) posits that teacher education students' beliefs surface as much from their behaviors as from their answers. Pajares (1992) suggests that the understanding of beliefs surfaces from inferences and that these inferences need to take into account the ways that individuals give evidence of belief, so "open-ended interviews, responses to dilemmas and vignettes, and observation of behavior must be included if richer and more accurate inferences are to be made" (Pajares, 1992, p. 327).

Qualitative methods provide the researcher with the tools necessary to gain an understanding of not readily evident aspects of the student teachers' beliefs and to illuminate their behavior in context. Observation and interviews with a purposeful sample of four secondary art majors and four elementary generalist student teachers were scheduled during their thirteen week practicum experience and further interviews with the same students were scheduled during their last term of course work.

I conducted observations at the practicum site of each of the members of the purposeful sample teaching at least one art class, during the thirteen-
week spring practicum. Observations included a short pre-lesson conference on the objectives of the lesson, at which time any lesson plans or teaching notes were collected. My field notes of the teaching episode included both written commentary and photographs of salient classroom features and student work. The majority of teaching episodes were audio taped.

A semi-structured interview followed the observation, which attempted to focus the respondents on their intentions for developing and teaching the observed lesson. The relationship of those choices to their own belief system and their autonomy as a student teacher were also probed. Final questions were meant to elicit the background influences that might have contributed to the student teachers' choices and actions. After the evidence from the analysis of the overall scores in the first and second surveys had shown that evaluation of student learning might be an area where subjects' beliefs were incongruent, a question on this topic was included. (See Appendix B for a typical series of questions for these interviews). Each interview following an art teaching episode was shaped around this structure, but not bound to it. When information was volunteered by a respondent that led to a greater understanding of their beliefs toward art education or the possible reasons for those beliefs, that information was followed by probes and further questions to elicit as much disclosure as possible.

Interviews were scheduled as close to the observation of the art teaching episode as possible for the respondent. All interviews were conducted on the school site, most often in a corner of an unused classroom or an unoccupied office or store room. All interviews were audio taped with the permission of the preservice teacher and later transcribed.

The interviews following the practicum, held during the final term of course work at the university, were structured to elicit the current beliefs of
these same preservice teachers. After referring to several possible interviewing techniques, the use of hypothetical situations or responses to dilemmas was chosen as a method of disclosing beliefs (Pajares, 1992; Spradley, 1979). Respondents were asked to plan an art class for their first teaching position. This response was followed by questions directed toward specific aspects of that scenario such as the role of the teacher, curriculum and instruction considerations and evaluation procedures. Again, the subjects were asked a series of questions meant to probe their understanding of what might have influenced their responses. Finally, they were asked to reflect on their current beliefs toward art education and add any information that they thought relevant to those beliefs in relation to their recent experience. (A sample interview format is included in Appendix C).

All the final interviews were conducted in my office at the university. Each interview was audio taped with the permission of the respondent and later transcribed.

Data Analysis.

Two separate modes of analysis were used for this study to correspond to the two research methodologies that were incorporated into this case study design. Statistical analysis of the data from the Eisner Art Education Belief Index was combined with descriptive and interpretive analysis of the qualitative data from the field notes, observations and interviews conducted during the study. This was done in an attempt to provide a more comprehensive picture of the beliefs of preservice teachers than would have been possible using purely quantitative or purely quantitative analysis.
Quantitative Analysis

Data from the survey instrument were tested for significance using one way analysis of variance and paired t-tests. The Statistical Package for the Social; Sciences, (SPSS) version X was used for all the statistical data analysis procedures. Demographic data collected with the survey provided a description of the sample in terms of age and gender. Means and frequencies were used to compare individual scores to that of the group and to find patterns of response.

The mean scores of all the subjects from the first administration of the Eisner Art Education Belief Index were rank ordered and used to choose the purposeful sample for individual observations and interviews. Patterns that emerged from the comparison of scores of specific statements from the first two administrations of the Index were incorporated into the interview questions directed at that sample.

The mean scores of each of the individual subjects on each administration of the survey and patterns of response that surfaced from analysis of specific statements on the survey were also used as part of the analysis of each preservice teacher from the purposeful sample.

Qualitative Analysis

Analysis of this case study was conducted concurrently with the data collection as would be expected in an emergent design. Data analysis strategies generally recommended for analyzing qualitative data (i.e. Glesne & Peshkin, 1992; Lincoln & Guba, 1985) were used, such as categorizing, synthesizing and searching for patterns from the array of field notes, documents, interviews, observations, photographs and data from the survey instrument. As mentioned previously, analysis of the survey data were used to inform the
data collection in the practicum situation and used again to inform the analysis of the other qualitative data as they were being collected. General themes and specific topics were identified that seemed to be closest to the focus of the concepts addressed in the research questions. In the case of the analysis of the student teacher profiles, the data made the most sense to be sorted into chronological order of beliefs. That is; prior beliefs, post method course beliefs, post practicum beliefs and a final sort for patterns that emerged from reviewing each case. Through constant comparison, patterns and reoccurring themes began to emerge.

Analytic files were built for each of the key informants. In each file went the analysis of the three administrations of the Belief Index and the individual's responses to each statement from each time period. Xerox copies from my observations and field notes; photographs taken during the observed teaching episodes; lesson plans or teaching notes provided by the student teachers; and transcribed interviews were also included in each file. Once I had decided on the organizing categories, data were coded, Xeroxed, cut, pasted and resorted until a coherent picture emerged of each preservice teacher. As much as a computer program which would sort and store all those bits of information seemed enticing, I found that, sitting surrounded by the "stuff" of each of my subjects, I was drawn back into the experience in a way that working on a machine simply cannot stimulate for me. Part of the process was returning to those interviews or pictures and getting an idea that I could then compare to the subject's responses to the survey or to the way the lesson had been delivered as noted in my field notes. The concept of "triangulation", finding multiple pieces of data to support each growing theme or topic, was especially useful.
After the individual profiles had been written, I then reread them looking for common themes from the groups (generalists or specialists) and for relationships with the relevant literature on preservice teachers' beliefs. Again, I was guided to some extent by my research questions and by the analysis of the quantitative data. I also found it useful to check my perceptions with colleagues in art education and with members of my committee.

Findings and interpretations appear in Chapter Four, (the overall analysis of the quantitative data); Chapter Five (the analysis of the subject profiles), and Chapter Six for the combined analysis.
CHAPTER 4 • CONTEXT

To understand the particulars of this case, a thorough social and programmatic context is provided in this chapter. It has been shown that the bounded system under analysis included all the preservice teachers enrolled in the one year teacher certification program taking an art methods course. The larger context and the variations between the elementary generalist and the secondary art specialist groups need some further clarification. The population is described as a whole and the idiosyncrasies between the two subgroups are described in detail. A general description is included of the art methods courses and the relationship of those courses to the rest of the program. Finally, an analysis of the Belief Index provides a broad overview of the preservice teachers’ beliefs at each of the time periods and across subgroups.

Social and Programmatic Context.

September, the real New Year for those involved in education. Sunshine and mountain vistas greet the new class of teacher education candidates. Soon this would be replaced by gray days and treks through the rain to yet another classroom in the long haul of lectures, seminars, assignments and school experience that culminates prior to the winter break in December. January and it all starts again, more classes, the extended practicum and a final term of classes that terminates at the end of August. Twelve months from start to finish, from student to teacher.

Everywhere students are attempting to find their way around unfamiliar buildings, waiting in lines at the bookstore and overflowing into the green areas, mixing caffeine and anticipation in high doses. The first day of
classes has been canceled for those enrolled in the teacher certification program. Instead of classes, orientation sessions are held to welcome this new group of prospective teachers into their post graduate professional year. The class is too large to meet together and so is divided into elementary generalists (both one and two year options) and secondary subject specialists. Even then, the largest lecture hall in the Education building is unable to accommodate the number of students and the orientation session is held across campus. Over three hundred students attend each session, to hear the Dean and Associate Dean welcome them to the program. They are congratulated on their choice of career and reminded of the exceptional caliber of prospective teachers admitted to this teacher education program.

Of the seven hundred and eighty teacher education candidates enrolled in this in-coming class, fewer than two hundred are the specific focus group for this study. They are the group that are inclusive of twelve month program elementary student teachers and the secondary art specialists. All of the twelve month elementary preservice teachers must take an art methods course, as they must take methods courses in all the subjects required at the elementary level in the provincial curriculum. All teachers are expected to teach art, as few school districts hire art specialists at the elementary level. In contrast, of the three hundred and eighty secondary specialists, only fifteen are preparing to become art educators. Although small in number, this group is in a good position for future employment as most secondary schools require specialists in the arts.

For both sets of teacher education candidates, whether generalists or specialists, the rhythm of the those first weeks is the same. Finding a way around the Education building and to the multiple other campus locations for classes is a time consuming and often frustrating experience. Classes can range
from large group lectures of over three hundred and fifty to seminar groups of twenty four or fewer. The mix of individuals presents a diverse group of men and women from twenty two to over sixty years old. Although the latter age is rare, the average age of the population at twenty seven, is high compared to that in most teacher education programs. The background experience of the group is as varied as their ages. Although it is a given that everyone has one previous degree, many have further degrees and/or have left careers in business or other professions to come into teaching. The unending round of introductions and "ice breakers" in each new class is both reassuring and intimidating. Students will comment that they are not used to the personal investment that is expected in the program, or the level of sacrifices that their colleagues have made to be here. From loss of wages, and student loans, to living out of their cars in the search for housing around campus, tales are told of the sometimes desperate measures that individuals have made in order to come into teacher education.

Amid all the orientations and introductions the message from faculty is clear: this is a demanding program that requires full time commitment. Outside jobs, family responsibilities and social activities must be put on hold. Beginning teaching will be intellectually and emotionally consuming.

The teacher education program is tightly structured and leaves little choice in scheduling or electives. In this first term, all the students are locked into classes that often start as early as 8:30 am and finish as late as 6:30 p.m., five days a week. The art specialists even have an elective evening course once a week that ends at 8:30 p.m. There is little time left after readings, assignments and group work have been done. As one student said after the first week of classes, "In my former faculty we wouldn't even have been
given the course syllabus yet. Here, I've already handed in assignments in two courses."

In the first term, students take two educational psychology courses that focus on issues of human development and exceptionality and an educational studies course focusing on the analysis of educational content and issues. A generic curriculum and instruction course, entitled the Principles of Teaching, is structured to acquaint beginning teachers with principles of planning, instruction, evaluation and classroom management. Related to this generic course are the subject matter specific methods courses. In the elementary generalist program, methods courses in reading, art and music are mandatory in the first term. The other six subject area methods courses are taken after winter break and before the extended practicum. The secondary specialists take one or two methods courses in their specialization(s) and have room in their program for further specialist methods courses after the extended practicum. Both groups also take a two week communications course prior to the extended practicum.

Rounding out this schedule are courses related to school experience and a host of educational studies, language across the curriculum, and learning and assessment courses that are taken in the final term.

The art methods course for generalists

Amid all the competing time and energy commitments of the teacher education program, the elementary art methods course meets once a week for a three hour block of time. For the student intake in this case, there were five sections of art methods. Four were taught by graduate students in the Art Education program and one section was taught by a sessional instructor who had recently retired from teaching art in the elementary schools. Only two of the instructors had taught the course before; it was common practice to give
this course to graduate students to teach as a way of financing their graduate studies. The course was coordinated by a full time faculty member who established the basic structure and content of the course, prepared the readings and met with the course instructors throughout the term.

The course was structured to provide elementary preservice teachers with an understanding of the role and value of art education. The theoretical and philosophical values of the course were clear in the choice of readings and specific description in the course syllabus. The approach to art education is subject-centered and relies heavily on the philosophy of discipline based art education (Greer, 1984) which identifies four parent disciplines of studio art, art history, aesthetics and art criticism. Readings included articles on discipline based art education; aesthetic scanning; criticizing art with children and evaluation of student progress in art. The provincial Elementary Art Curriculum guide was the required text. This curriculum guide, also based on a subject-centered model of art education, had received an award from the National Art Education Association two years previous to the commencement of this study. University art education faculty were involved with members of the teaching profession in developing this guide.

Although there was variation among instructors as to particular scheduling and activities, each art methods class was structured to start with one of the main concepts or topics of the course and to include a specific studio media component. The preservice teachers were involved in making art using materials commonly found in elementary schools. Readings to accompany each topic and extra handouts on the studio component were often available.

A typical three hour class would start with thirty five to thirty eight student teachers arriving from various other classes to the dedicated art
education rooms in the Education Building. The art methods instructor would provide an overview for the particular topic that was the focus of the pedagogical content section. This was often took the form of a mini lecture on the topic, with references to the assigned readings and the elementary curriculum guide. Because of time constraints, the size of the sections and the assumptions about the groups' knowledge about issues in art education, this part of the class was most often teacher directed and involved either lecture or direct instruction. The bulk of the class time would be spent with the methods instructor presenting a model art lesson where the preservice teachers took the part of elementary students and completed a studio project in a specific medium. This studio activity was most often a project that could be directly adapted to an elementary art class. The use of materials and techniques, possible ways of incorporating art history, criticism and aesthetics were modeled in a way that allowed the student teachers a chance to develop knowledge, skills and attitudes about art at the same time as they were attempting to understand those teaching decisions about curriculum, instruction, evaluation and management that underscored the choices made in each lesson. This proved a demanding task for adult learners who often viewed the process of making and responding to art with serious trepidation. The comments of one respondent echo the sentiments of many of the group, "When I started the program I really wasn't sure if we were going to go off the deep end and everyone was going to float around and be creative and do the 60's thing and I didn't feel ready for it, or I didn't know if we were going to be very critical and observing art in its process and having intellectual discussions." With this type of reaction in mind, most instructors chose activities that would stimulate an understanding of the potential of the given
medium for art and at the same time would guarantee a degree of success and satisfaction for the novice teachers involved.

A major part of the evaluation of the individuals in the class was their resource book, which chronicled their participation and understanding of the main concepts in the course. The resource book was to contain samples of studio work completed in the course, presented in a form suitable for classroom use, and include a summary of the main points of lectures, discussions and readings. Visual examples to accompany the particular studio activities and a specific project on responding to art were added expectations.

Students often complained about the amount of work required in the art methods course. Squeezed into a single session a week, during the first term, this course introduced many concepts and experiences that were totally new both in terms of art and art education. It was taught under the assumption that subject matter understanding in art would not be common to these learners and would have to be broadly covered at the same time that issues in teaching art to children were explored. Prior studies on a similar population of preservice teachers at the same institution (Helgadottir & Gray, 1992) reinforced the view that preservice teachers had serious deficits in their art background. The instructors of the art methods course for elementary generalists had the unenviable responsibility of developing knowledge, skills and attitudes towards both art and art education among preservice teachers who were heavily involved in a teacher education program that structured many competing demands for their time, energy and commitment.

**The art methods course for art specialists.**

The curriculum and instruction course in art methods for secondary specialists met twice a week for a three hour block. The methods instructor was a faculty associate seconded from a local secondary art classroom and a
graduate of the Masters program at the university. Course content was
developed independently by the instructor but it closely paralleled the
philosophy and theoretical underpinnings of the elementary generalist course
and of the art education department as a whole. The provincial secondary Art
Guide was the required text. Again, the curriculum had been developed with a
subject-centered bias and was closely aligned with the elementary curriculum.
Many of the same personnel had been involved with the development and
implementation of both the provincial elementary and the secondary art
curriculum guides.

The course instructor also was the main faculty advisor for the
prospective art teachers during their practicum. Given the small number of
students and the influence of the instructor on their total program, this
became a select group that was very aware of one anothers' beliefs about art
education. They were not only together as a group in the art methods course
but also in the elective art education courses and in the practicum supervision
group. The students were exposed to and interacted more with their art
methods instructor than with any of the other faculty member in the teacher
education program.

The specialist group more closely followed the main concepts addressed
in the generic curriculum and instruction course, the Principles of Teaching.
The art methods instructor also taught this course and provided a strong link
between the concepts being addressed in both courses. Starting with each
prospective teacher developing a personal philosophy based on the concept of
the teacher as a rational decision maker, the art methods course bridged the
ideas of the relationship of pedagogy and subject matter knowledge. An art
educator was a person whose knowledge, skills and attitudes towards art
interacted with their decisions about the nature of learning and adolescent learners, planning, instruction, evaluation and classroom management.

In sharp contrast to the generalist art methods course, the specialist methods course met for twice as many hours with half the number of students in the classroom. These preservice teachers had already established themselves as a unique group within the larger secondary program. They viewed themselves as artist/teachers and formed bonds and friendships that would typically last through their professional careers. This group also identified strongly with the art education department. Previous experience suggests that a number of the graduates from this course would return to this university to complete diploma and masters degrees. Art department activities were planned with the specialist group from liaison dinners with their practicum sponsoring teachers to awards and scholarship opportunities.

A typical secondary art methods class would find the fifteen art specialists arriving at the same classroom that held the larger generalist sections. The agenda for the class would be on the board as the students entered and it would expand on the central topics that were part of the course syllabus and schedule which each student teacher possessed. Unlike the process for the generalist sections, a variety of instruction techniques were modeled, from cooperative groups to direct instruction. The preservice teachers took a much more active role in presenting and challenging ideas and ideologies. Involvement in the process of art making, the main component of the generalist course, was not appropriate in a course where these learners were already strongly acquainted with art techniques. What was new, was the integration of the historical, critical and aesthetic components around studio processes.
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The class would begin with the preservice teachers sharing resources, art gallery experiences or other art education related materials. Each class also had a particular studio or media component which corresponded to the media areas identified in the curriculum guide; drawing, painting, textiles, sculpture, ceramics, and graphics. After an overview by the instructor of how that media area might be represented in the secondary curriculum either at the foundations level or in a senior level art course, the preservice teachers spent time discussing their own high school experience. From this base of experience, the instructor would return to a discipline based model of art education and engage the methods students in building a unit of instruction that would involve the components of studio art, art history, criticism, and aesthetics. Often examples from their own high school classes would provide a reference. The session would culminate with a previously assigned presentation by one of the class members on the topic at hand.

The evaluation of the individuals in the class was based on participation and involvement, the in-class presentations and unit planning assignments. Unit plans were evaluated on the extent to which the student teachers had applied what they had learned in their generic curriculum instruction course to the specific discipline based art education approach that was the basis of the art methods course.

The art specialist preservice teachers both admired and respected their art methods instructor. In their evaluations of the course, it was difficult to separate their positive response to the content and methodology from their positive regard for the art methods instructor as a model of excellence in art education.

While the foundation of all the art methods courses was a theoretical orientation to discipline based art education, the art program was committed
to addressing this orientation within the broadest terms possible so that students were not indoctrinated into a narrowly defined range of curriculum, instruction or evaluation possibilities. The tension between structuring the content around a particular orientation and encouraging responsibility on the students part to substantiate their beliefs and values, encouraged an atmosphere where openness and diversity were acknowledged and accepted.

Instrumental Context: The Eisner Art Education Belief Index

The survey instrument, the Eisner Art Education Belief Index, was useful in verifying trends and providing descriptions of the beliefs of the population as a whole and in making comparisons of the beliefs between the art specialists and generalists preservice teachers of the students beliefs. The results of the Belief Index are presented in the order of the research questions they address by grouping them under the headings, Beliefs About Art Education; Influential Factors; and Beliefs Fostered and Challenged. The Belief Index was also useful in the analysis and interpretations of the responses of each of the individuals who made up the purposeful sample in this study. Those results have been incorporated into the findings on those specific profiles and are presented in Chapter Five. Chapter Six incorporates the analysis of the Belief Index and the purposeful sample to describe possible patterns of analysis for the case as a whole.

Beliefs about Art Education

The performance of each of the 98 student teachers was assessed by the Eisner Belief Index at three points in their teacher preparation: prior to coursework, after their art methods course, and after their thirteen week practicum near the end of the program.

Table I presents the mean scores of the students who responded to every statement for each section on each of the three administrations of the index.
Table I
Performance of all subjects on Eisner Art Education Belief Index

<table>
<thead>
<tr>
<th></th>
<th>Prior to course work</th>
<th>Post Methods</th>
<th>Post Practica</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Subject Centered</td>
<td>Child Centered</td>
<td>Subject Centered</td>
</tr>
<tr>
<td>M</td>
<td>81.124</td>
<td>97.633</td>
<td>76.796</td>
</tr>
<tr>
<td>N</td>
<td>97</td>
<td>98</td>
<td>98</td>
</tr>
</tbody>
</table>

low score = strong agreement with orientation
means were not calculated for subjects who did not respond to every statement

The two orientations are defined as subject-centered and child-centered. Since there are 30 questions in each section and since the range of scores per item is from 1 to 5, the lowest possible score is 30, the highest is 150 and the median is 90. On the 5 point Likert type scale used, 1=strongly agree and 5=strongly disagree, a score below the median would therefore indicate an agreement with the particular orientation and a score above the median would indicate a disagreement with that orientation. The mean scores on all sections of the index and across all administrations indicate a slightly more subject-centered attitude and belief response toward art education than a child-centered response. The longitudinal comparison shows that the subject-centered disposition became more pronounced at the conclusion of the art methods course and held after the school based practicum period. Correspondingly, the negative response toward the child-centered orientation
is more pronounced after the art methods course and even more so after the practicum experience.

Comparisons between the mean scores of the elementary generalist student teachers and the secondary art specialists on the three administrations of the Index are presented in Table II. Due to the small number of specialists, the results are practically significant rather than statistically significant.

Table II - Comparison of Generalist and Specialist Preservice Teachers

<table>
<thead>
<tr>
<th>Subject Centered</th>
<th>Prior</th>
<th>Post Methods</th>
<th>Post Practica</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Generalists</td>
<td>Specialists</td>
<td>Generalists</td>
</tr>
<tr>
<td>M</td>
<td>82.4</td>
<td>70.0</td>
<td>77.7</td>
</tr>
<tr>
<td>SD</td>
<td>11.3</td>
<td>17.5</td>
<td>11.8</td>
</tr>
<tr>
<td>N</td>
<td>87.0</td>
<td>10.0</td>
<td>88.0</td>
</tr>
<tr>
<td>F</td>
<td>.0027 *</td>
<td>.026*</td>
<td>.50*</td>
</tr>
<tr>
<td>Child Centered</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>M</td>
<td>97.5</td>
<td>99.5</td>
<td>98.9</td>
</tr>
<tr>
<td>SD</td>
<td>11.02</td>
<td>8.8</td>
<td>12.4</td>
</tr>
<tr>
<td>N</td>
<td>88.0</td>
<td>10.0</td>
<td>84.0</td>
</tr>
<tr>
<td>F</td>
<td>.56</td>
<td>.067</td>
<td>.0107*</td>
</tr>
</tbody>
</table>
As might be expected, the art specialists held significantly more subject-centered beliefs toward art education than did the generalists, both before and after course work as indicated on the Belief Index. The art specialists also tended to hold more definite beliefs as indicated by the fact that their responses fell more to the extreme (i.e. strongly agree and strongly disagree) than those of the generalist group. Another interesting aspect of this analysis is the significant difference between the child-centered response of the specialists and that of the generalists after the extended practicum. The art specialists appear to have become both less subject-centered and less child-centered. This result is difficult to interpret as the expectation is that movement toward one orientation would produce a corresponding movement away from the other orientation.

One possible explanation lies in the ambiguity that the specialists felt toward the area of creativity. While there is little disagreement in the field of art education that expressiveness and imagination are often characteristics of art, the issue of whether these qualities are learned or innate is debatable. Innate creativity became the hallmark of the child-centered developmentalist view of art education. However, the issue of encouraging creativity through the systematic analysis of strategies for image development, the analysis of particular artistic styles and explorations and the development of aesthetic sensibilities was a major component of the particular philosophy that pervaded the provincial art curriculum and the university art education.
program. Imagination and expressiveness in those terms are more appropriately categorized as part of the subject-centered response.

Some of the statements on the Belief Index that were designated as subject-centered, seem to have been interpreted to mean the opposite. For example, "A solid foundation of basic art skill, should be acquired by a student before he/she is encouraged to work imaginatively" was a statement meant to show an agreement with the subject-centered orientation. For the art specialists, however, image development was defined as a basic art skill. Therefore the favored response to this statement by the end of the program was to strongly disagree (60%) or disagree (40%). Another aspect that seemed to influence the scores on the Belief Index was the depth of knowledge and understanding that the preservice teachers brought to the area of art education. The level of ambiguity that was associated with understanding some statements seemed to be attributed to the depth of an analysis of the intent of the statement.

The results on the first administration of the Belief Index are noteworthy for a number of reasons. While it would be expected that the art specialists would hold more subject-centered beliefs toward art education prior to entering the teacher education program, the same is not true for the generalist population. Most studies (i.e. Galbraith, 1991; Myers, 1992;) suggest that generalist preservice teachers are more child-centered than subject-centered. However, in the pilot study of the Belief Index undertaken by Eisner (1973) results showed an overall subject-centered orientation by generalist preservice teachers. The items on the Index that fell within the category of curriculum seemed especially prone to the subject-minded orientation. This also seems to be the case in this study. Generalist preservice teachers were in agreement that art programs, like those for other subject areas,
planned both rationally and systematically. However, for the most part, they had no idea what that might mean and their responses to individual items were contradictory. Although the mean score indicates a subject-centered response, an analysis of particular aspects of that response appears to erode that mean score. For example, 80% of the generalists entering the program disagreed with the statement "Teachers of art who are not able to talk in an intellectually critical way about works of art are not really competent to teach art." While they generally believed that art had a content that students could master, they appear to believe that teachers do not need to know much about that content to teach it. Likewise, there were major contradictions in the area of evaluation. Preservice teachers generally seemed to believe that the teacher should not evaluate student art work although they also believed there were areas of knowledge and skill that could be taught. It is also important to keep in mind that the overall mean score of 82.4 (with 90 as the neutral response) was an indication that the beliefs of incoming preservice teachers were not very definite.

Influential factors

Background information provided by the preservice teachers on the questionnaire included their age, gender, attitudes toward prior art experiences and beliefs about their personal artistic proclivities. A one way analysis of variance was conducted to reveal any significant variations on the scores according to factors such as age or gender. The population ranged in age from twenty two to over fifty years old. The difference between mean scores on any of the tests with age as the variable were small and insignificant. When gender was the variable, there was no statistically significant difference,
with the exception of the first survey conducted prior to coursework at the beginning of the program.

Table III
Analysis of Variance by Gender

| Subject Centered • Prior to Coursework |
|-----------------|----------------|-----------|
|                 | Male          | Female    | Total     |
| M               | 75.8          | 82.6      | 81.124    |
| SD              | 15.5          | 11.0      | 12.580    |
| N               | 24            | 73        | 97        |
| F               | *.0168        |           |           |

* significance at .05

Table III presents an analysis of variance by gender of the first response to the survey instrument. There was a statistically significant difference among mean scores on this first index when analyzed by gender. The women in the study group appear much less definite about their beliefs as they entered the program than do the men. Although they still are slightly more subject-centered than child-centered, as indicated by their scores on the Index, the mean score does not capture the subtlety of this difference. This was the only place where gender appeared to indicate any significant difference.

It is interesting to speculate about the relationship between the predominant assumption among teacher educators that preservice generalist teachers have a tendency toward a child-centered approach to art education
and the fact that in many other institutions, the preservice population is almost exclusively (90-98%) female.

**Personal attitudes toward Art and Art Education**

Five statements were included at the end of the second version of the survey (see Appendix A) which were meant to elicit the personal attitudes of the preservice teachers toward their own education in art and their dispositions toward making and responding to art. The preservice teachers were to answer each statement on a similar five point Likert scale from 1=strongly agree to 5=strongly disagree. They were also instructed that 3=neutral or not applicable response. Table IV summarizes a one way analysis of variance of the mean scores of the generalists and the art specialist preservice teachers when compared to each of the five statements.

**Table IV**

**Personal Attitudes toward Art and Art Education**

<table>
<thead>
<tr>
<th>Mean Group Compared to</th>
<th>Generalist</th>
<th></th>
<th>Specialist</th>
<th></th>
<th></th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean</td>
<td>SD</td>
<td>Mean</td>
<td>SD</td>
<td></td>
<td></td>
</tr>
<tr>
<td>I had positive experiences in my own elementary art education</td>
<td>2.32</td>
<td>1.2</td>
<td>2.3</td>
<td>1.4</td>
<td>.94</td>
<td></td>
</tr>
<tr>
<td>I had positive experiences in my own secondary art education</td>
<td>2.8</td>
<td>1.2</td>
<td>1.9</td>
<td>1.2</td>
<td>.0176</td>
<td></td>
</tr>
<tr>
<td>I have continued my own art education beyond high school by attending art related courses</td>
<td>3.30</td>
<td>1.4</td>
<td>1.1</td>
<td>.31</td>
<td>* .000</td>
<td></td>
</tr>
<tr>
<td>I see myself as an artistic person</td>
<td>2.7</td>
<td>1.3</td>
<td>1.3</td>
<td>.48</td>
<td>* .0014</td>
<td></td>
</tr>
<tr>
<td>I enjoy attending art museums, galleries, and art events</td>
<td>2.05</td>
<td>1.08</td>
<td>1.3</td>
<td>.50</td>
<td>* .0508</td>
<td></td>
</tr>
</tbody>
</table>

low score= strong agreement
*significant at .05
As can be expected, there was a significant difference between the scores of the specialist and the generalists, with specialists responding more positively on all aspects of their own education in art. The generalists are marginally more positive than neutral toward their own experiences with art and art education. This suggests that the generalists' beliefs about art education, developed through the teacher education program, at least were based partly on positive past experiences.

Beliefs fostered and challenged

Overall, the data from the analysis of the Eisner Art Education Belief Index indicate a significant trend toward a more subject-centered set of beliefs across all student teachers, with the greatest gains made after the art methods courses. Table V presents paired t tests which provide a longitudinal analysis of both sections of the Index. The data seem to indicate that there was a systematic alteration in beliefs toward art education in line with the values held by the university program after the art methods course and that the practicum experience did not alter this effect.
<table>
<thead>
<tr>
<th>Subject Centered Response</th>
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<td><strong>Variable</strong></td>
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<td><strong>Correlation</strong></td>
<td><strong>t</strong></td>
<td><strong>Probability</strong></td>
</tr>
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<td>.575</td>
<td>3.48</td>
<td>*.001</td>
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<tr>
<td>Post Methods</td>
<td>76.94</td>
<td></td>
<td></td>
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<tr>
<td>Post Methods</td>
<td>76.88</td>
<td>.481</td>
<td>.27</td>
<td>.786</td>
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<tr>
<td>Post Practicum</td>
<td>76.54</td>
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<td>Prior to Methods</td>
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<td>.270</td>
<td>2.86</td>
<td>*.005</td>
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<td>Post practicum</td>
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<th>Child Centered Response</th>
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<td><strong>Variable</strong></td>
<td><strong>Mean</strong></td>
<td><strong>Correlation</strong></td>
<td><strong>t</strong></td>
<td><strong>Probability</strong></td>
</tr>
<tr>
<td>Prior to Methods</td>
<td>97.27</td>
<td>.476</td>
<td>-2.01</td>
<td>*.047</td>
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<tr>
<td>Post Methods</td>
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<td>Post Methods</td>
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<td>.433</td>
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<td>Post Practicum</td>
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<tr>
<td>Prior to Methods</td>
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<td>.579</td>
<td>-2.08</td>
<td>*.040</td>
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<tr>
<td>Post practicum</td>
<td>102.20</td>
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</table>

*significantly different at the .05 level
low score = strong agreement with orientation
Means were not calculated for subjects who did not respond to every statement.

The tendency with statistical analysis is to continue working with the data to uncover more and more intricate relationships and possible meanings. In this study, although the statistics do provide a solid component, they are only part of the total picture. Complementary understandings gained through observations, interviews, and field notes complete that picture. The next chapter summarizes the individual profiles of each of the purposeful sample of preservice teachers by combining quantitative and qualitative methodologies.
CHAPTER 5 • SUBJECT PROFILES

This chapter presents the analysis of the purposeful sample of generalist and specialist preservice teachers. Each subject is treated as a separate profile for the purposes of this analysis. Each profile is divided into sections which parallel the main research questions and include: a brief introduction and a graph of the subject's scores on the Eisner Belief Index; characterizations of the subject's beliefs toward art education prior to the teacher certification program; characterizations of the subject's beliefs toward art education after the art methods course and first term of course work; an analysis of a pertinent part of the subject's practicum experience; characterization of post practicum beliefs and a final reflection. An analysis of data from the Eisner Belief Index, field notes, sections of transcribed interviews and collected documents have been interwoven for each subject. Quotations from the interviews are coded with a month date and whether they are taken from the first set of interviews during the practicum or from the second set at the end of the program.

MARILYN

Marilyn was chosen as a subject because her preliminary beliefs, as indicated on the Eisner Belief Index placed her within the average score range for the generalist preservice teachers. The graph shows that Marilyn was typical of the generalist group on her initial set of scores but her beliefs were more pronounced with subsequent scores. After the methods course and even after their practicum experience, Marilyn's beliefs changed to be more closely aligned with the philosophy of the art methods course.
Characterization of prior beliefs

Marilyn responded to questions on her prior beliefs towards art education by recalling very little of her own elementary education in art and by responding with a decidedly negative reaction to art education in her own secondary and post secondary schooling. At the same time she viewed herself as an artistic person who enjoyed looking at the art of others and visiting museums and galleries. Her initial scores on the Belief Index suggest that she already was leaning toward a belief that art could be taught in a way that children could understand and learn much like other school subjects. For Marilyn, art was not just for the talented few, but she was not clear exactly
what art education could or should be. To the statement, for example, "One of
the most important tools for adequate art teaching is having clear and specific
objectives," Marilyn disagreed in her pretest questionnaire and strongly agreed
in both other responses to the Belief Index. Another complete shift in her
response came from the statement, "The clearer the child understands what
he/she is expected to learn in art, the more efficient and satisfying is his/her
learning likely to be." Marilyn's own lack of understanding when it came to
what should be the basis for an art course obviously influenced how she
responded to these statements prior to the methods course.

The interviews reinforced what Marilyn had reported as background
information and in answering the Belief Index. Her personal school
experience in art was not particularly positive. At the beginning of the teacher
education program, she was concerned about the art methods course and what
she might learn there. Her response to a question on what her prior
understanding of art teaching was, helps put her beliefs in perspective.

I would say definitely I didn't have any clue what teaching art meant when
I think about my own background. Here is an example: we never were
taught to talk about techniques and ideas like an artist. I am not sure how I
got that knowledge to do that, a lot of research, I would think. I see that as
being one of those areas where I will have to spend more time because I am
in social studies so that for me shouldn't be that hard. We did express in
our art class the discipline based approach and prior to the methods course,
I had never thought of art that way before. (05/#1)

Marilyn repeatedly voiced her concern about her lack of content
knowledge in art. As a history major, she identified with teaching art where
links were made to cultural context and historical perspective. However, her
background was extremely limited in the area of art techniques and she was
very concerned about how to increase her own knowledge in a way that she
could use to pass that information on to children.
Characterization of post method course beliefs

At the end of her methods course, Marilyn had moved to a subject-centered response agreeing with most of the statements on the Belief Index that supported a subject-centered approach to art education and disagreeing with statements were supportive of a non interference model of art education. As noted before, she now strongly agreed with statements that put the emphasis on the teacher to develop art experiences that had clear objectives and where students were clear about what they were learning. Another such example is her response to the statement, "Although 'teaching' and 'learning' are used in the literature in the field of education, these terms are, in fact, inappropriate for thinking about what teachers and pupils do in art." Marilyn strongly agreed prior to the methods courses and strongly disagreed after she had completed the art methods course.

Her art education course, although very influential in developing and changing her beliefs about art education was not without its problems. For Marilyn there was not enough time for her to assimilate all the knowledge she felt she needed once she determined what art education could be.

Each art methods class we would read an article and just talk about that and then you would rush through eight things to do in the studio and I never felt good about anything I did because it was such a rush, I felt really time pressured. (07/#2)

Marilyn was an extremely capable and thoughtful beginning teacher and she was able to articulate much of what had been important to her.

I think I have learned more about what art is and how to teach it from the art ed. course for sure, just what we did and all the studio time we had helped. I found it very rushed though but definitely how we explored what we were doing was a good model and it made sense to me. Not having an art history background, even a brief art history, like "these are the basic periods", just to give you an overall sense, I think would be a good addition to the program. (07,#2)
Practicum experience

Marilyn, despite her self-proclaimed lack of content knowledge, was able to adapt the discipline based pedagogy she learned in her methods course to her own teaching situation. Her printmaking unit for the grade 5/6 class was well developed for a beginning teacher and she identified artistic concepts both in making and responding to art. The school had focused professional development around an arts initiative and Marilyn had attended the school-based inservice workshops run by the district art consultant. She readily adapted these ideas to the unit she developed for her own class.

Marilyn taught art in the regular classroom and not in a specialized space. Art was obviously an integral part of her curriculum. The room was decorated with large language arts posters (teacher made), examples of the writing process and one entire wall on both sides, above and below the chalkboard, was covered with paper matted pastel drawings done by the class. She had chosen to undertake a printmaking unit even though there was no sink for water or cleanup in the room. Asked what had influenced her choice of content for the unit she responded,

I talked to my sponsor teacher about what they had done in the year and they had done a lot for clay work and they had done a lot of drawing and some painting. I thought this was something really different and I enjoyed doing it in our art class, too, and then when we had the inservice I thought, oh that's great too, that helps me and then even if other teachers were doing it before me, I knew what to expect.

The Fine Arts consultant came in and did a demonstration class and then we all went up, my sponsor teacher and myself and some of the other teachers and then she did the stencils. It was good. We could take what she had done and try it ourselves to see how it worked. (05/#1)

The lesson that I observed Marilyn teach was near the end of the unit and the students were concerned with the specific process and technique of polystyrene printing. Although both the sponsor teacher and Marilyn referred
to the class as challenging, management issues were not evident in the printmaking lesson. Marilyn was well-prepared, reviewed knowledge and skills with the students and involvement and enthusiasm were sustained during the entire period. Students moved easily between the various stations and their desks. Although the possibility for disruptive behavior appeared heightened by the amount of materials, equipment and movement in the classroom, the students' behavior was exemplary. They were actively engaged and on task even during the clean up time. Students were comfortable working independently or going to the teacher or other students for suggestions or guidance. They obviously understood the expectations and willingly engaged in the class.

The pre-planning by Marilyn was responsible for much of the ease with which the lesson progressed. She had printing ink, brayers and cookie sheets (for inking stations) on hand and ready to be used at the beginning of the lesson. One area was set aside for inking, another for printing and a section of the floor was covered with paper to receive the final prints for drying. After the initial review, the students could work independently at their desks on their polystyrene blocks and their designs. They were able to work at their own pace and move to various stations without confusion or disruption to others. The desks were spread out enough that Marilyn could easily move about the room to monitor, encourage and assist students. She could see all parts of the room and the activities going on at a quick survey and she appeared very "with it" in terms of her demeanor and confidence. Marilyn could confidently discuss the procedure and course objectives for the unit. Elements and principles of design and historical content and a bit of art criticism were included, as well as the exploration of various techniques.
When we started the unit we talked about the different kinds of printing we have seen in books and all around us, a little bit of the history of printing. We did the stencil printing first and that's when they created their stencils. We talked about taking away the positive and the negative shapes, and using sponges as a technique. Then we did the monoprint and we talked about that. This was the third type of printing we will try. (05/#1)

Marilyn was concerned about her assessment and evaluation of the student's learning. Her comments show that she has grown a great deal in terms of her understanding about art education and is now grappling with the difficult task of putting those beliefs into practice.

Now that I am teaching art I am learning from what I am doing and as I have said I find the assessment stuff very difficult, how do I assess this? If I set these goals out, I have to have a way of finding that out, and maybe at the beginning of next class you spend two minutes, and I say "what techniques did you use last day", and then problem solving with them, what works and didn't work and why, that type of thing. (05/#1)

In terms of the unit itself, I guess I'm looking for whether they understand, do they know at the end more than they did at the beginning. (05/#1)

The effect of a supportive school environment that echoed the values of the art education program was evident in Marilyn's comments in her final interview. When she was asked how she would plan for future art experiences, she responded:

I would think about exactly what I wanted to do in terms of units and then I think about my broad goals and objectives and try and look at the resources that I could get for those concepts. I always thought of art as being an activity kind of thing and now I see it as just like any other subject, you have to have objectives; what am I trying to get out of this, what are the children going to learn. (07/#2)

Marilyn's scores on the Belief Index continue to show her decisive support for a model of art education that is based on subject matter understanding. As she says,

I don't think you have to be an artist in order to teach art but I do think you have to research the subject to understand the big ideas. (07,#2)
Her concern for her own lack of knowledge was evident and she was frustrated by the lack of flexibility within the one year teacher education program to allow her to continue with her own agenda to meet her needs.

The summer has been the most frustrating time in my university career because you came out of the schools, you knew what you were strong in, you knew what your weaknesses were. I would have loved to have taken another arts methods course that was an extension of my previous one rather than taking the sociology of education that I can take if I want to continue in a graduate programme. (07/#2)

Final reflections

Marilyn was a confident and thoughtful preservice teacher. Her change in beliefs about art education might be attributed to several factors. Although her own art education had not been particularly strong prior to entering the teacher education program, she was predisposed to a positive attitude toward art. Her background in the humanities provided a model which, when presented with a similar set of values in the art methods class and in her Principles of Teaching course, she could transfer to her growing understanding of art education.

Her practicum experience matched the values and beliefs that she had encountered at the university. The school district staff were closely allied with the university art education department; and persons from the district and the university were currently engaged in developing a new provincial art curriculum which echoed similar values. The school administration and generalist classroom teachers supported this art education initiative. Marilyn's teacher, like herself, had little training in art education but he was supportive of art and was developing a strong art program in his classroom. The students obviously enjoyed and were learning from the experience. Marilyn had parental support as well. She mentioned that a parent had
volunteered to come into the classroom as a visiting artist and give the students drawing and painting lessons.

Marilyn's background in history provided a springboard into her expressed need for a more thorough art history knowledge and she felt confident that she could continue to grow and develop her own understandings in this area.

Finally, Marilyn was successful in adopting and developing her art education philosophy and methods. Her confidence and success as a beginning teacher reinforced her developing beliefs. Her final score on the Belief Index indicates a substantial change in her beliefs toward a subject-centered model of art education.

ELIZABETH

Elizabeth was chosen as a subject because her scores on the initial Belief Index placed her at the child centered extreme for the generalist group. As the graph indicates, she demonstrated a significant belief change after the art methods course and this new belief change remained constant after the practicum experience
Characterization of prior beliefs

Elizabeth responded to the statements on the Belief Index that focused on her own art education experiences with a strong negative response to both her elementary art classes and her university art history course. She did not take any art during her high school education. Elizabeth did not see herself as an artistic person but she did enjoy visiting museums and galleries.

Elizabeth's responses on the preliminary Belief Index indicate that she did not have really definite beliefs about art education. On approximately one-third of the questions she responded with a neutral response, neither agreeing nor disagreeing with the statements. She only had very definite (strongly agree or strongly disagree) responses to nine of the sixty statements. An example of a statement that she strongly agreed with prior to the methods course and strongly disagreed with in subsequent tests focused on her pro
child-centered response as she entered the program, "Ability in art is not so much an unfolding of what's within the child, but rather the acquisition of certain skills of perception, imagination and production." Another example of a major change in her beliefs was her initial strong agreement with the statement "Children are natural artists and teachers and other adults should not try to influence them or their work."

Elizabeth confirmed in her interviews those background influences that caused her to be ambivalent to the value of art education and to what her role might be as an art teacher.

My experience in art in elementary school was hating it and being bad at it. After elementary school ended and I didn't have to take art, I never went near it. To this day if I have to draw something I will draw a stick man. I got a lot more open to art as I was taking the art methods course because I had a real wall about it, I would have thought the kids would have been bored silly, it is irrelevant. I took an art history course in university because I had to graduate and it was at night and I slept through the whole thing. All we did was look at slides, memorize names and pictures and spit that out for an exam. I learned nothing and I remember nothing. (07/#2)

Characterization of post method course beliefs

By the end of the methods course, Elizabeth was less ambivalent to most of the statements on the Belief Index and had reversed her definite beliefs on specific child-centered statements. As can be noted from her graph, she now agreed with the majority of statements that presented a subject-centered model of art education. Elizabeth describes her attitude and belief change toward art education during the art methods course:

I guess the main learning for me is that art is not nearly so intimidating as I thought it would be. When I started university and the first time I filled out the questionnaire, I didn't have a clue how to teach art, I have no artistic ability much less talent myself. I am incapable of drawing anything but a stick man that I am pleased with, and I just didn't have any idea what I would do in an art class. Within a couple of weeks of being in the methods course I completely reversed. I just though, this is not so hard at
It doesn't matter if I can't draw an amazing self portrait because I am not the one doing it. It's what the students are learning that is important. I just have to be able to get them enthused and excited about it, they are the ones doing the work. The other big relief is to find out that if I come up with one activity, it is not over and done within a day and then I have to come up with another one. Art lessons usually take two or three classes from start to finish so they are more ongoing projects and I like that, more of a flow than every day trying to come up with something incredibly creative that leads nowhere. (05/#1)

Innate talent was replaced by a belief that it was possible to teach and learn about art. In the art methods class, Elizabeth was presented with a model of art education that made sense to her understanding about teaching and learning in other subject areas. She was quite willing to leave a set of beliefs that had negative connotations for her own self image and replace them with a system that was more in line with her image of herself as a successful teacher. Elizabeth, as demonstrated through her marks and the comments of her instructors, was very successful in understanding and developing the ideas she was learning in the other courses in the program. The concepts of lesson and unit planning that were part of her Principles of Teaching course, she found readily adaptable to what she was doing in her art methods class. After many negative art experiences, Elizabeth was rather surprised at her positive response to her art methods course. She realized that her conscientiousness in that course paid off both in her own learning and in her enjoyment of the course.

I seem to have been one of the minority in my class that really enjoyed the methods course. I liked the fact that every week there was a whole new topic and we sort of dabbled. We never really went crazy on any one kind of technique but we dabbled and we got a little sample of everything that was really useful to me. Actually the resource book was good for me because I went home every Thursday after art class and typed up the activity and how to do that activity while it was still fresh in my mind and definitely during my practicum I used a lot of that stuff. I would have forgotten how to do it if I hadn't had to do that resource book. I know a lot of people left it until the end of the term and it is ineffective then, it
doesn't work, maybe people should hand them in on a weekly basis or something. (07/#2)

Practicum experience

The twenty four grade six students in her class were obviously comfortable with Elizabeth as a teacher and enthusiastic about the art lesson. Student art work was prominently displayed on the bulletin boards. Noticeable preparation for this unit was evident from the art reproductions on the chalkboard to the art folders that each child possessed. This was not a lesson "put on" as a performance for an interested observer but rather part of the program that was ongoing in the thirteen week practicum. The influence of her methods course, the provincial curriculum and authorized curriculum materials were evident in the content of the self-portrait unit that engaged the students. When asked to describe the content of the unit, Elizabeth was able to articulate all the major objectives she had planned and how the students were progressing.

I spent three classes working up to this lesson. We talked a little about portraits, said what we knew about them. We were looking at faces and talking about proportion and how to portray that. They looked at a drawing in the Discover Art textbook showing just the outline of a face and location of the eyes, nose and mouth. I said, "What do you think is the most typical error that people make when they draw faces?", and they came up with a few ideas. We approached the thing about eyes are often put really high, so they practiced drawing what they saw in the book and using an actual scale to draw the face, divide it in half, put the eyes at the half-way mark, not up on the top, leave room for eyebrows and bangs etc. the nose and the mouth etc. That was just drawing outlines and then on Wednesday they began sketching their own pictures. They brought in a picture of themselves, it could be from any age in their life. Trying to open up the variety, I said bring in a baby picture if you want or a picture when you were four. They just practiced and it took them until last class and today to get their initial drawing done. I also put an emphasis on adding the finishing touches because in the past there has been a problem with a lot of kids doing a pencil sketch and saying they were done when they were actually supposed to be learning how to use oil pastels or chalk pastels to complete the image. A lot of them resisted colour so this time I gave them
the option of shading and adding more depth that way or completing their work in colour. (05/#1)

Elizabeth was self-assured and comfortable with the students and the air of mutual respect was evident in the comments and discussion that took place between students and teacher. This particular lesson was mostly concerned with skill and technique development as Elizabeth gave suggestions for increasing their observational skills and techniques for use of the application of colour and form using oil pastels. All the children were on task throughout the observation and confident about asking Elizabeth or their classmates for confirmation and suggestions. Management concerns were not an issue. The planning of the lesson plus Elizabeth's competence as a "teacher in action" kept the pace and involvement appropriately balanced. After an initial review of what they had been doing, Elizabeth reminded the students that this would be the last class in this unit and that the portraits were to be finished for homework if not completed in class.

All the students had their own photographs and beginning drawings and most immediately began to work. Several students gathered around Elizabeth to ask specific questions about technique and several others discussed their drawings among themselves. The students' major concern was making their drawings as realistic as possible and they willingly consulted any handy source from Elizabeth to each other and on several occasions the researcher. Students moved to the textbooks or to get the oil pastels as they needed them. Elizabeth moved about the room, stopping to make positive comments or suggestions such as "Fabulous, do you know what I like best?" or "Which part seems to you to need more work?" When most children were ready to use the oil pastels, Elizabeth drew the class's attention to a few tips
such as using light colours first and then questioned them to get them thinking about why her suggestions might be helpful.

This class was not culturally diverse. The majority of the children were at least second generation Canadian. The two new immigrants, although they spoke little English, were as actively involved in the assignment and with the class as the other students. The children were obviously pleased with what they were learning and eager for the researcher to take a photograph of them with their self portraits. Most were able to complete their portraits in the class and those that did not seemed quite happy about taking them home to finish.

Characterization of post practicum beliefs

The practicum situation reinforced the beliefs that Elizabeth developed in her university coursework.

What formed my previous attitudes was my own experience and the only reason it has changed is having taken the art methods course and then teaching art in practicum. If I hadn't had to teach art in the practicum, if they had an art specialist, I still think the methods course would have resulted in me being more willing to try teaching art but I needed to actually be thrown into doing it to realize that I can do it, it is not a completely impossible thing just because I am not artistically talented. During the course, I came very quickly to think that this is not a big intimidating thing, it can be quite easy to plan and successfully carry out lessons for art and then actually doing it in my practicum has just reinforced that. I have no qualms about teaching art, if there was a job in the province available and they said it was for an art specialist I would accept it and take it. I would say sure I will teach art all day to all the different grade levels. Before the methods course I never would have thought I could do that, I didn't even think I could teach art to my own class. (07/#2)

Consistent with Elizabeth's awareness of the positive aspects of art as subject matter was her reported response of her students to art.

The majority of the kids were artistic and the other teachers had commented on that, that this particular class was really artistically inclined. They loved art and they looked forward to art class, they always wanted to
know what we were going to do, when we were having it. If they saw that I was getting out construction paper or paints or whatever, the majority of them would be "right on". I am sure that probably did influence me, I don't know what it would have been like if they had been resistant because I have not experienced that. I would guess that I would be much more inclined if something else needed more attention or time we would have missed art that day. I was probably more inclined to ensure that we always stuck to the schedule and got art in when it was supposed to happen because art mattered to them. (07/#2)

There was an art education initiative in the school district where Elizabeth was placed for her practicum. She also attended the school-based inservice given by the art consultant. Both the school philosophy and that of her sponsor teacher had a reinforcing effect on her developing belief change.

Elizabeth was also able to overcome her negative attitude to art history and art criticism which were the outgrowth of her own experience in a university art history course. She was able to see that art history could be more than learning dates and names and there might be concepts that were educational and involving to the students.

In the methods course we talked about making art history relevant, talking about Picasso and then if you were going to decorate your room with Picasso's style what would that look like or if you are going to do a self portrait pick a self portrait done by a famous artist and try to emulate that style. That was quite interesting and we did a little bit of that in my practicum after studying France and looking at some Impressionists' paintings. That was good, the kids seemed to enjoy that. I am quite open to doing art history and I think in fact that my attitude about it has changed. Now I feel that there is a way to make it interesting to the kids and as long as you can make it interesting it is definitely an important thing to do. (07/#2)

Final reflections

Elizabeth was a self-assured, vivacious, and energetic beginning teacher. She had a very positive belief in the value of education and her role as a teacher who could affect real learning among her pupils. She was highly successful in both her course work and in her practicum.
Her original ambivalence and negative attitudes toward art were the outgrowth of her own negative personal experiences both in elementary school and during a required university art history course. She was able to overcome these negative attitudes and replace her beliefs about art as a child-centered unfolding with the model that she encountered in her art methods course. Because of her own sincere attempts to be as effective a teacher as possible, she applied herself in art methods despite her resistance to the subject and discovered, much to her surprise, that some worthwhile learning was possible, that art was not "irrelevant".

This new set of beliefs was strongly reinforced within the practicum experience. The model of art education developed at the university was in concert with the art initiative in the placement district and school. Both Elizabeth's sponsor teacher and the students in her class reinforced those beliefs.

Probably the most important aspect for Elizabeth was the success she achieved using her new set of beliefs to underpin her preparation and teaching of art to her grade six students. A model of teaching and learning art that suggested that art was accessible to all people and not limited to the talent or those with innate ability, held a great deal of appeal to Elizabeth, as she articulates in her final interview.

I think the biggest thing that really sticks with me about art is that you actually can learn to do artistic techniques. I went through art thinking I am not good at this so I am not even going to try because you either have it or you don't and, in fact, I think that kids can be taught through a series of exercises and steps and build-up gradually how to draw the contours of a shoe, etc. You can actually learn how to draw, where I have always thought it was just an instinctive thing that you either had or you didn't. So I will teach things that were interesting to them and I will actually teach techniques which would require me going out and getting the right books and learning how to do them but that can be taught. (07/#2)
GRANT

Grant was chosen as a subject because his preliminary scores on the *Eisner Belief Index* placed him at the subject-centered extreme for the generalist group. As the graph indicates, Grant came into the teacher education program with much more definite beliefs than most of his colleagues and he modified these beliefs to score almost exactly at the norm for this group by the end of the practicum experience.

Characterization of prior beliefs

Grant appears not to have been influenced by his own art education prior to university. He responded very favorably to his university art history classes although he did not appear to have any real subject matter understanding of the discipline of art.
Grant was a mature student teacher with two Masters degrees from other faculties prior to his admission into the one-year teacher certification program. His definite beliefs about art education were reflected in the fact that he gave only two neutral responses on the sixty items in the Belief Index.

In his initial interview he summed up his beliefs in this manner.

When I came into the program I had an abiding interest in art and I consider myself art literate in as much as in art criticism. I am not artistic but I don't think that matters to teach. One just has to be open. I think it is more important to get the child to start thinking like a scientist rather than teach him what a scientist knows. Maybe the same applies to art. I think I came into the programme with an idea that art is important, give me the tools to teach it. (05/#1)

In the attitude questions at the end of the survey data, Grant gave neutral responses to his attitudes towards his elementary and secondary school art experiences, a very positive response to art history and viewing art in museums and galleries. He also reported that he was not an artistic person.

Characterization of beliefs post methods course

Grant was frustrated by his art methods course and was quite vocal about the difficulties he experienced.

I think one of the problems was the course itself. First of all it was 3:30 to 6:30 and we were being initiated into a new kind of world at that point so we were very tired, exhausted, so it was hard to be creative at 3:30. They were packing a lot in. I would have liked to have been more ideas like say 'this is your first week, here is what you do', not 'oh you know, you could do this or you could do that'. Here is what I did when I had my first week, or here is what I think you should do and say give us one page lesson plan but not so much make us go through the process. I would still get us to do some of that but I think it is very hard to be creative when you are exhausted. I think a lot of people felt like 'what do I do now'. (07/#2)

Whatever positive attitude he had toward the value of art was not reinforced by either the content or the process encountered in his methods
class. Of all the student teachers interviewed and observed, Grant displayed the least understanding of the theoretical basis of the art methods course.

Grant reversed many of his beliefs about art education in his response to the Belief Index that would have generally been supported by his methods class. For example, prior to the methods class, he strongly disagreed with the statement, "Teaching children techniques for creating certain visual effects is generally a consequence of a poor understanding of children's artistic development" while after the methods course he strongly agreed. Another example, "Teachers of art who are not able to talk in an intellectually critical way about works of art are not really competent to teach art," he strongly agreed with prior and answered with a neutral response post methods course. Perhaps, most astounding was his reversal from strong agreement to disagreement with the statement, "Children's progress in art requires a systematic and sequentially organized art curriculum." The theoretical position that was at the core of the art methods course seemed to be lost on Grant. He moved from a position of general agreement with it prior to exposure and a negative reaction after the course. Many of his beliefs actually changed away from those espoused by the readings and content of the course. Grant suggested that many of the students did not like the course instructor but for him it was the structure of the course that caused his alienation.

Practicum Experience

Grant had a struggle during his practicum experience. His situation was atypical in that it was comprised of a multi-age group with 75 children and 3 teachers in the unit. Many of the difficulties he encountered he attributed to the complexity of the particular group. Management was a major concern for Grant. He was not as confident at capturing and maintaining
students' attention as the experienced teacher. His faculty advisor was also present during the lesson I observed at his request.

Grant's provision of a lesson plan entitled "Theme: Art; Subject: Fold-Up Book" gave a good indication that his understanding of subject matter knowledge in art was extremely limited. The lesson was, in fact, a language arts lesson and art was merely used as a way of expressing understanding in visual form of a novel the students were studying.

Grant chose to develop an activity that had been part of the art methods class and apply it to language arts unit on the novel, Voyage of the Mimi. He had prepared a lesson plan and used his own example from the art methods class as the motivational device to interest and inform the students of the lesson's intent. Unfortunately, his own conception of the discipline of art was so weak that, instead of developing any art objectives, he actually taught a lesson on story progression. The art concepts that were part of the original activity in the methods class were never acknowledged nor addressed.

The seventy-five students were gathered around tables in a large double classroom. Large cut out drawings of sea mammals hung on two walls and cut construction paper images hung from hooks in the ceiling. Although the cut paper technique was the same one as Grant would be using, he seemed unaware of the prior student work or the fact the students might have already had any experience with this technique.

Grant introduced the lesson with a fifteen-minute monologue where he used the flip chart in the centre of the room and showed his own example of a fold-out book. The example was completed in his art methods course and represented six scenes from significant periods in his own life, using colour, shape and composition to convey information. He did not refer to or discuss the art concepts behind his own example. His objectives for the class were to
take six scenes from their novel and illustrate them in a fold-out book. He made reference to a possible fold and dip cover and a stick puppet to complete the lesson. The purpose stated to the students was "to provide another way for you to show what you learned from the Mimi." The purpose, objective and a six-point procedure were written on a flip chart in the centre of the room.

After the introduction, draft paper was handed out to the students and a multitude of clarification questions were asked by the students. Grant then asked the students to suggest possible scenes to illustrate. After hearing a few responses he then added that there should be a brief written description under each scene. At this point, the other student teacher reiterated the assignment.

A new set of instructions was given, including the suggestion to use a ruler because "neatness counts". As the student teachers circulated, the students were still confused and there were many questions about why neatness should count in a draft sketch. Nearly thirty minutes into the period, the children are still busy drawing six neat boxes. There was confusion about whether the paper was good copy or draft paper. As Grant circulated and commented on students' work, his suggestions were often counter productive to what he required for a final product. He challenged the students to add more detail to their draft drawings although the final product was to be cut paper shapes without details.

At forty-five minutes into the period, Grant interrupted the students to add that the scenes should be from the perspective of the character they had adopted in their journal writing. This announcement was greeted by a chorus of "Do we have to" and similar distressed responses.

When students were finished with their draft sketches, they were able to then take final copy paper and fold it into six sections. At fifty five minutes
into this hour and fifteen minute class, Grant once again interrupted the class to demonstrate how to fold the sheet of precut final copy paper into six. He explained that they must now cut their scenes out of construction paper, no drawing allowed and that their final copy should look like their drafts.

Hands went up everywhere and Grant commented, "Stay seated, I will come to you." At clean up time the students were informed that the draft assignment was homework.

Grant appears to have confused his beliefs about art with knowledge of the discipline of art. Especially in the area of studio work, where art making and understanding were the main components, Grant's lack of understanding of basic art concepts led to his inability to adequately plan an art lesson. His confusion quickly led to confusion among the students and management concerns surfaced even before he had completed the introduction. Students remained confused throughout. Grant appeared unaware that he was not addressing art concepts in the lesson. In subsequent interviews he remained convinced that difficulties were part of the problem of managing the class. The students at one point commented that his use of art terms (3 dimensional and 2 dimensional) was incorrect. He ignored the comments. His evaluation scheme was likewise unrelated to art. At several points he explained that neatness of writing and spelling would be part of the criteria for evaluation for this art project.

During the interviews he expanded on his criteria:

I am going with almost three stages, on one thing saying do they have the minimum six scenes, do they have it illustrated, does it make sense, do they have it in chronological order, have they described it well, is the language used properly. Then on the other hand, have they put some thought into it, is there some sort of insight involved, does it make them think differently about the Mimi than they did before. Then, thirdly, are they showing really good use of art skills to distinguish them from their peers. (05/#1)
The art skills he was evaluating he seemed unable to define and were not part of any prior objectives.

Grant felt that art was not valued in the school where he did his practicum, nor were any of his sponsor teachers particularly interested in teaching art. He felt that this was at odds with his own position.

I think in an ideal world, I don’t think that I would take the approach that the teachers I was working with did, if I may be allowed to comment, where art was kind of a filler and it was kind of the last thing they thought of. They had these integrated activities blocks and it was, 'Well, we have to think of something for them to do'. They did scale models of whales which I thought was just a disaster, the scale was all wrong. I would take a much more systematic approach to art than what I have seen but then again I am not experienced enough to make a real definitive statement. Personally, I would try to take a more systematic approach and I think it is an important part of the curriculum. To be fair, in that forum I think art is a bit more difficult when you have 78 kids you are trying to organize and just getting enough paint and paper and keeping the kids in control is more difficult in that forum, maybe that coloured the way that they approached art. (05/#1)

Characterization of beliefs post practicum

Even while Grant made positive comments on the value of art his response on the Belief Index data indicate his beliefs were changing toward a less structured approach to art education. In the final survey, for example, he disagreed with the statement, "Specific periods of time should be set aside by the teacher for the teaching of art".

Grant appeared to be confused about the value of art and art education. His comments in his final interview provide a strong indication of this conflict.

I have always had an interest in art, I am not very artistic but I believe art to be an important aspect of one’s life. To be honest I would have said that art in schools was sort of frivolous, let’s do the three R’s and get it over with but I think that since, especially now that I know more about how individuals have different ways of expressing themselves, not everyone exceeds [sic] in the medium of writing and I actually noticed in my
practicum that some kids really excelled at art that weren't very good in other ways, I think that would be a shame to prevent them from showing themselves. (07/#2)

Grant appeared much more responsive to the critical/historical aspects of art education but he included none of these aspects in his art lessons and even expressed some doubts that he could motivate children to be responsive to art. His subject matter knowledge led him to think of criticism more as social studies than art.

I don't know how it would be possible to get a bunch of 10 year olds go to the Vancouver Art Gallery without having a rebellion but maybe one could and I would love to do that sort of thing, to expose them to different kinds of art. Art is not just their mother's calendar in the kitchen. All the social controversy about spending money on art, that's major social studies. It would be curious to get their thoughts on that.(07/#2)

Final reflections

Grant was an intelligent preservice teacher who had achieved success in his university programs and academic work. He was eager to continue this pattern and to justify his belief system to fit his image of himself as a successful professional. Post practicum, he wrote, and subsequently had published, an article on student teaching in a non-graded team-taught classroom. Reading between the lines, much of the article was a commentary on the difficulty of his practicum situation and an appeal for specific support for novice teachers in similar situations.

Grant's beliefs in art and art education were contradictory and in conflict due to a number of factors. While he assumed a strong personal interest in art and the importance of art, this belief was not supported by any real understanding of the discipline of art. His difficulties were reinforced by a strong negative reaction to his art methods class and a practicum placement where he perceived that art was a filler and not valued educationally.
Although he responded favorably to the art criticism section of his methods class and to his own interest in art, he was not able to translate that into meaningful classroom instruction. His response was to downplay what could be achieved in an elementary school and to re-evaluate his beliefs.

SALLY

Sally was chosen as a subject because her beliefs were typical of the generalist group norms as indicated on the preliminary scores on the *Eisner Belief Index*. As the graph suggests, Sally scored almost at the neutral point, neither agreeing with nor disagreeing with either a subject centered or child centered approach to art education. The methods course appears not to have made much difference to this overall pattern with a slight change noted after her school experience.

Figure IV - Sally
Characterization of prior beliefs

Sally responded to her perception of her own school art experience with a favorable response to her elementary education. She did not take art courses in either secondary school or university and strongly disliked her art methods class. Sally saw herself as neither an artistic person nor a person who enjoyed looking at art work in museums or galleries. Sally's response on the preliminary questionnaire indicated that she did not have definite beliefs about art education. A close inspection of her responses show that she answered with the neutral response in 34 of the 60 questions. She only strongly agreed with 4 statements and only strongly disagreed with 3 statements. Of these statements, she only changed her response in subsequent surveys to one statement. In the preliminary survey she strongly disagreed with, "Any intermediate student who is well educated in the visual arts should be able to articulate his/her preferences in art and provide well reasoned grounds for holding them." In later surveys she agreed and strongly agreed with that statement. In her interviews Sally expressed concern about her own background in art and her lack of knowledge about the subject.

Not having a content background in art has been a problem but it is not something you can learn in a year programme either. It is impossible so if you don't come in with a background you have to pick it up over time ... It makes me more reluctant to try things, I won't not teach art but it makes me reluctant to experiment .. When I started the program I really wasn't sure if we were going to go off the deep end and everyone was going to float around and be creative and do the '60's things and I didn't feel ready for it, or I didn't know if we were going to be very critical and observing art in its process and having intellectual discussions. The more intellectual it gets the more uncomfortable I am with it because I don't have the understanding to give to the kids if I don't know where I am starting from. (07/#2)
Characterization of beliefs post art methods course.

The art methods course was not a positive experience for Sally. She felt she was unable to fit what she was to be learning into a structure that made sense for her as a beginning teacher. Her own lack of experience in art making, left her anxious about attempting to explore any of the processes that were part of the studio component of the methods course. Her unease with her lack of background in art history, aesthetics or criticism made her even more anxious about developing pedagogical content knowledge in the area of responding to art. Moreover, she wanted specific instructions and step-by-step directions. Her interview remarks, quite thoroughly highlight the conditions that led to her difficulties in the art methods course.

I found the art class was too much stuff thrown at us all at once. It was really chaotic and confusing. Sometimes you didn't know what was happening and you were doing three different things in one day because it was three hours. A couple of times, for those people who were really into it, they really got into the flow and were really creative and got it all going, they were quite excited but I ended up shutting down a couple of times, just "I am not participating any more". I couldn't deal with it. Our instructor tried to show us a whole bunch of different things and for me it was just too much, too fast. Get off the roller coaster. I needed to have one or two concepts developed; drawing or clay and develop it from, "this is where you would start with kids, you have no skill, the kids have no skill, start here to get all the way through". Show me how to get from the beginning to the end. Then I can take the process of that and transfer it to learning to do something else with the children. But I felt like all these things were being hit and there was no possible way that I could actually teach all this. By the end of it I really had no idea what I was going to do with art. I am a structured person so I would have liked to have a really strong "this is the process of learning how to deal with the skill of art, this is the process of how to evaluate the skill". I would have found that more helpful. (07/#2)

Practicum experience

Sally was placed in a combined grade 2/3 classroom for her practicum. The classroom teacher had just completed a diploma in art education at the university and art was a pivotal component of her curriculum with these
primary children. The room and the bulletin boards in the hall, were filled with children's art work of exceptional quality. The class had been studying a unit on birds. Examples of the sponsor teacher's art lessons with these children were everywhere. Clay sculptures of owls were out on the shelves to dry. Each sculpture had obviously been worked on over an extended period of time as all were carefully modeled, had much added detail and were unique. Examples of Inuit prints and the students' own prints were on one bulletin board and detailed drawings for a connecting science lesson covered another board. Teacher-made charts on the elements and principles of design and on drawing skills were also prominently displayed.

There were 23 children in the classroom seated in groups of 4 with their desks placed together to form a table. The class was primarily English speaking, but included two ESL students and an autistic child with a teacher's aide.

Although Sally had given her consent to the classroom observations, she was obviously nervous with me in the room. Her lesson plan was not written in a form that had been suggested in the teacher education program. There were no student learning objectives, intents or purposes listed, only a 10 step procedure for the teacher to follow. Sally had chosen to focus this lesson on the students' close observational drawings of a feather. She had feathers and magnifying glasses ready and also had the paper, pencils and pens easily accessible.

Sally started with distributing the magnifying glasses and the feathers and spent several minutes with the students directing their attention to what they were seeing, naming the parts of the feather and explaining that they would be doing observational drawings of the feather, first in pencil and then in felt pen. One of the children pointed out that the drawings might be better
if the outside boundary was a circle, like the magnifying glass. Sally was quick to revise her directions to include this suggestion. At this point she also revised her procedure from the lesson plan and handed out the experimentation paper. After getting the children to fold their paper in 6 equal parts (no easy task in a primary class), Sally proceeded to give them detailed instructions on what to do with the first 3 boxes. Her intent was to have them experiment with pencil to make a variety of lines but the concept of why that might be useful in the later observation drawing was missing from her instructions. She then handed out the felt tip pens and repeated the procedure in the remaining boxes. This section of the 50 minute lesson took over 20 minutes. She had to move 2 children to different seats to keep them on task. The students were clearly confused about the reason for this experimentation and were further dissatisfied with Sally's response to that concern. When directly questioned on, "What is the point of this?", Sally responded, "To have fun, that is one reason. I see some people trying various types of lines and making different shapes". At this prompt, she held up several student examples but again without any real explanation of why they had spent so much time in making marks on their 6 boxes.

Halfway through the lesson period, Sally asked the students to put their felts down and she began an explanation of the feather drawings. "Here comes the hard part. Do you remember what part of your feather you were going to draw? Look at your feather through the magnifying glass again. What kinds of lines are you seeing?" After another 5 minutes of questioning and close observation, Sally decided to demonstrate what she wanted by drawing on the board. She made several self depreciating comments as she drew. "I am trying to do this one on the board. I know you are used to Mrs. .... but mine won't be so good. Perhaps we can learn together".
The students began to get restless as Sally continued to draw on the board and discuss what she was trying to do. The children finally began their drawings. At this point the sponsor teacher re-entered the room and Sally appealed to her. "I am crashing here, do you want to see what you can do? I can't seem to get the concept across". The teacher moved into the room and took charge. For the remainder of the period, the sponsor teacher directed the students' drawing. Sally continued to circulate around the room observing the children and occasionally stopping to make positive comments. 

In the interview after the lesson, Sally was still uncomfortable about what she could do in an art class. Her frustration with attempting to teach a technique - observation drawing - that she had neither mastered nor conceptually understood was evident. Her attempt to explain the lesson in the larger frame of the unit on birds, highlights her incomplete conceptual understanding of art.

This lesson fits largely into the birds unit that we are doing and we were looking at feathers and specifically what feathers are, what they do and how they help the bird, what are they for, how do they work? We are getting down into the parts of the feather and what they do and the hooks hold things together. I was hoping that would lead into drawing it. We have looked at all the structures and we have looked at real feathers and pictures of feathers and I wanted them to look at the structures when we started drawing them. I was going to move out of this, I don't know if its a progression but we were going to look at the next art project was going to be transformation of the feather which you can do with any kind of object but taking a feather and making "what else can you make it be or into", an animal, etc. to be more creative than scientific. (05/#1)

Characterization of post practicum beliefs

Sally did not have a dramatic change in her beliefs toward art education as indicated on her overall scores on the Belief Index. What changed the most was her use of other than a neutral response. She was more definite in her
opinions and more able to conceptualize what her role as an art educator might be. The strongest influence on Sally was the sponsor teacher from her practicum placement. As Sally reports when asked in her final interview whether her beliefs about art education had changed since entering the teacher education program:

I just thought that "well you know how it is important but you know it gets done on Friday afternoons because that's what they like to do" but that has changed especially through my practicum, Kathy was really involved with integrating the art into the programme and dealing with the artistic concepts and things, she really showed me how it can be a larger part of the class. She did a lot of her big themes around art projects so that was really interesting to watch and the kids always really got into it. She took my idea of art and just stretched it right out because I walked out of that art class going, "I don't know what I am going to do" and she said do this and try this and the kids can really do this. I was really impressed, she was really fantastic. I guess mostly just that kind of change than really something with the attitude. I truly didn't think that we could get this type of work from children who are 9 years old. I am really impressed not just with what Kathy can do, but what other teachers that don't have art backgrounds can do and that has been the biggest surprise to me. That is where I have seen the most change in me, my willingness to try. (07/#2)

Sally's beliefs and attitudes about teaching art were closely connected with her concerns about her abilities as a teacher. Like the majority of the student teachers in the program, Sally really wanted to be, and to be seen by others to be, an excellent teacher. She perceived her students' work reflected on her ability as a teacher. She was able to articulate her dilemma with art.

If you don't feel comfortable, you are not going to do it with your kids, you rationalize. I think the difficulty with art in a professional sense is that it often gets on display in school and if you are not doing a good job it shows immediately on the walls. It is very stressful to have that happen. I know it bothers me putting it on display where everyone can criticize. (07/#2)

In discussing her methods for evaluating students' work, this sentiment that their abilities reflected the teacher's ability again surfaced.
Evaluation for the student's art would be based mostly on, because I don't feel confident in judging quality necessarily, the effort that the child made, did they make an effort to actually attempt whatever concept I was trying to get across? Part of that is up to you. If they are not transferring the concept then you haven't taught something. It is difficult for me. (05/#1)

Sally was more definite that there should be a conceptual base to an art program. She simply was confused about what that might be.

Final Reflections

Of all the student teachers that were interviewed and observed during this research, Sally's beliefs about art education were the least developed toward either end of the continuum. Sally did not have a particularly negative personal school experience but had a strong conviction entering the program and after the methods course that art education was neither valuable for the development of a child's innate creativity nor as a discipline. She was unable to articulate what factors might have influenced her.

The practicum situation was a turning point for Sally. By sheer chance, she was placed with a sponsor teacher who modeled what was possible in a primary classroom when the art curriculum was a major part of the students' development. The positive response by the children and the acceptance and encouragement of the other staff members all encouraged Sally to re-think her position on art for young children. In her own words:

I gave art a lot less importance before I went on to practicum. I was very conservative minded about it ... I didn't take it as seriously as I do now. (07/#2)

Sally's beliefs about art education crystallized after her practicum. However, her own sense that she could be as effectual as her sponsor teacher, left her in a nebulous position about whether her espoused beliefs could now become actualized.
The Art Specialists

ALAN

Alan was chosen to represent the subject centered extreme of the art specialist group of pre-service teachers as defined by the Eisner Belief Index. As noted in his graph, Alan entered the teacher certification program with very definite beliefs about art education. Although these beliefs were slightly modified during the course of the program, his basic response did not radically change.

Figure V - Alan

Characterization of prior beliefs

Alan had an extensive art background before entering the teacher education program. A mature student of 40 years old, he considered himself an artist/teacher and was widely involved in the world of art.
I have traveled a lot and I think probably right off the top I think that it is safe to say that is what was the major influence on me, looking at real art all over the world. Anywhere I have traveled I have always looked in galleries and museums and explored the visible architecture and that sort of thing. I think that it is my background that got me excited about art, I have always surrounded myself with art and it has been a constant stimulus to keep me wanting to learn a little bit more and look at new work. When you see the originals I think it makes a huge difference rather than books. I always have books around too, but I think it is really important to see real art. (04/#1)

He also reported a positive experience in all of his art education throughout his own schooling. Alan's decision to become an art teacher had encouraged him to return to university and pursue that career goal. In his undergraduate degree, he had been very proactive in planning for a teaching career, choosing a Fine Arts option that would allow him to take art education courses as part of his degree requirements. He had made appointments for career counseling with the art education department for several years prior to entering the Faculty of Education and had done very well in the art education component of his BFA course work and in volunteer teaching in schools. Alan's responses to the initial Belief Index were very definite. He only recorded one neutral response in the 60 items and well over half his responses were either strongly agree or strongly disagree.

Characterization of post methods course beliefs

In his responses on the Belief Index after the art methods course, Alan appeared less definite about his beliefs. The number of strongly agree or strongly disagree responses fell slightly to below half and the number of neutral responses rose from one to six. The actual pattern of Alan's responses did not radically change with the exception of three items where he reversed his initial response. As there seemed to be no logic to those changes and they were not consistent with his final responses, there is little that can be
concluded from this information. The ideas presented in his art methods courses were not new to Alan. He had already completed two art education courses in studio areas, prior to entering the program with similar philosophical and theoretical positions. Alan did not acknowledge any impact that his methods course had on his beliefs about teaching in any of the interviews that were conducted with him. The instructor of the course was initially impressed with Alan's knowledge and approach to art education but his final grade in the course suggested that he had not applied himself to the maximum of his potential. Rather than confirm his beliefs, the methods course appears to have caused Alan to be less sure of the stance he would take toward art education now that he was totally immersed in the teacher education program.

**Practicum experience**

Alan was assigned to teach art in an inner city school of approximately 2000 students. His teaching load covered the range of grades from grade 8 to grade 12 and across media areas. The observations for this study were of senior art class working on a unit on multiple perspective. The unit was developed using a simple object (a chair) and expanded to provide the students with a referent to viewing the history of perspective in art as well as to have the students use this knowledge to produce a unique solution in several media to the problem of perspective. Alan later expanded on this unit plan and became the successful recipient of a university sponsored award for excellence in the design of an art education unit.

Alan's knowledge of the subject matter of art in the areas of art history, criticism and studio production were evident in his planning and his preparation for his teaching. His goals and objectives were clearly subject
centered and yet he wrestled with the dilemma of also providing instruction that would foster creative and imaginative solutions from the students. The 26 students in this class were representative of the 64 nationalities at this school. Alan had arranged the room to display student art work at various stages of development. As well as student work, framed works of contemporary artists were on display. Art books and reproductions were piled near the teacher's desk and slides and a slide projector were set up for students to review the central visuals that had been used for each unit. Individual students seemed comfortable in the relaxed atmosphere to ask each other, or Alan, to address either conceptual or technical problems that surfaced as they were working through their ideas.

In all three observations, Alan started the class with a brief introduction to review and extend the central concepts of the unit. He used both visuals (slides, reproductions, his own work and students work) to make the concepts clear and he often demonstrated specific techniques, such as cutting foam core or drawing where appropriate. The majority of each classroom period, Alan spent working with individuals or small groups of students on the particular problem they were facing in their own art making. The students were totally involved in their work and as evident from the displays of finished work and work in progress, clear about the objectives of the unit and what was expected of them. Alan describes the intent of the unit.

The intent of this unit was to introduce them to the concept of using more than one viewpoint when looking at a subject or an object and making an image. In the introductions in all the groups, we looked at a combination of slides and artwork in poster form, I brought in some of my own work and also slides. We looked at the Renaissance version of reality through the lens (one eye closed) reality, one viewpoint, one perspective and showed how that was developed during the Renaissance, the camera obscura and that sort of thing, vanishing points, etc., architectural drawings. Also the pre-Renaissance, Gothic, medieval works a variety of different cultures before the Renaissance and even during the Renaissance.
that had no worries about trying to be looking at the world through one eye, for instance: Indian, Malaysian, African, North American, Oriental where the viewpoints vary quite a bit. Then we went after the Renaissance to the beginning of this century when Braque and Picasso upset the apple cart and really pushed the idea of using multiple perspectives and analytical and synthetic cubism and where that has led. We looked at those examples and also where that led to people like Jasper Johns and Jennifer Bartlett and Rauschenberg and some of the contemporary artists in this century and the affect that that concept has had on modern art. I tried to stress that it is not just a reaction to the Renaissance but it is in keeping with virtually every other culture in the world except for the so-called "Western one" and for most of the students it was completely new to them in the historical sense. It clarified things for them and gave them a bit of freedom, I think, in interpreting the concept. They took it as a starting point and said "yippee, let's go". They really enjoyed the process. (04/#1)

In this case, the pre-service teacher had adequate knowledge and a well formed sense of pedagogical content knowledge to develop and teach an exemplary unit appropriate to the diverse range of students in the classroom. Alan's evaluation criteria seemed to be understood by the students and reflect his overall goals for the unit. In general, the influence of his education programme at the university was reflected in the language he used to describe his evaluation scheme. The importance of "prior knowledge", for example, was a concept developed in both the Principles of Teaching course and the art methods course.

When I evaluate, I take into account establishing prior knowledge, find out where they are all coming from, what their ability level is, interests, etc. and then try and accommodate that and design a programme or at least certain lessons or certain units that will allow each of them to go at least to their ability and hopefully a bit beyond that. I like the idea of sketch books, I think that is an ongoing thing that they could evaluate themselves, get their peers and or themselves to enter into the evaluation and have an art history component worked into the evaluation, library projects, etc. Evaluation is a combination of fixed criteria and floating ones. They will be evaluated by whether they have accomplished the goals that I set out in the beginning which was to look at the chair from more than one perspective and produce several art works that exemplify that concept. Because some of them took off in so many different tangents, I will look at "well this person obviously did far more work than was asked for in the beginning" and took the initiative and I think that will be a factor. The
ones that were obviously really ambitious will get a better grade as far as I am concerned that just shows the ability to work on their own and I like to see some thinking and experimentation, that is a major factor for me, whether they were willing to take some chances or whether they just did enough to get the project done. (04/#1)

Characterization of post practicum beliefs

Alan had definite beliefs about his role as an art teacher and what art education should be about. He was able to articulate those beliefs and to substantiate how to translate his beliefs into practice. His school placement reinforced the values that he brought into the program and the values that were part of the methods course. The sponsor teacher, in this instance, was also a strong subject based advocate for art education. Alan fit easily into a philosophy that was consistent with his own and had a great deal of respect and admiration for his school advisor.

The sponsor teacher sees art as being very important as well and he shows that with his students, goes to visit artists in their home, has artists into the school on a fairly regular basis. He has a constant supply of new "what's going on in the art galleries in this city" and the kids know they see him as an interested teacher in what's going on in the art world and he does a really good job in connecting art in the contemporary scene in his role as an art educator. He has married the two very well. That is my view and it was before I started, I think if somebody is going to teach art it is a good idea to know what is going on in the art world. (07/#1)

The art majors also took art education courses when they returned to the university after the practicum. Although Alan acknowledged the influence of the discussions about art education theory as beneficial in these classes, he did not feel they had much impact on his beliefs about art education. His conception of himself as an artist/teacher was set before he entered the program and changed very little during either his course work or his practicum. In Alan's case the Belief Index was not a strong indicator of the depth or range of his conceptions about art education.
Final Reflections

Although Alan would appear to have grown more hesitant about his beliefs as indicated on his scores on the Belief Index, it is more likely that he now viewed the issues as more complex and therefore was less able to be definitive about many of the statements.

Alan was strongly motivated to become an art teacher and had come into his teacher education program with a well integrated set of beliefs that were formed by his own school and life experience as well with his positive response to prior university level art education courses. Neither his university art methods instructor nor the content of the art methods course appears to have influenced Alan greatly. He was not motivated to challenge the content of his coursework.

His practicum placement provided a close match between his own philosophy and teaching style and Alan's sense that real learning took place in the school experience. Alan and his sponsor teacher had a good deal of respect for each other. The students attitudes also reinforced Alan's beliefs about teaching and learning in art. The multicultural complexity of the school and the addition of several special needs students all were positive influences on Alan's growing conception of the possibilities of art education.

I think it is really important to excite the students about not just art but learning about anything. Their world at home, maybe what their future interest might be, all of these things come into play. I would like to try and integrate all of those into their view of what art is and just get them into an excited mode so that they want to explore and learn about art. I think it is good to, not so much in the earlier grades, find out what their interests are and try and accommodate that, so facilitate a bit but provide a role model as an artist/teacher. Associate with them as an artist and teacher and a fellow student who is also learning as well. I think it has been helpful to the students to see me sort of working along with them. (07/#2)

Alan built from his own strengths as an artist. He defined his teaching role in terms like "artist-teacher". The theory and art curriculum that was
introduced in his art methods course, provided a referent for Alan, a structure into which his beliefs about art and teaching fit. He was supportive of a subject centered model because that was the structure that most closely resembled his prior experiences. Like many of the art specialists, he was not so much challenged by new ideas but rather, incorporated models and structures to bolster his own well developed belief system.

SUSAN

Susan was chosen as a subject from the art specialist group because her scores on the initial Eisner Belief Index placed her as the least decisive about her beliefs toward art education. As indicated in the graph, Susan scored almost exactly at the norm for the total group of preservice teachers with a slight preference for a subject-centered approach toward art education. Her beliefs remained consistent over the course of the program with a slight movement toward more definite subject centered beliefs by the end of the practicum.

Figure VI - Susan

![Eisner Belief Index: Susan](image)
Characterization of prior beliefs

Susan had been very involved in the world of art prior to her entrance into the teacher certification program. She had her degree from an eastern art college and had professional experience as an art gallery director and curator and as a practicing artist. Although she had not taken art during her own schooling prior to high school graduation, Susan's intense involvement with art as an adult influenced her decision to teach art to adolescents. During the year before entering the teacher certification program, Susan had attended courses in art education in the same university to broaden her own expertise. With such a strong content and subject matter background, it seemed somewhat surprising to review Susan's score on the Belief Index. Much of the score can be explained by the fact that she seldom answered (7 of the 60 items) with the extreme response of strongly agree or strongly disagree and gave a neutral response to 12 of the 60 items. Susan was hesitant to commit to many of the statements and suggested in interviews that she found the Belief Index "ambiguous". Susan only radically changed her response to one item. In the initial Belief Index, she strongly agreed with the statement "Children should never be allowed to copy each others' work in the classroom" and did not alter that response until after the practicum experience when she disagreed.

Characterization of post methods course beliefs

Although the scores on the Belief Index do not suggest a major change in her belief system, Susan suggests quite differently in her interviews.

Not until I started considering coming into the program did I think about what art education might mean because I didn't take art in high school myself so I didn't have that reference, it was all post secondary courses. When I started taking courses through the art education faculty here, I
realized that it was more than just doing your own work and expecting people to follow your lead, that there was a lot more to it. I would have to say that the program itself has changed my views a lot. (04/#1)

Susan was quite affected by her art methods instructor. She referred to the ideas that she saw developed in the art methods class as changing her thinking and providing her with a new set of possibilities for the classroom. She also saw the methods instructor as a mentor and identified with her philosophy and style of teaching.

Practicum experience

In the classroom observations, Susan was comfortable with the students and they with her. The art classroom in this suburban junior high school was set up to emphasize involvement in the world of art. Student projects, teacher made charts, significant quotations and reproductions of contemporary artists works all added to the ambiance.

Susan had developed a painting unit for the art 9 class which focused on landscape painting. Their previous class had been on a field trip to an art gallery in an adjacent municipality that featured the landscape paintings of William Weston, a local Canadian artist from the 1930's. They had had a guided tour of the exhibit and spent some time choosing and copying a favorite piece while in the gallery.

In this observed lesson, Susan provided the students with a response questionnaire that focused their attention on some of the main concepts she wanted them to recall from the gallery experience. After a few minutes of the students individually responding in writing to the questionnaire, Susan led a class discussion to review and expand on their understanding of art concepts such as perspective, colour and technique. She started with recall questions such as "What did Weston do to the objects in the foreground of the painting
to make them appear closer to us?" and then continued to probe student responses and push for their own aesthetic response to the paintings. The discussion continued for 20 minutes of the 50 minute period with Susan initiating questions related to their paining unit and the field trip and the students engaged in reflecting on what they had seen and how that might relate to their own work. The remainder of the class period was devoted to the students completing the pastel drawings they had started in the gallery. Susan spent her time moving around the tables of students, monitoring and motivating. She concluded the class by again reviewing how this lesson fit in the larger painting unit.

Susan, more than many of the other pre-service teachers was concerned about the issues of creativity and student choice in the art experience. The unit I observed covered all the prerequisites of a discipline based art experience from art criticism, aesthetics and contemporary understanding of art, to developing specific understanding in the use of techniques and materials. Susan also emphasized that the students' own interpretation and unique response to image development was the main objective.

Susan's concerns, like those of all the specialists, were not in having too little content background in art, but rather in changing her thinking from that of an active participant in the world of art to her role as a teacher. How to bring that world alive to the adolescents in her classrooms was a major focus of her reflections.

Many of the students had never been to an art gallery or museum before and their attitudes toward art in general frustrated Susan.

I always blame myself, "why aren't they excited about this?" but you have no ideas where they are coming from. That is something I beat myself about because I thought I wasn't getting them excited about art, it was my fault, that I wasn't giving them the right projects to do and things like that. (07/#2)
Susan had been quite affected by the art methods course. Several times she commented on the fact that her units and lessons were the result of ideas she expanded from the methods course. Her own background and resources also strongly influenced her choice of content. Several of her units she planned around visuals and resources that she had collected prior to entering the teacher certification program.

The sponsor teacher was very supportive of Susan and they had an easy, mutually respectful relationship. Susan felt their philosophy and teaching style were well matched. Susan was particularly concerned by the values of the school and the community which did not support her conception of the importance of art in education.

There wasn't a lot of importance placed in the school on art and from what I could gather at that particular school, the art program had decreased over the years, that there were in fact more art teachers, whether it was always a junior high I don't know. I guess that is probably pretty common in schools that art programs are not thought of as highly as they should be. The kids came from different schools, it depends I guess, on how much importance their teachers put on art. (07/#2)

Characterization of post practicum beliefs

Again, although there is very little change in Susan's response on the Belief Index, the interviews suggest that Susan is more reflective about her beliefs toward art education.

My beliefs toward art education have just gone back and forth, being in the classroom here and then going out to the school and then coming back into the classroom. It has kind of switched a few times. I think things have really jelled in the spring/summer term because I have had the experiences of teaching albeit limited in some ways.

Everybody is complaining about having to come back in the summer, whereas if the course had ended after the practicum I am not sure how much reflection I would have done. I am sure I would have done some but I didn't know whether it would have been directed in the way that it was. I
think with a lot of the courses it is kind of hard to judge because it is after the fact, but a lot of the courses we are taking now I wish I had beforehand. Then again, it might not have applied, not knowing what the practicum would have entailed. The summer session has really given me an opportunity to really think.(07/#2)

It was not only Susan's art education courses that affected her thinking. She was very influenced by the courses she took entitled, Language Across the Curriculum and on the focus of creative and imaginative thought that was explored in an English education elective.

During her final interview, Susan was able to articulate the difficulties she experienced between her espoused beliefs and her actual classroom practice.

When you talk about teaching it is totally different from when you are actually teaching. The idealism of talking about what you would like to do and what you plan to do is where I am back to now. Questioning what I did, I think the last time we talked was near the end of my practicum and I thought I had some pretty concrete ideas of what I had done and how my sponsor teacher had influenced me but now I see things in a different light.

Although I thought I was doing things for the students, in retrospect it was what I wanted to do. I wanted them to do certain things and I still haven't decided whether that is good or bad. I know my lessons were too much product oriented and I probably could have spent more time getting their ideas on things and giving them a little more freedom. I think I was a little tight-reigned sometimes.

I guess before going on practicum or knowing more about it, I probably thought that I would go in there and teach them how to do things, but now I see it as being much more than that. I feel we should have been getting into more of what is creativity ... there are a lot more questions now and they are still unanswered. I think when I get my own class it will be hopefully a slower pace and more reflective, although I tried to do that but I think it was just the circumstances of a practicum that made you feel so rushed and having to come up with things so quickly.

Lots more choice would be one of the key elements, instead of saying this is what you are going to do. This is particularly with grade 8's, they are a special case in themselves, they do need more direction and more structure but perhaps more choice within the structure. We all need more time to think about what you are doing, not get too caught up in doing, doing, doing. (07/#2)
Final reflections

Susan's beliefs about art education started with her beliefs about what involvement in the world of art meant to her, refocussed as she became more immersed in general education and art education theory and practice, again from her involvement with a supportive teacher but rather discouraging school environment and finally were re-cast again in her final academic term at the university. A thoughtful and reflective individual, Susan seriously questioned the what and why of her assumptions and the assumptions she was presented with during her education.

KAREN

Karen was the most child-centered of the art specialists as indicated by the Eisner Belief Index. As noted in her graph, her beliefs changed over the course of the methods course and the practicum to become more subject centered.

Figure VII - Karen

Eisner Belief Index: Karen
Characterization of prior beliefs

Karen was the youngest of the pre-service teachers included in the profiles. She went straight from high school into university and then into the teacher certification program after the completion of her BA degree and a further fifth year to meet the subject specific requirements for a double major in both English and Art. She reported a very positive attitude toward both her grade school and university art courses. In her interviews, she reported the strong influence of the teaching methods modeled in the art education courses she took prior to entering the teacher education program. She also returned to her former high school to let her art teacher know that she was going into art education. She felt that her natural talent and her success in studio classes as well as her own recent high school experience, put her in a good position to become an art teacher. Karen reported a very favorable reaction to her own elementary and secondary art education and she had a strong sense of herself as an artistic person. Karen’s conception of art entering the program seemed to be based on her own success in art. Karen changed her position on a substantial 20 of the 60 items over the course of the program.

Characterization of post methods course beliefs

Although Karen enjoyed and was successful in her art methods course, she began to expand her conception of subject area knowledge. She questioned whether her own background knowledge would be adequate for her to be able to plan and teach art units. She had come into the program confident about her abilities in studio art but realized that her assumptions about art as a subject were rather limited in relation to the backgrounds of other art specialists and as she was introduced to the concept of discipline based art education in her methods course. Karen began to believe that art history,
aesthetics and art criticism should also be part of her own knowledge base and that she should be incorporating these areas into her planning and teaching. Karen originally disagreed with statements on the Belief Index such as "Reproductions of works of art have no place in the school classroom" which are indicators of a historical, critical or aesthetic component in the art program. After the methods course she strongly agreed with that statement. She also moved from a position of not believing that evaluation was important to strongly supporting statements that suggested evaluation of student learning in art was an essential part of the teacher's role.

Karen incorporated these new values into her planning for units of instruction she developed in the art methods course, and in thinking about what she would teach in her practicum.

Practicum experience

Karen was placed in a senior secondary school in a suburban area where she taught both art and English to grade 11 and 12 students. The school was semestered and Karen's art blocks were 75 minutes long and met every day. The observations I made were of a grade 12, drawing and painting class of 15 students.

Karen had prepared a lesson plan using a format she developed in her art methods class which stressed not only objectives, procedure/content closure and a time frame but also highlighted a separate area for art criticism. She also had a proposal form for the watercolour unit developed for the students to fill out. This form reemphasized the link between their study of watercolour technique, their understanding of specific concepts in the elements and principles of design (such as the use of colour to evoke mood) and reference to image development strategies (magnification, simplification,
elaboration, etc.) as possible ways to develop unique artistic solutions to the assignment.

The classroom was set up with stools around small groups of tables so that 2 to 4 students could work comfortably together. Karen had taken over the large bulletin board space at the side of the room and used it to display art reproduction of Georgia O'Keeffe flower paintings and four watercolour images Karen had painted herself. She had also designed and made specific charts which emphasized the concepts developed in the unit. The rest of the room was cluttered with the sponsor teachers' paraphernalia; stacks of handouts, library books, magazines and charts. Karen, as both an art and English major, worked in two separate classrooms, with two different sponsor teachers. Karen arrived at the beginning of the period carrying two boxes of materials. The filmstrip projector she had ordered from the library had not arrived and the extension cord usually kept in the room was nowhere in sight. Twelve of the 15 senior students were seated and in the room as the bell rang. Karen sent the first student who entered 2 minutes late down to the library for the projector. The other students wandered in during the period. This laissez faire attitude toward attendance was very much a part of the school culture and difficult for a student teacher to change.

Karen handed out the student watercolour proposal forms and circulated as the students fill them out, occasionally referring the students to the charts on the Elements and Principles of Design that were about the room. Fifteen minutes after the start of the first period, the projector arrived and Karen commenced the direct instruction portion of the class. She provided the students with a strategy for taking notes and an outline on the board of the specific watercolour techniques she wanted them to understand.

In the interview after the lesson, Karen explained her intentions.
It didn't go as smoothly as I wanted it to but my intent was for them to go beyond just a cute little watercolour. I wanted them to chose some organizing design strategies along with thinking about colour symbolism and something to evoke a mood or feeling of a memory that they have from a place in the past.

That was the purpose of having that proposal, to have them pin down what strategies were. I know things evolve after they are working so it could change but they could see what they started with and then realize how things do get bigger or move in a different direction once they start working with the materials.

Just previous to this we were working on figure drawings where they did some monochromatic studies and value and I originally introduced this with some Georgia O’Keeffe slides which I will come back to at the end of this week just because she exemplifies the use of magnification and simplification to evoke an obvious mood and with her colour choice as well. (04/#1)

At the conclusion of the filmstrip/lecture Karen had the students confer with each other in small groups about what they had learned and how they might apply it to their watercolour assignment. Karen circulated around the room attempting to keep these rather lethargic 17 and 18 year olds motivated and on track. At the end of the class period, she handed out a self evaluation form modeled after a form from her Principles of Teaching course.

Karen found her sponsor teacher had similar ideas about art education to those she had learned from her art methods course. Her sponsor teacher had completed two masters degrees from the same university and expected to see a discipline based approach in the student teacher's planning and delivery of instruction. Karen was comfortable with this expectation and referred to the difference with her own high school experience.

I remember that I really didn't use the elements and principle of design, I just drew things the size they were and the way they were, realistically so trying to get the students to think about doing something a different way and having a purpose in mind is important.
Just doing something that they didn't think of before in a way that might be a little more interesting is a big step...

Some of the them want to go to art school, they have to do some of the studies of still life and figure line and I knew that some of them really want to start working out of their imagination and start putting some personal things into their work. So with that I was trying to steer the last little while towards this point where they finally go "oh I can do something that I want to do and that is going to be different from everybody else instead of everyone doing the same thing".

I chose Georgia O'Keeffe because of the obvious crosses over and I love her work and I wanted to use a women artist for a change. (04/#1)

Characterization of post practicum beliefs

Karen returned to the university with an even greater belief in a subject-centered model of art education. Karen's original beliefs have been replaced with a sense that art education involved understanding and manipulating principles, strategies and techniques. Moreover, she now incorporated an analysis of the art works of other artists as well as her own knowledge from her experience into her lessons and units.

The results of the Belief Index are consistent with Karen's comments in her interviews. To a statement such as, "Intellectual abilities are as important in the creation of art as they are in studying the standard academic subjects", Karen now gives a strongly agree.

Karen attributes the similarities between the theory she learned in her English methods courses and her Principles of Teaching course as part of her conversion in her art education beliefs.

Final reflections

Karen is an enthusiastic young teacher. She was influenced by her prior experience in school with a system that encouraged personal expression and a
development of art for the talented. She was successful within that system and her enjoyment of that success caused her to develop a belief system built around that philosophical base.

When she encountered an alternate value system in both her art methods course and in her practicum experience, she was able to incorporate this new understanding without invalidating her own experience. As a double major, she was able to acknowledge the parallels between this discipline based view of art and her understanding of English education. Karen was able to make a logical case for broadening her conception of art and to challenge her own beliefs about natural development. As she redefined her role as a teacher throughout her program, this new conception of art education fit comfortably within that structure. The supportive practicum experience reinforced her changing beliefs.

MAI

Mai was chosen as a subject because her scores on the preliminary Eisner Belief Index placed her within the average range of the secondary art specialist group. The graph places Mai's beliefs as more subject-centered than child-centered in all three time periods. Neither her university course work nor practicum experience appears to have significantly affected her overall score.
Characteristics of prior beliefs

Like Karen, Mai was one of the youngest preservice teachers entering the teacher certification program. Mai attended local elementary and secondary schools where she was pleased with her own art education. After a year at university, she moved to the Art School where she completed her degree, majoring in printmaking. Again, she reported a sense that her art education had been a positive experience and she saw herself as an artistic person with an interest in art outside her own work.

Mai's beliefs as indicated by the preliminary score on Belief Index were moderate. On one quarter of the items (15/60), she gave a neutral response and the majority of her other responses were in the agree or disagree categories (34/60) rather than strongly agree or strongly disagree. Even in responding to her views of her own educational experience, Mai responded
toward the middle of the scale rather than at the extremes. She was the only specialist to answer in this way.

Characterization of beliefs post methods course

Mai suggested that she agreed with the basic theory of art education as expounded in the methods course and in the provincial curriculum.

You know that diagram, the one with the image in the center and making and responding around the outside. If I had thought much about art education before I entered the program, that is what I thought art was about. (04/#1)

Mai did not feel that her beliefs were largely changed by her university course work. Although she responded somewhat favorably to her art methods course, for the most part she was very cynical about the teacher education program. She suggested that she was learning little to do with the profession of teaching and with art education in particular.

I am pretty cynical about the whole education programme right now. It seems like it was created to take your money and stretch things out. I think in theory a lot of the things would be beneficial but I don't know for some reason they just don't feel as though those things really apply right now.

As I was going through education I thought a lot of it had to do with our position in art. Art is different, a lot of things did not apply at all, but that was okay. I knew that and I would just sit by and I figured well if ever I was subbing I would have to take over some other classes anyways and that information is valuable.

I didn't think it was a waste of time but the amount of work for the return seems inappropriate. (07/#2)

Unlike the other student teachers, Mai did not see the relationship between her course work in the Principles of Teaching course or her other courses as useful in her education as an art teacher.

Practicum experience

Mai was placed in a high socio-economic status school near the university. A wealthy Asian population had recently immigrated into the
area and the school population reflected the community. The school administration was proud of the academic focus and proud of the large percentage of students who went on to post secondary institutions, especially universities. Several times, in informal conversations, the principal and vice principal commented on the quality of the school programs and the academic success of the student body.

The art room was unusual in the extreme orderliness and sterility of the surroundings. Student work was mounted and displayed on the bulletin boards on the sliding blackboards but more as examples of processes than as pieces of art. Each display had a lettered caption such as "dry point etching", "aqua tint" or "silkscreen". Several framed examples from former years hung on the walls. There was no sense that the displayed work represented the students who were currently enrolled in art classes. Visuals developed by the student teacher were non-existent in the room. The bulletin board nearest the door held class schedules, a poster of a district student art show and several photographs of the sponsor teacher with school teams and photos of his own children.

Mai developed a unit to fit in with the sponsor teacher's program on printmaking techniques. In contrast to all the other student teachers, she had prepared no unit or lesson plans, nor did her sponsor teacher expect that of her. He was the only sponsor teacher that did not participate in the liaison meetings initiated by the university art education department.

The observed class was composed of twenty-one students, nineteen females and two males and ranged in grade level from grade nine to grade twelve. Mai had prepared a papermaking lesson and brought in her own screens, trays and books. As she was setting up for the demonstration, the students gathered around her at the front of the room obviously interested in
this new process. Mai commented on the keen response and their interest and several students replied with comments such as:

"This is so neat ... we never usually get to do this stuff."

"This class is usually so boring."

Mai began the class with a demonstration on making paper, outlining all the steps as the students were gathered around her. The sponsor teacher remained in the room and took part in the demonstration. He was as intrigued by the process as the students and asked as many questions for clarification as they did. The atmosphere was informal but very attentive.

Mai finished the demonstration and moved to where she had a collection of her own hand-made paper and a stack of library books. After showing several examples, she showed pictures of artist David Hockney's work, "Paper Pools" and discussed the use of paper making in contemporary art. She also showed books on paper boxes, casting, bound books and contemporary paper craft. The students asked individuals questions and a small group chose to begin paper making while the rest of the class returned to their desks to complete their designs for their silkscreen images.

Mai's discussion prior to the class of her intent for the class was fairly close to what actually occurred. The links to the approach to teaching as advocated in her methods course are in evidence as is her acceptance that her sponsor teacher holds a different set of values.

Basically I will do a demonstration on papemaking then get into the pulp and make-up of paper, then talk about its history and get into its uses, going into contemporary uses and then products and such, things that we can do with paper, casting, sculptural forming, etc. This is a printmaking class, just before this they had gone on a field trip to the South Granville Galleries and came back and had a discussion. That was at an introductory level because I don't think they have ever gone on a field trip to a gallery before. Everything in this class seems very rudimentary, it is not formal at all.
Right now they are all doing various projects in printmaking so they are doing silk screening, first with one colour and then with three colours, they are doing etching and dry point and aqua tinting.

I think .....'s ideas are great but I think he has been here so long and he has seen some of the things not work up to snuff so I think it has marred his vision and he has kind of taken a laid back kind of view of "well they are not going to do this anyway so why should I teach it". As far as the ideas that go back to "let's just show them how to do this and get them to do it," that is what he is doing right now. If it were my class I think I would start right from new and go through all those areas in the curriculum, the image mapping, art history, art criticism, etc.(04/#1)

Mai was conscious of her lesson planning even though she did not write out her plans. She also could reflect on the differences between her own approach, her sponsor teacher's approach and the premises developed in her art methods course. The art specialists were a close group and discussed their practicum situations among themselves. Mai felt that she was not able to teach in a way that would be more in line with her beliefs about art education. Although other student teachers seemed to be in placements that reinforced their beliefs, Mai rationalized that in some ways her situation was better because she did not have to work as hard.

When I talk to the other student teachers I think it fits in very well with their programs and sounds good, but in a way it is kind of nice because it is not as much work for me to do right now.(04/#1)

Characterization of beliefs post practicum

By the end of the practicum experience and in her reflections back at the university, Mai was more direct about the effect the practicum had on her beliefs.

It will influence me but at the same time I am trying to keep it in my mind to try and not let it influence me because I think you have to hold onto your own beliefs of what you think understanding art is about in the first place. My beliefs are still there, I am just hoping this experience doesn't mar anything, and I am just trying to hold onto that. To tell you the truth, I couldn't wait until I got out of the practicum, I was counting the days. (07/#2)
An analysis of the Belief Index tends to support the sentiment that Mai expressed. Although she still was answering the moderate responses rather than the extremes to statements, she retained almost the same position as she had held on entering the program. Of the three items where she radically changed her responses, two were statements that would lead to a more subject-centered model of art education. She still was neutral to ten statements but nine of them were different than the fifteen statements that she had answered with a neutral response on the preliminary survey. She continued to suggest that her university education was more common sense than providing any new conceptions that would be useful to her.

Final Reflections

Mai's experience and age both were factors in how well she was able to reflect on her beliefs. She seemed unable to recognize the influence of the ideas presented in her methods class even though she admitted that she had not given much thought to teaching prior to entering the program. In discussions, and in the answers she gave to the survey instrument, her beliefs about art education often reflected the underlying values she encountered in her program of studies. She seemed reluctant to attribute much credence to any ideas that might have surfaced at the university nor was she willing to clarify what did influence her. She saw her practicum as a hoop to jump through in order to reach her goal and felt she learned as much of what not to do as what to do in developing her own art program.

Summary

The subject profiles of the eight preservice teachers serve to highlight their individual differences, as personalities and in their practicum situations.
The emphasis of this study is on prospective teacher beliefs and the extent to which these might change in the course of a teacher education program. The results of these profiles show a range of belief changes and point up the differences between what was learned from the interviews and observations and what was revealed by the administration of the Belief Index.
CHAPTER 6 • DISCUSSION AND INTERPRETATION

The findings from this study reinforce the point that beliefs are complex and dynamic entities that are difficult to capture into static, fixed categories. After sorting, rereading and analyzing the data from the individual profiles, the larger framework and the **Belief Index** and in conjunction with revisiting the literature, there were four broad themes that emerged as most relevant to the study. Rather than discrete categories, these themes are more like the patterns that make up the central design of the tapestry of beliefs toward art education held by preservice teachers. Within each of these themes are both independent and interlocking threads that form that pattern. By examining both the patterns and some of the dominant threads, it is possible to understand and appreciate prospective teachers' beliefs toward art education and the impact those beliefs can have on practice.

**Beliefs and Subject Matter Knowledge**

As suggested in the review of the literature, (Ball & McDiarmid, 1990; Feiman-Nemser & Buchmann 1985; Grossman, Wilson & Shulman, 1989; Nespor, 1987; Pajares, 1992) there is a growing body of research related to the beliefs and preconceptions held by preservice teachers about subject matter knowledge and its impact on teaching practice. This relationship was a major theme that wove throughout this study, surfacing initially at the beginning of the teacher certification program, and pulling together a number of other issues as the program unfolded. Before unraveling the various threads of this theme, it is worth re-establishing a working definition of the distinction between the terms belief and knowledge. This is especially necessary as the two constructs are often treated as the same (Fenstermaster, 1994; Grossman, Wilson and Shulman, 1986).
Beliefs can be distinguished from knowledge in a number of ways (Pajares, 1992; Nespor, 1987). For the purposes of this study, beliefs refer to ways of thinking which rely heavily on affective and personal understandings. Beliefs are more subjective than objective and are often rooted in personal experience. Knowledge, on the other hand, refers to ways of thinking about something that rely on consensuality determined by relatively well established canons of argument.

One of the first challenges facing beginning teachers is the transformation of their disciplinary knowledge into a form of knowledge that is appropriate for students and for the task of teaching. This pedagogical content knowledge (Shulman, 1986) is shaped both by an understanding of subject matter knowledge and by an understanding of issues related to teaching and learning. Beliefs about what constitutes knowledge in art education become the screens with which preservice teachers sift this information.

One thread that formed this pattern was the assumption in post degree teacher education programs that there is a correlation between beliefs about knowledge in a subject area and the knowledge acquired in that subject. Prerequisites for entrance into teacher education from programs in the liberal arts and sciences are meant to ensure an adequate content base and there is an assumption that beliefs about the value of that subject area are part and parcel of this knowledge acquisition. That was certainly not the case in either degree or kind from the analysis of the data of the purposeful sample of preservice teachers. In this study, the relationship between belief and knowledge about art education appears much more complex than would first appear.

For the elementary generalist teachers involved in the study, few had significant study in art beyond their own elementary education. In comparing
their scores on the Belief Index to those of the art specialists, overall they had, as would be expected, less strongly held beliefs toward art education. Some, such as Sally, clearly had never had much involvement with the area of art and so entered the program with both a deficiency of knowledge and a corresponding undeveloped set of beliefs as they related to the subject matter knowledge that would be central to art education. The art methods class did little either to develop Sally's beliefs or her conception of an appropriate knowledge base for art. However, it was in the profiles of Elizabeth, Marilyn and Grant that the relationship between belief and knowledge was more complex.

Elizabeth is an example of a teacher education candidate who would be expected to be entering the program with at least a modicum of subject matter knowledge given that she had completed a university level course in art history as well as having had experience with school art. However, Elizabeth's experience with her own art education both in her elementary school and university course had been extremely negative. She disliked her elementary experience equating knowledge in art as the development of innate talent and found her art history course worse. In her words, "I learned nothing and remember nothing". The acquisition of factual knowledge about specific pieces of art divorced from any aesthetic understanding of those images convinced Elizabeth of the uselessness of art history. The course work which should have prepared Elizabeth with a knowledge of the discipline of art history in effect caused her to discredit the area entirely. She believed that art, as she understood it, was irrelevant to her own and to any child's education. During the course of the methods class, when presented with a different conception of subject matter knowledge in art, Elizabeth was able to reevaluate what knowledge in art might mean and adopt a model that was
more in line with her beliefs about other subject areas where content was related to larger issues than factual knowledge. She determined that there was content worth knowing in art and that that content could be taught in a way that was meaningful to children. She also began to appreciate the connections between knowledge in art and knowledge in other subjects.

Marilyn voiced similar concerns based on her prior experiences in art. She suggested that the knowledge she acquired in her previous education simply did not prepare her to understand what teaching art might mean. The subject matter knowledge acquired in her schooling had been isolated activities without any conception of what art was or why art might be meaningful in her education. She discussed this difficulty in comments like, "We were never taught to talk about techniques or ideas like an artist." She repeatedly voiced concern about her lack of content knowledge and her concern that her prior experiences had not prepared her in the forms of knowledge necessary to understand art. Again, when presented with a model of art education that resonated with her humanities background, Marilyn began to grasp what pedagogical content knowledge in art might entail and what forms of knowledge she might need to acquire in order to teach art. Marilyn, like Elizabeth, was able to bring her beliefs about art more in line with her beliefs about teaching and learning in other subject areas.

Grant is the example of a student teacher who equated belief with knowledge. Grant both considered himself "art literate" and had strongly held subject-centered beliefs as he entered the teacher education program. His experience in both the art methods class and the practicum situation suggest that his actual content, substantive or syntactic knowledge in art was extremely limited. As he recognized this deficiency, his beliefs about the need for subject matter knowledge also seemed to weaken. Even in the area of art
criticism which he associated with his greatest knowledge, he had doubts that it would be possible to motivate children to be responsive to art. For this preservice teacher, his beliefs about his own knowledge of art and his apparent knowledge were contradictory. As he progressed through both his course work and his school teaching experience, this discrepancy became more obvious; his attempts to develop pedagogical content understanding were thwarted by his own lack of content understanding. Neither the methods course, nor his school placement were helpful in reconciling this discrepancy.

Another thread that emerged in this pattern and was emphasized in different ways through the other themes was the difference between the specialists and the generalist preservice teachers. The relationship between knowledge and belief was a different issue with the art specialists than with the generalist teachers even though most were not prepared in their undergraduate degrees for the comprehensive knowledge base necessary to teach. They entered the program with much more definite beliefs toward art education but like the generalists, those beliefs were based as much on personal experience as on a conceptual understanding of issues in art. As Detmers and Marantz (1988) suggest, the focus of current undergraduate programs in art tends to be on technical mastery of art production; how to be an artist; or factual learning in art history without even much real understanding of what historical inquiry is in art. Both aspects are a far cry from the type of content, substantive and syntactic knowledge advocated by Grossman, Wilson and Shulman (1989) or the subject matter knowledge advocated by the Holmes Group (1986) as necessary prerequisites to teaching.

While some of the specialists were more prepared than others to view art education in a wider context than the development of future artists, the relationship between their personal beliefs and knowledge reinforces the
relationship between beliefs about knowledge from the perspective of a practitioner and beliefs about knowledge from the perspective of a teacher. As Walters and Calvert (1990), found in their study of preservice art specialists in Alberta and Manitoba, the major emphasis of knowledge in undergraduate art programs is on studio work rather than around conceptual or theoretical concerns which might apply to all media. Few preservice teachers had art theory or aesthetics courses and art history courses were typically chosen on a random basis usually according to personal interest. While the specialists entered the program with a much more developed knowledge base, few had previously conceptualized what subject matter knowledge might be appropriate in the context of school education.

Alan entered the program with a relatively strong background in art. Unlike Grant, his beliefs were much more consistent with his actual knowledge. The theory and pedagogical understanding of art that was introduced in his methods course provided a structure for Alan that complemented his own experiences and beliefs. The practicum experience further extended and reinforced that relationship. He was not challenged by a discrepancy but rather incorporated the complementary features of his teaching experience to sanctify his beliefs. Alan's somewhat unexpected score on the Belief Index (his scores shifted from a very definite response to progressively less definite) seem to be at least partly explained by the increased complexity of his understanding of art education that he brought to the analysis of the items on the Index. He, as with several of the other specialists, commented that the interpretation of some of the statements was relative to their understanding of the concepts addressed. Bullough and Stokes (1994), in their analysis of change of preservice teachers conceptions of teaching using metaphor, refer to the idea that change was often a matter of degree, not kind.
This notion is very applicable to many of the specialists in this study, with Alan as the most prominent example. It is also important to note that, although the Belief Index sets up a continuum, beliefs are not mutually exclusive. Conceptions of imagination, personal expression and creativity are not the exclusive domain of a child-centered model of art education. The issues of the nature of art are far from resolved in either the beliefs held by these preservice teachers or the literature in the field of art and art education.

Susan and Mai are more typical of a moderate set of beliefs consistent with their own knowledge background. Susan suggested that her beliefs about art education had not been developed prior to the program as her focus had been on being an artist and so she had not considered how her own knowledge acquisition might have an impact on her pedagogical beliefs. Following the methods course and the practicum experience, Susan was able to reflect on her beliefs and her own education and synthesize a conception of what art education should be for the adolescents she was going to teach. The structure presented in the art methods class, made both pedagogical and subject matter sense to Susan. She continually questioned what she was learning in the context of her new role as a teacher.

Mai’s beliefs about knowledge in art remained consistent with her art school education and she believed that neither the experience gained in her practicum nor in her course work affected these beliefs. What appears more likely is that, like Alan, Mai’s substantive knowledge about art deepened, but in a manner consistent with her prior beliefs. What she did not come to appreciate was the relationship between her beliefs about the nature of knowledge in art and how this might apply to the decisions she might make as a teacher.
Karen, of the specialists, was the least subject centered upon entering the program. Her beliefs, however, were consistent with a school background experience that was technique focused and emphasized natural talent. When presented with the opportunity to expand her conception of what knowledge in art might look like in her methods class and practicum, Karen's beliefs fell in line with this expanded view of knowledge in art. She was able to incorporate this new understanding without invalidating her prior experience. In her final interview, Karen's response to what had influenced her, incorporated her prior experiences and her present education.

Definitely doing my own work, my own experiences from school, remembering what it was like to be an art student and how I used to analyze my art teachers and wonder is this really right. Seeing a different perspective in Fine Arts in the studio and the history courses and one of the better experiences I think, I know, is this program. (07/ #2)

The preservice teachers in this study selected the particular area of the visual arts to emphasize based on their own beliefs and knowledge about art and the availability of resources and materials. A broad spectrum of examples were used from reproductions and films of contemporary and traditional artists to gallery excursions to view art work. Both the range and extent of the conceptual understandings embodied in the art work was much more evident among the specialists. Art work was chosen to match a theme, for gender reasons, to represent various cultural conceptions, as exemplars of contemporary or historical ideas, to model technique, to challenge conceptions of art versus craft, as inspiration for image development strategies and a host of other reasons. The generalists chose examples usually to address a theme or as examples of a technique from traditional images available in the school or local library. Grant did not bring the work of acknowledged adult artists into the lessons he taught. He did use a sample of his own work from the
methods class. The beliefs about the connections between the visual arts and school art education was to a large extent determined by the prospective teacher's knowledge of art.

All of the art specialists gave evidence that the art methods course had affected the way that they conceptualized what knowledge in art might mean. Even those preservice teachers who did not modify their beliefs, acknowledged that the course had provided a structure for them to reflect upon and analyze their own conception of art. The conscious effort by the art methods instructor to build a relationship between the preservice teachers' past school experiences and contemporary theory in art education appears to have been effective as a strategy to cause reflection upon tacit beliefs.

Another way that tacit beliefs were analyzed was in reference to the preservice teacher's conceptions of evaluation in art. The Belief Index highlighted the often conflicting beliefs that teachers have between curriculum and instruction in art education and evaluation. While most of the generalists and all the specialists were willing to subscribe to a subject centered model of art education that designated the acquisition of specific knowledge, skills and attitudes many were still unable, by the end of the methods course, to forego their belief that it was inappropriate to evaluate student learning in art. Variations of why that might be so ranged from Sally's concern that she could not really identify whether it was her teaching or the students' learning that was the basis of her evaluation criteria, to Grant's use of inappropriate criteria borrowed from language arts that did not match his art objectives. Evaluation and assessment are currently very controversial topics in the field of art education and it could also be that the preservice
teachers reflected the inconsistencies that were evident in the practice and the values of the field.

There was evidence from the Belief Index as well, that lack of knowledge about art was a greater issue for the generalists than for the specialists. Given the lack of subject matter knowledge in art that the generalists had acquired in their prior education, it is not surprising that the mean response for the generalist group was consistently negative to the statement on the Belief Index. "Teachers of art who are not able to talk in an intellectually critical way about works of art are not really competent to teach art." The art specialists on the other hand, strongly agreed. This piece of information points toward the next connecting thread. Beliefs about knowledge are interwoven with another of the major patterns that surfaced from this study; the relationship between beliefs and the perception of personal competence.

Beliefs and Competence

Beliefs are formed with affective and subjective dimensions (Nespor, 1987) as well as through the acquisition of knowledge. For the preservice teachers in this study, their own sense of competence with both art and art education appear to have been strong factors in shaping their beliefs. Prior experiences in art, especially school-enculturated experience, played a dual role in the development of beliefs. The preservice teachers equated these experiences as indications of their personal artistic abilities and with the possibilities for their own success as teachers of art. Ball and McDiarmid (1990) refer to prospective teachers' dispositions for particular subjects, that is their conceptions of themselves as being good at particular subjects and not at others, as well known variables that are often overlooked when planning
subject matter courses. These dispositions were especially influential at the beginning of the teacher education program. The results of the attitude questions (see Table IV), indicate a generally favorable attitude toward art. However, nearly 20% of the generalist preservice teachers ranked themselves as non artistic. Other studies (most notably Smith Shank, 1992) have pointed to the effects of prior school art experiences in shaping this anxiety toward art and art education. Galbraith (1991) also discusses the fears of generalist primary preservice teachers toward art education based on their worries about their own artistic abilities. Values about the place of art in education and what model of art education prospective teachers adopted seem to be based to a certain degree on their perceptions of themselves as artistic. Obviously the specialists, in this study, had a stronger sense of their own artistic abilities entering the teacher education program as they all held degrees or specializations in art.

The art methods course and the practicum experience provided the opportunity for the preservice teachers to shift their beliefs about their competence in art from the role of an individual engaged with art, to the role of a teacher of art. A discussion of individual responses reveals some of the influence that a sense of personal competence can have in reinforcing or redefining beliefs.

Both Sally and Elizabeth entered the teacher education program with a negative image of themselves in relation to art. Their experiences in the program were diametrically opposed, as was the development of their eventual beliefs toward art education. Sally felt neither artistically inclined nor very concerned about learning more about art education at the beginning of her teacher education program. She found the content and the structure of the art methods course confusing and spoke of "shutting down" with
frustration at her inability to be successful with some of the assignments in
the course. Sally had the sense that she was incapable of either creating art or
of responding in any intellectual way to art. Her experience in the practicum
was also difficult for Sally. Although her sponsor teacher was an excellent art
teacher and Sally saw the value of teaching art to children, she still felt
unprepared and had difficulty living up to the standards set by herself and her
sponsor teacher. She commented on the public nature of art teaching where
the children's' work went up in the classroom or in the hall and the teacher
was judged on the success of the student art work.

If you don't feel comfortable, you are not going to do it with your kids, you
rationalize. I think the difficulty with art in a professional sense is that it
often gets on display in school and if you are not doing a good job it shows
immediately on the walls. It is very stressful to have that happen. I know
it bothers me putting it on display where everyone can criticize. (07/#2)

For Sally, her feelings of efficacy were foremost in her deliberations
about the value of art education. Although her beliefs were modified because
of her sponsor teacher and how she observed the children reacted to art, she
was continually trying to reconcile her own sense of competency as a teacher
with her sense of herself as an artistic person.

Elizabeth is an example of the opposite scenario. She also came into the
program with feelings of inadequacy in relation to her own artistic abilities.
However, her strong motivation to be a successful teacher and her
determination to get the most from her art methods course, caused her to
develop strategies where she met a great deal of success in the art methods
class. That sense of ability as an art teacher carried over into her practicum
assignment. The following quote from Elizabeth's final interview sums up
her own reflections on her growing sense of competence.
What formed my previous attitudes was my own experience and the only reason it has changed is having taken the art methods course and then teaching art in practicum. If I hadn't had to teach art in the practicum, if they had an art specialist, I still think the methods course would have resulted in me being more willing to try teaching art but I needed to actually be thrown into doing it to realize that I can do it, it is not a completely impossible thing just because I am not artistically talented. During the course, I came very quickly to think that this is not a bit intimidating thing, it can be quite easy to plan and successfully carry out lessons for art and then actually doing it in my practicum has just reinforced that. I have no qualms about teaching art, if there was a job in the province available and they said it was for an art specialist I would accept it and take it. I would say sure I will teach art all day to all the different grade levels. Before the methods course I never would have thought I could do that, I didn't even think I could teach art to my own class. (07/#2)

Although Sally and Elizabeth probably represent the two extremes of feelings of competency interacting with developing beliefs, all the student teachers studied mentioned either overtly or indirectly that their sense of themselves as successful artists or art teachers made a difference to their beliefs about art education. For the generalists, the transition was the greatest. Marilyn's experience was similar to Elizabeth's in that she found her success as a teacher of art using the model developed in the art methods class reinforced her sense that her new conception of art education was worthwhile. Grant, like Sally, was frustrated by both the methods class and his teaching experience on practicum and questioned his beliefs in relation to his own competence as a teacher of art.

All the specialists in the sample came into the program positively disposed to their own artistic abilities and were able to transfer that into their role as art teachers. For example, the specialists all used examples of their own art work in their teaching situation. Many referred to themselves as artist/teachers and grounded their decisions about the studio activities that formed
the basis of the art lessons on their own experiences in studio art. Past experience with specialist preservice art teachers, leads me to observe that ability as an artist does not necessarily translate into success as an art teacher. Beliefs about what constitutes the curriculum of art education and the match between competence in teaching and that model did seem to influence the art specialists in this study.

Karen was supportive of a model of art education entering the program that was obviously linked to her previous success in school but was reinforced in her change of beliefs by the success she had as a student teacher on practicum using those new understandings about art that she came to appreciate during the methods course. Alan's beliefs, although slightly modified, remained consistent with his prior beliefs and his practicum success reinforced this. Susan's beliefs were developed through her positive identification with the art methods instructor, her success in the methods course and her sense of herself as a competent teacher. Mai, although successful in her practicum, felt compelled to rationalize why her practicum teaching did not always seem to reflect her professed beliefs. As all these examples illustrate, the issue of competence was put to test both in the methods course and during the practical teaching portion of the teacher education program.

Beliefs and the Practicum Context

There was no doubt that the practicum experience had a significant role to play in the development of the preservice teachers' beliefs toward art education. Although the overall mean in the survey instrument did not change dramatically, the subject profiles illustrate the effect of the practicum in either confirming or confronting developing beliefs. The preservice
teachers' sense of competence during the practicum has been mentioned as one strand of this theme. The role of school culture, the influence of the sponsor teacher and links between the theory espoused at the university and actual practice in classrooms were also strands. The impact of the practicum situation and especially the congruence between on-campus programs and field experience has been a significant part of the literature in teacher education. Zeichner (1986, 1987), however, argues that researchers have not paid enough attention to the impact of particular types of classrooms, schools, and communities on the relationship between student teaching and teacher development.

In this study, there was a relationship between the values toward art education subscribed to by the sponsor teacher, school and district staff and those subscribed to in the university program. Where a positive relationship existed, the preservice teachers were more likely to agree with the views expressed in their art methods class. In the majority of cases this positive relationship worked to reinforce the beliefs held by the end of the methods course. Of the generalists, Marilyn and Elizabeth are striking examples of this positive relationship. Both were in schools in a district with an Art Coordinator and a district wide art initiative. The positive role of an art consultant has been discussed extensively by Irwin (1992) and the effect of this district art consultant for enriching the understanding of art of teachers and preservice teachers echoed those findings. Although their sponsor teachers had no particular education in art, both sponsor teachers were supportive of the art education initiative and attended sessions presented by the district Art Coordinator with their student teachers. Both student teachers commented on the similarity of approach to art education that was espoused by the Art Coordinator to that which they had learned in their art methods classes. The
strong relationship between faculty in the art education department with this particular district and the links between locally developed and provincially developed curriculum in art were other examples of where the learning from art methods class was seen as congruent with what was observed in the practicum situation. In Marilyn's case, a supportive parent community also reinforced this relationship. For Marilyn and Elizabeth, the positive response of the students in their classes toward learning in art was another strand that reinforced beliefs toward art education.

In the case of Sally, where the art methods course had not changed her beliefs, the impact of an exceptional art teacher and enthusiastic children caused her to reexamine her beliefs toward art education to move slightly more in line with the philosophy of the art methods course. Sally's sponsor teacher was a recent graduate of the university diploma program in art education. The theory that left Sally frustrated and confused in her methods course was made powerful and meaningful when she observed it in practice. Sally was still left in the difficult situation of meeting the expectations of this definition of quality art education but she was more convinced that a subject-centered model of art was appropriate as part of every child's education. As she observed;

Kathy has made a big difference because she is a down to earth person who is interested in children's art. Some people are so far out on a limb with creativity that, because I have no art background, I can't relate to them. She has made it an everyday thing for the kids and for me. She has made me feel like "maybe I can do this" and she has made the biggest difference to my attitude to art... When I saw some of the portfolio of what she had done with the kids, even before I saw the kids, I was amazed at what they could do.... It makes it a real positive attitude and a real part of the school, art is involved in the whole curriculum. (07/#2)

If a positive correlation between the university program and the practicum situation appears to reinforce or actually change preservice
teachers' beliefs toward greater congruence, then Grant was the example where the opposite situation appears to have achieved the opposite effect. Grant felt that his sponsor teachers saw little value in teaching art and that art was used as a "filler" in the classroom. There was no evidence that any model of art education was particularly valued by his sponsor teachers, the school or the district. By the end of the university program, Grant's scores on the Belief Index and his comments in his final interview suggest that his beliefs toward art education were negatively affected by his practicum experience. He was also the only student teacher studied who unconsciously displayed a major disjuncture between his espoused beliefs and his practice.

A similar correspondence between the beliefs espoused in the art methods course and the practicum experience was observed for the art specialists. Karen, Sally, and Alan were all placed in schools where the sponsor teachers were graduates of the university art education department and had close contact with the university faculty. The sponsor teachers' art programs reflected a subject-centered, discipline based philosophy of art education. All were familiar with the provincial curriculum and were actively involved with the either district or provincial art teachers' associations. The university art education department held liaison meetings and evening lectures. All three sponsor teachers regularly attended these functions. They expected the student teachers to plan and deliver instruction based on the same principles that were developed in the art methods class. All three student teachers had a great deal of respect for their sponsor teachers. The positive relationship between the beliefs they held at the end of the art methods class and the beliefs they held at the end of the practicum can in part be attributed to this correspondence.
Mai was the only one among the specialists where the values implied and expressed in the practicum placement were at odds with the university program. She was very conscious about the differences between her sponsor teacher's conception of art education and her own, which more closely reflected what she had been taught in her art methods class. Her sponsor teacher was not involved in art education to any great extent outside of his own school. He did not associate with the university art education department other than to request student teachers. He not attended any university sponsored events nor was he particularly interested in the suggested guidelines for lesson and unit planning that were part of what the faculty supervisor required of all the art specialists. In one observation and in her discussion of previous lessons, Mai had attempted to modify the sponsor teacher's program to more closely reflect what she felt was important in art education. For example, she had taken the students on a field trip to a local art gallery and she made reference to historical and contemporary developments in the introduction to paper making although the students' evaluation was geared exclusively to their technical mastery of various art techniques. Although Mai’s overall beliefs remained unchanged by the practicum, she was obviously affected by the experience and both rationalized the discrepancy during her involvement and was angry and frustrated by it afterward. In her words;

It will influence me but at the same time I am trying to keep it in my mind to try and not let it influence me because I think you have to hold onto your own beliefs of what you think understanding art is about in the first place. My beliefs are still there, I am just hoping this experience doesn’t mar anything, and I am just trying to hold onto that. To tell you the truth, I couldn't wait until I got out of the practicum. I was counting the days. (07/#2)
The art specialists were in a slightly different situation in the practicum than the generalists in that there was specialist supervision. For most of the specialists, the instructor of their art methods course also was their practicum supervisor. Where this was not possible, another faculty associate with a strong art background supervised the art education student teachers on practicum. The relationship, therefore, between the methods class and the student teaching experience was very tightly coupled. Given this close relationship between the expectations of the art methods class and the field experience, it was no wonder that there was a sense of conflict in Mai's situation.

Beliefs and Programmatic Context

The fourth major theme that wove through the evolving beliefs toward art education held by preservice teachers was the context of the program under study. The intended and unintended effects of the program structure, the relationship of the various components of the program and the ways that the preservice teachers were influenced by this relationship became another theme that emerged in the analysis of the data. One thread of this theme was the congruence between the values expressed in various components of the university program. While the art methods course was the crucible where beliefs of the preservice teachers toward art education were first examined, the relationship between the methods course and the practicum situation, examined in the previous section, and the links that that students made between the content of other methods courses and their art methods course were also significant.

Another aspect of the programmatic context that surfaced was the tightly coupled nature of the specialist program as compared to the generalist
Several of the prospective teachers mentioned the relationship of the art methods course to other methods courses and to the Principles of Teaching course. Often concepts that were pedagogical, such as particular teaching strategies, were adapted to make sense within the context of teaching art. Portfolio assessment and evaluation is an example of a new strategy addressed in the general education course that has a prolonged history in art education. The program had the art methods course scheduled in the first term of course work with the generic teaching course and so general teaching concepts were being addressed at the same time specific subject centered applications were being taught in the art methods classes. This relationship was much more pronounced in the specialist program as the methods instructor had a better understanding of the various components of the program than the generalist art methods instructors. As is typical in many programs (Jeffers, 1993), elementary art methods courses are predominantly taught by sessional instructors and graduate students who do not have an intimate working knowledge of other components of the teacher education programs. This relationship between and among courses was described by the prospective teachers and, in some cases, inferred from analyzing the interviews and observations. For preservice teachers such as Alan, in his interviews specific parallels and intersections of commonality were not made explicit, nor could references in his remarks to the language and concepts that crossed courses be found during observation in the teaching situation. Much of this tacit understanding seemed to be related to the broaden pedagogical content beliefs and knowledge that the students acquired in the courses required prior to the practicum experience.

It is worth noting the differences between this program and other programs that have been the focus of study in preservice teachers' beliefs
toward art education. Many art methods courses in over 1400 teacher education programs that exist in North America, are taught in Fine Arts departments rather than in Education faculties. In this study, art education was a part of the education curriculum and instruction program in the Faculty of Education and art education faculty taught within the regular teacher education program. Another variable that could be significant is the fact that art was part of the required courses at the elementary generalist level and a specialization at the secondary level. This subject area parity reinforced the equal status of art as a school subject and implicitly suggested that there were possible similarities between teaching and learning with the other subject areas. Explicit reference to the underlying principles of planning, classroom management, instructional strategies and assessment and evaluation that could be adapted to all subject areas was a major goal of the Principles of Teaching course.

Differences between the specialist and generalist programs also need to be noted. The maxim that secondary teachers are teachers of subjects and elementary teachers are teachers of children was, in many ways, played out in the structure of the education program. From subject area requirements for admission to the greater emphasis on specialist courses and specialist supervision of practica, the secondary program placed much more emphasis on subject matter. Although this is far too simplistic an analysis, there was a difference between what was possible in the two programs. While the methods courses in the secondary program more closely resembled the concept of pedagogical content, the elementary methods course was, for want of a better term, discipline based pedagogy. Many researchers of generalist art methods courses (Galbraith, 1991; Myers, 1992;) have alluded to the difficulties of teaching both content and methods concurrently.
For the specialists, there were a number of connections to the practitioners and organizations that were involved in the field of art education. Preservice specialist art teachers were expected to attend professional conferences in art and learn about local, national and international art organizations. All of the university art education faculty were active in these organizations. The preservice teachers in the art specialization were socialized into a professional culture of art education in ways that were not possible in the generalist program.

**Summary**

The four themes that emerged from the study emphasize the importance of attending to the beliefs of preservice teachers when planning programs of teacher education. It was not only the prior beliefs toward art education that impacted on the understandings that the prospective teachers gained during the course work and practicum in their teacher certification year. The evolving nature of their beliefs and how those beliefs interacted with subject matter knowledge and understanding during the program was significant. The central and connecting pattern to this tapestry of beliefs toward art education was the relationship between beliefs and subject matter. The findings suggest that subject matter knowledge is a necessary but not sufficient condition for teaching art. Substantive understanding about the discipline of art, derived either from school or university courses, was lacking in the majority of the profiles of the purposeful sample of prospective teachers. In fact, in several examples, the beliefs that prospective teachers developed toward art education ran contrary to what can be assumed was the intent of the prior course work. When conceptual subject matter understanding was developed in the art methods course, many of the preservice teachers were able to modify their beliefs. The interdependent,
The evolving relationship between beliefs and subject matter knowledge was identified first in the course work component of the teacher education program. The methods course became the place where preservice teachers were able to compare their beliefs about art education with a discipline-based model that provided not only a theoretical underpinning to the course but also was exemplified in the activities and pedagogical applications presented in the course. This seems to confirm Nespor's (1987) assertion that not only do preservice teachers need to become conscious about their beliefs, they need to be presented with a means to replace old beliefs with new variations.

It was not just the elementary generalists that were lacking a coherent theory to structure their understanding of substantive content in art. The secondary specialists also benefited from coming to recognize the influence their prior education had exerted on their beliefs toward art education. The strategy used by the methods instructor, which encouraged the specialists reflexively to recognize their subjective beliefs by comparing the model of art education they were learning to their previous school experience, supports Prawat's (1992) claim that linking new beliefs with earlier conceptions was an effective way to support belief change.

To analyze adequately the areas of imagination and evaluation in a subject-centered model of art education was difficult given the constraints of the survey instrument. However, the suggestion from the interview and observation data is that the preservice teachers at both levels, were developing understandings and thoughtful responses by incorporating both areas in a way that was consistent with a subject-centered approach to art education.

The integrative relationship between beliefs and subject matter knowledge was the dominant theme that emerged in the study and was closely related to the other main themes. Preservice teachers' conceptions of
themselves as competent in art also strongly affected their beliefs toward art education. The art methods course and the practicum experience provided the opportunity for the preservice teachers to shift their beliefs about their competence in art from the role of an individual engaged with art, to the role of a teacher of art. When their emphasis was on performance as a teacher of art, rather than on performance as an artist or critic, the generalist teachers were more likely to be receptive to a subject-centered model of art education. The shift for the specialists was from their previous vision of themselves as artists to an awareness of the pedagogical implications of an artist/teacher. Beliefs about what constitutes the subject matter of art education and the match of competence in teaching to that model did seem to influence the art specialists in this study.

If the methods course was where beliefs toward art education were first challenged, then the practicum was where those beliefs were further shaped. The practicum was the place where beliefs toward art education could be enacted. The positive relationship between the values toward art education subscribed to by the sponsor teacher, school and district staff and those subscribed to in the university program seemed to give rise to the preservice teachers' agreement with the views expressed in their art methods class. The opposite also was possible. Grant was one example of a preservice teacher whose beliefs suffered from lack of clarification.

Finally, the context of this case: the structure of the teacher education program; the relationship of the various components of the program and the student teacher population, influenced beliefs toward art education. In the next chapter, conclusions and implications of these findings will be presented.
CHAPTER 7 • SUMMARY, CONCLUSIONS AND IMPLICATIONS

The thesis emerging from this study is that subject matter knowledge and beliefs of preservice teachers toward art education form a dynamic and evolving relationship. Participation by prospective teachers' in their teacher education programs and school-enculturated practice, as exemplified in their practicum, affected the development and evolution of this relationship. This chapter is structured to address the findings by first reviewing the research questions and then offering possible implications for theory, practice and research.

Research Questions Revisited

1. What beliefs do prospective teachers hold toward art education, on a continuum between child-centered and subject-centered, prior to and following the teacher practicum?

2. What factors are reported by prospective teachers as influencing the formation of these beliefs? (i.e. background, gender, age, previous courses)

3. Which beliefs were fostered in their teacher education programs?

4. Which beliefs were challenged in their teacher education programs?

5. What relationships are apparent between prior beliefs and classroom practice?
While the research questions developed a useful framework to begin this case, as is common in qualitative studies, both the direction and the emphasis of the questions changed as the study progressed. The questions were directed at assessing specific empirical questions while the underlying assumption was that the "whats" would help formulate possible analysis of "hows" and "whys". The first question, "What beliefs do prospective teachers hold toward art education, on a continuum between child-centered and subject-centered, prior to and following the teacher practicum?" was structured to assess both a broad understanding of prior beliefs and a sense of whether these beliefs had changed. While question two was directed to the analysis of prior beliefs, questions three and four attempted to focus on the substance and the effects of the teacher education program on preservice teachers' beliefs toward art education. Question five focuses on classroom practice (as exemplified by the practicum experience) but also came to include other influences on beliefs in the practicum beyond practice. The ultimate purpose of this research was to move beyond a description and interpretation of the problem to suggest grounded theoretical, practical and research implications for art teacher education and extensions into teacher education in general.

1. What beliefs do prospective teachers hold toward art education, on a continuum between child-centered and subject-centered beliefs, prior to and following the teacher practicum? The results from the Belief Index and from the purposeful sample of preservice teachers suggest that the range of beliefs held prior to the teacher education program is indicative of the range of art education experiences held by those entering the program. Contrary to results from other studies of generalist preservice art teachers, (Galbraith, 1991; Myers 1992), this study found that the majority of generalist teachers did not hold
definite child-centered beliefs, nor, when held, were these beliefs as immutable to change as has been suggested. The generalist preservice teachers entered the program without strongly held beliefs toward any model of art education. The specialist teachers had more definite beliefs: they answered statements on the survey with stronger indicators of agreement or disagreement, for example, and they were, as a group, more subject-centered. The paired t tests from the Belief Index and the observations and interviews of the purposeful sample show that a change in the beliefs of the majority of preservice teachers occurred over the course of the year long study to be more in concert with the values expressed in the art education program. What appeared more important than the actual beliefs that the preservice teachers held prior to the program, was the formation of those beliefs and the ways in which they were influenced in both the teacher education program and in the school experience.

2. What factors are reported by prospective teachers as influencing the formation of these beliefs? In accord with the literature on subject matter knowledge (Ball & McDiarmid, 1990), the preservice teachers in this study were influenced in the formation of their beliefs toward art education as much, if not more, by their own school-enculturated experiences with art as by the understandings developed by their university education. Contrary to many of the assumptions about the content and the emphasis of liberal arts programs as prerequisites to teacher education, there was not a clear correspondence between prior subject matter knowledge in art and beliefs about the value of subject matter knowledge. Often the way the subject was taught both in schools and university courses, shaped notions about the nature of the subject and the way the subject should be taught. The prospective teachers' own dispositions toward art as a subject and personal
sense of artistic competence seemed also to influence strongly the formation of beliefs. A somewhat surprising finding from the Belief Index was that, upon entering the teacher education program, the women in the study were less definite than the men about their beliefs in relation to child-centered or subject-centered models of art education.

3. What beliefs were fostered in their teacher education program? The data indicate that for most students the beliefs toward art education that were fostered in the teacher education program corresponded to the values addressed in the art methods courses. That is, most prospective teachers' beliefs by the end of the methods course were in concert with a subject-centered model of art education that characterized art making and responding within the rational construction of an art program. Beliefs were fostered that art was a subject with substantive content in the areas of studio practice, aesthetics, art history and art criticism and was worthy of study in the school curriculum. The similarities between concepts of teaching and learning that were addressed in other courses and the art methods course seemed to reinforce beliefs that planning, instruction and evaluation were all important aspects of art education. Differences between the generalist and specialist programs include the focus of pedagogical content knowledge and beliefs in the specialist program and discipline based pedagogical knowledge and beliefs at the elementary level. While the specialists were closer to the concept of developing pedagogical content knowledge and beliefs, the generalists' minimal discipline based background meant that they were learning about the structures of the discipline at the same time as they were expected to understand applications to pedagogy.

4. What beliefs were challenged in the teacher education program? In addition to beliefs about the nature of art, the teacher education program
challenged preservice teachers' conceptions of the role of the teacher. Notions that art teachers need only provide children with a variety of materials and should not bring adult influences to bear on children's creative expression in art were countered with a model in which the teachers made decisions about the appropriate content for art education and were able to support their decisions based on theory and practice in the field of art education. The common belief that artistic ability was the main criterion for successful art teaching was also challenged. Especially among the generalist preservice teachers, a realization that art could be taught by someone who was not a practicing artist challenged their beliefs about their own capacities as art teachers. Equally important was the challenge that artistic competence was an innate talent. For both groups of preservice teachers, the most meaningful challenges to beliefs were those that developed through personal school-enculturated experience and were reflexively recognized in relation to the model of art education supported by the art education program.

5. What relationships are apparent between prior beliefs and classroom practice? The beliefs that preservice teachers held toward art education prior to the practicum experience seemed to influence classroom practice in all cases except those in which the beliefs of the sponsor teacher or school ran contrary to the prospective teacher's beliefs. In this study, those preservice teachers acquiesced to emulate their sponsor teachers' conceptions of art education. That did not necessarily translate into a substantial belief change, however. In Mai's case, she simply rationalized her practicum as a hoop to jump but insisted her beliefs would remain intact in her own classroom. In Sally's case, her beliefs were developed by the model she saw in action in the practicum situation, although she had rejected many of the features of this same model in her art education class. Where the practicum placement reinforced the
beliefs toward art supported through the teacher education program, these beliefs were sanctioned. Influences that were direct, such as the influence of the sponsor teacher, or indirect, as in the examples of the direction given by the art coordinator, district policy and complementary curriculum guides, all contributed to this school-enculturated climate. Although not apparent from the individual generalist profiles, the practicum situation for most generalist teachers may not be as relevant to art education belief change as the purposeful sample might suggest. Few school districts enjoy the kinds of initiative in art and support of an active art coordinator that influenced two of the purposeful sample; nor are many elementary teachers as subject centered in art as Sally's sponsor. Most of the generalists in this study would have been exposed to a form of school art that, while not likely to be overly child-centered, would not be as well developed as the model proposed in their methods class. The data from the Belief Index support the idea that substantial belief change did not occur as a result of the practicum. This is likely the result of not much emphasis on art education in the course of the practicum experience. For the specialists, the school experience was one more means of entry into the disciplinary socialization (Grossman & Stodolsky, 1994) that plays an important role in shaping their beliefs about teaching and learning in subject areas at the secondary level.

Teaching art is very much determined by the values and beliefs of the individual teacher (Gray & MacGregor, 1991). Although all the preservice teachers in this study were exposed to the sanctioned curriculum guides in art, the reality of schools is that the teacher has sole responsibility for developing and implementing the art curriculum. Unlike other subjects that are often driven by covering content in prescribed text books and by attempting to cover the content of government exams, decisions about the content and evaluation
of art are very much in the hands of the classroom teacher. The art curriculum is a guide only and the beliefs of teachers toward the appropriate subject matter, sequence and art experiences that engage children constitutes the basis for art education in most classrooms. The beliefs of preservice teachers toward art education as they are developed through their teacher education programs are of paramount importance to what will eventually be the curriculum in schools. As Richmond (1993) states from his study of classroom teachers, "Good teachers operate on the basis of their own refined beliefs about the values and purposes of art and art education, and the developmental needs of their students." (p.378). He suggests that preservice programs must acknowledge the importance of discussion and critical reflection so that "..student teachers are invited to enter into a conversation that will continue throughout their professional lives " (p.378).

Beliefs about content and beliefs about pedagogy determine the way teachers enact the teaching and learning of art in their classrooms. In this study, the prospective teachers used a number of different strategies and styles of interaction in the classes they taught from teacher centered to student centered, direct instruction to individualized learning. Variety of teaching style was observed for each individual in the purposeful sample. Beliefs about teaching and learning in art were formed and shaped by their past school experiences (for the specialists that included their involvement as art students and artists); by the courses in the teacher education program and by the observation of practice in the school practicum component.

Conclusions

The four themes that emerged from the study emphasize the importance of attending to the beliefs of preservice teachers when planning
programs of teacher education. The evolving nature of subject matter beliefs and how they interact with subject matter knowledge appears to be significant in the eventual values that prospective teachers ascribe to that subject and, presumably, what and how they will teach.

Beliefs, pedagogical content knowledge and discipline based pedagogy

The findings suggest that subject matter knowledge is a necessary but not sufficient condition for teaching art. Beliefs about what is the appropriate content for art education influence decisions about instruction, evaluation and the role of the teacher. Research in other subject areas (Brown, Cooney & Jones, 1990; Grossman, 1991; Mayer-Smith, Moon, & Wideen, 1994) indicate that the critical role of the interaction between beliefs and subject matter knowledge is not limited to art education.

This study also concludes that strategies that help preservice teachers acknowledge their own subject matter beliefs and beliefs about personal dispositions and competence in light of contemporary theories of art and art education were important in providing a context to recognize and acknowledge developing beliefs. The methods course became the place where preservice teachers were able to compare their beliefs about art education with a discipline based model that provided not only a theoretical underpinning to the course but also was exemplified in the activities and pedagogical applications presented in the course. Preservice teachers need to become conscious about their beliefs and they need to be presented with a means to link new beliefs with old conceptions (Prawat, 1992).

The concept of pedagogical content knowledge was discarded in favor of the new term discipline based pedagogy when referring to generalist elementary teachers. The distinction between the concepts is that in
pedagogical content knowledge, acquired subject matter knowledge is linked to subject matter pedagogy. Without an understanding of subject matter, the idea that preservice teachers can acquire pedagogical content knowledge is inappropriate. This case concluded that the limited understanding of the discipline of art of the generalist preservice teachers implied that fresh appreciation and understanding of subject matter knowledge had to be built in conjunction with pedagogy. Hence, the term discipline based pedagogy more aptly describes the process of building discipline based knowledge in conjunction with subject matter pedagogical understanding.

Beliefs and personal competence and conceptions of teaching- from student to teacher

Preservice teachers' conceptions of themselves as competent in art strongly affected their beliefs toward art education. The art methods course and the practicum experience provided the opportunity for the preservice teachers to shift their beliefs about their competence in art from the role of an individual engaged with art, to the role of a teacher of art. When they saw themselves as performing as a teacher of art, rather than as an artist or critic, the generalist teachers were more likely to believe in a subject-centered model of art education. The shift for the specialists was from artist to artist/teacher but echoed the pattern set by the generalists that conceptions of success as a teacher were linked to beliefs about the nature of the subject and beliefs about the role of the teacher within that conception. The study would conclude that sense of competence as a teacher of a subject is also transformed by beliefs and knowledge about that subject.

Forging beliefs in the practicum

If the methods course was the crucible in which beliefs toward art education were first challenged, then the practicum was the forge that further
shaped those beliefs. The practicum provided the opportunity to enact beliefs about curriculum, instruction, evaluation, and the newly developed role of the art teacher. There was a clear relationship between the values toward art education subscribed to by the sponsor teacher, school and district staff and those subscribed to in the university program. As the study has shown, direct influences, such as the sponsor teacher, or indirect influences, as in the examples the art coordinator, district policy and complementary curriculum guides, all contributed to shaping beliefs and knowledge. Where there was a dissonance of values, as in the cases of Mai or Grant, the preservice teacher felt obliged to rationalize their actions or beliefs. Where a consonance existed between the values espoused in the art methods course and the values in the schools, the preservice teachers were more likely to continue to agree with the views expressed in their art methods class. The dynamic interaction of shared values about subject matter knowledge and pedagogy were powerful forces in shaping beliefs when enacted within the practicum. It is important to emphasize that a consonance in values in no way should equate with sameness or cloning. The observable dimensions cited in the profiles of the way teachers and student teachers enacted these values, point to the variety and diversity that was encouraged in the program.

Beliefs and the context of teacher education programs

Finally, the context of this case, such as the relationship of a post degree program to the prior subject matter knowledge of prospective teachers; intended and unintended effects of the program structure and the relationship of the various components of the program influenced beliefs toward art education.
The findings from this case study seem to contest the validity of the assumptions by university faculty and policy makers who follow the Holmes Group recommendations that a liberal arts education provides either the subject matter knowledge or the intellectual skills and dispositions necessary for preparation of visual arts teachers. As we have seen, prior to their art methods course, neither the generalist elementary preservice teachers nor the secondary art specialists had the depth of understanding of the content or substantive structures of art to develop meaningful subject-centered curriculum. Moreover, in at least one of the subject profiles, beliefs about art history that were contrary to this understanding were developed in the prospective teacher's liberal arts course. This study concludes that subject matter knowledge for teaching art becomes part of the responsibility of education courses when it is not adequately dealt with in prior liberal arts education. There are also many educators who would support that claim beyond art into other subject areas as well (Ball & McDiarmid, 1990; Grimmett, 1995; Grossman, Wilson, & Shulman, 1989).

It can be concluded from the findings that the structure of generalist and specialist programs at the study site differed in substantial ways that affected the relationship between beliefs and knowledge. The generalist teachers were most in need of subject matter knowledge in art education, and yet the structure of the elementary program made meeting this need a difficult task. Competing demands from other components of the program, large class size and inadequate hours in the methods course, all strained the resources of the methods instructors. The lack of understanding by the majority of art methods instructors of the constraints and content of the other courses compounded this difficulty. The generic teaching course that tied together many of the pedagogical concepts that were then explored in the
subject areas was poorly understood by the art method instructors and student teachers were left to make their own connections. Coordination of methods courses across subject areas or coordination of the content of the other courses in the program was non-existent at the time of the study.

The situation for the specialists was quite different. The structure of their program supported the reflexive recognition of beliefs in the development of pedagogical content knowledge. All of the constraints previously mentioned for the generalist program, with the exception of coordination of the other program courses, were not issues in the specialist program. The specialists were socialized into their role as art teachers by the tightly coupled structure of the program, their identification and continued contact with the art methods instructor and the close affiliation of the university faculty to the local, national and international field.

This study would conclude that structural issues of teacher education program organization require attention if the substantive issues of the program are to be effective. Teacher education courses should not be taught in isolation but should refer to the distinctive nature and similarities between and among the central concepts of each course. Faculty must not remain isolated from knowledge of the central components of the program of study; interaction with students across courses; the practical experience and practitioners in the schools.

**Implications for Theory, Practice and Research**

According to Doyle (1990), research in teaching and teacher education has always been seen as a pragmatic enterprise intended to improve teaching and teacher education rather than to simply describe or to understand it. In
keeping with that tradition, this study has implications for theory, practice and research in teacher education.

Implications for theory

There are two areas of the teacher education literature where this study contributes to theoretical knowledge; pedagogical content knowledge and preservice teachers beliefs.

Although Shulman's idea of pedagogical content knowledge has been developed substantially since it was first voiced, this study suggests it falls short of adequately describing a construct useful for elementary generalist teachers in art. Research and writings in the area of pedagogical content knowledge are predominantly situated around secondary teaching in the traditional core academic disciplines. Pedagogical content knowledge presupposes both knowledge and beliefs about subject matter that form the basis of what Shulman (1992) entitles, "wisdom of practitioners". It is a term that implies that the pedagogical understandings are built upon prior subject matter knowledge. This study would suggest that elementary generalist preservice teachers do not possess even moderately developed subject matter knowledge in art. Their beliefs toward art were not based on knowledge but on personal or school-enculturated experience. By contrast this study suggests that a fresh understanding of the structure and substance of a discipline has a transforming effect on the pedagogical understandings and beliefs preservice teachers hold toward the content to be taught. This concept of discipline based pedagogy, as used in this study, more closely approximates the reality of elementary generalist teacher education. While researchers in the area of pedagogical content knowledge would acknowledge that teacher educators must share the transmission of subject matter knowledge to prospective teachers (Grossman, Wilson, & Shulman, 1989), their emphasis is on
expanding that knowledge. In the case presented in this thesis, the almost total lack of subject matter knowledge in art meant that a fundamental conception of art was presented in conjunction with pedagogical applications. Discipline based pedagogy extends our understanding of the relationship of subject matter and pedagogy when subject matter knowledge appears to be lacking.

Although the literature on preservice teachers beliefs about subject matter is still in the very early stages, there is a prevailing assumption that preservice teachers' prior beliefs are fixed and immutable. The findings from this study would suggest a reconceptualization of beliefs as dynamic and evolving particularly in situations when prospective teachers lack a solid grasp of subject matter knowledge.

Implications for practice

If teacher educators take seriously the thesis emerging from this study that subject matter knowledge and beliefs of preservice teachers toward art education form a dynamic and evolving relationship, and that both teacher education programs and practicum affect the development and evolution of this relationship, then there are several implications for practice. Methods courses should be planned to include strategies that will help preservice teachers to examine their beliefs toward art education in conjunction with subject matter knowledge and practical applications. The dynamic relationship of beliefs and knowledge implies that methods courses should offer more than content divorced from subjective and affective responses to that content. The strategy used by the specialist art methods instructor, which encouraged the specialists reflexively to recognize their subjective beliefs by comparing the model of art education they were learning to their previous school experience, is a good example of how constructivist ideas appeared to support belief
change. Particular strategies in art education such as dialogue journals, (Schiller, 1995; Rolands, 1995;) case studies, (Chia, in press; Galbraith, 1993), personal stories and metaphors (Smith-Shank, 1992) seem promising. Rather than a focus on beliefs and pedagogical content knowledge in the methods course, this study would submit that the emphasis should be on beliefs and discipline based pedagogy, so that a clear conceptual understanding of the discipline of art becomes the basis for developing pedagogical understanding.

Collaborative practices between university personnel, sponsor teachers and student teachers were advocated by Eisner (1972) over twenty years ago as a way of reducing the contradictions that often exist between the values and beliefs toward art education held between the various individuals and institutions. The conclusion from this study is support for that claim and further suggest that not only are collaborative practices required, those practices should be based around a shared belief about the nature of art education and pedagogy.

The structure of teacher education programs must be taken into account when planning art methods courses so that the relationships between the various components of the program and the various players are taken into account. Programs that are tightly coupled conceptually so that beliefs and knowledge can be explored in a dynamic manner within and across courses are advocated. Moreover, where possible, teacher educators should be apprised of this dynamic and also involved across both practical and course work sections of the program with communities of preservice teachers.

Implications for research

A number of pedagogical strategies are currently being championed as possible ways to help preservice teachers become more reflective about their
own beliefs. More research is needed on particular strategies which will benefit art education across a wide spectrum of applications.

There is a need for further study to determine the prior beliefs that prospective teachers bring to their teacher education programs and whether these beliefs are affected by those programs. Similar studies using a combination of the Belief Index and interviews and observation across various teacher education programs are needed to develop a basic understanding of the influence of context on beliefs. In advocating the continued use of the Eisler Art Education Belief Index, a cautionary note is required. Combining the Index with qualitative methodology helps to counter the polarity that is common in this type of survey instrument. Qualitative research methodology also can uncover unexpected patterns, themes and discrepancies.

The role that the various structures of teacher education programs (undergraduate or fifth year; Fine Arts or Education faculties; generalist or specialist), and characteristics of students (age, gender, prior experience with art, ) play in the development of beliefs toward art education is valuable information when planning programs of study in teacher education. A beginning on the comparison of contexts in different institutions (Myers & Grauer, 1994) suggests that student characteristics and the structure of teacher education programs have a strong bearing on the impact of art methods courses in challenging preservice elementary teachers' beliefs toward art education.

Research is also needed to determine the long term effects of teacher education on beliefs. Now that the sample from this study have been absorbed into the work force, have their beliefs changed toward art education? Has teaching affected their beliefs about art education as they learn more about
students and subject matter from the experience of teaching? What evidence is there that the disciplinary socialization that began in their teacher education program is continuing to influence their beliefs? The study of preservice teachers often ends at the point they leave the university setting and gain entrance into the world of teaching. More longitudinal studies that follow preservice teachers into the workplace would be of great benefit to teacher educators.

Concluding note

The interest in the last few years in teacher education in general has made a significant impact on the increased awareness of preservice issues in art education. I no longer feel compelled to rationalize my involvement in an area of research that directly engages the problems, issues and dilemmas that occupy my professional obligations as an art educator in teacher education. Making a difference in the education of future teachers is a powerful incentive to understanding of the beliefs of preservice teachers toward art education. Being part of an increasing cadre of art educators who are attempting through research and reflection to improve that education is an added bonus. Through this study, I hope to have added some insights into an area that is gaining both prominence and acceptance.
References


Zimmerman, E. (in press). Concerns of pre-service art teachers and those who teach them to teach. *Art Education*.

This booklet contains a list of 60 statements concerning the goals of Art Education, the role of the teacher when teaching art, the functions of the art curriculum and other important matters regarding the teaching of art. Once you have read a statement please indicate on the answer sheet provided whether you strongly agree (A,1), agree (B,2), are uncertain (C,3), disagree (D,4), or whether you strongly disagree (E,5) with that statement. Each of the statements is intended to elicit your point of view or belief about Art Education and has, therefore, no correct answer. If you come across a statement that you do not understand or for some other reason feel you cannot respond to, please fill in "uncertain" (C,3) on your answer sheet.

Please make sure that the personal information asked for on the cover of the answer sheet is completed before you begin to read through the booklet. To ensure confidentiality, please use your mother’s maiden name and first initial instead of your own name. As you read through the booklet, please do not make any marks within it. The answer sheet is to be used to record your answers. The answer sheet has been designed so that each item corresponds with a numbered response line. Please make sure that the statements and the lines match up.

The person responsible for distributing these booklets to you will give you the signal as to when you may begin. Once you have completed responding to all of the 60 statements please hand in the booklet and your answer sheet. This survey will take approximately 30 minutes.

You have the right to refuse to participate or withdraw at any time without jeopardizing class standing.

If the questionnaire is completed it is assumed that consent has been given.
1. Teaching children techniques for creating certain visual effects is generally a consequence of a poor understanding of children's artistic development.

2. Much of the weakness of art programs in the school is due to the mystique with which many teachers imbue it.

3. Teaching intermediate school students aesthetic theory should be done since it is one of the best ways to insure that they will have grounds to justify their judgments about art.

4. Any intermediate student who is well educated in the visual arts should be able to articulate his/her preferences in art and provide well reasoned grounds for holding them.

5. Creativity in art requires not so much the ability to think as the ability to feel deeply.

6. In general, art teachers make too much of the child's so-called "freshness of vision."

7. In a genuine art experience, skills develop from the need to express yourself in visual terms.

8. Reproductions of works of art have little or no place in the primary school classroom.

9. Teachers of art who are not able to talk in an intellectually critical way about works of art are not really competent to teach art.

10. One of the most important tools for adequate art teaching is having clear and specific instructional objectives.

11. The child develops best in art when left to his/her own resources, provided he/she has plenty of art materials with which to work.

12. People who try to teach art are "barking up the wrong tree."

13. There are times when it is perfectly appropriate to have children copy or trace in an art class.

14. One of the major functions of art education is not to teach children to see, but to keep alive the fresh and vivid perceptions with which they look at the world.

15. A solid foundation of basic art skills should be acquired by a student before he/she is encouraged to work imaginatively.
16. Since you can't measure the outcomes of art teaching, you can't really evaluate what the student has learned.

17. Efforts to influence children while they are working with art materials should be avoided at all costs.

18. Teachers have a responsibility to evaluate students continually as they work in the classroom.

19. Competence in art can and should be evaluated by the teacher.

20. Reading, looking, and talking about art should be an important aspect of art programs for intermediate school students.

21. The use of specific objectives in an art curriculum is inappropriate for a really dynamic art program.

22. Learning how to do naturalistic drawings is an extremely important technique for any intermediate school student to learn.

23. The best curriculum for primary students is one which provides them with a wide variety of materials with which to work.

24. The clearer the child understands what he/she is expected to learn in art the more efficient and satisfying is his/her learning likely to be.

25. Children should never be allowed to copy each other's work in the classroom.

26. Drawing, painting and print-making employ a body of techniques which can and ought to be taught to children.

27. There are times in the classroom when the teacher should demonstrate or illustrate how something can be drawn.

28. Encouraging intermediate school pupils to look at works of art is, in general, an appropriate thing for teachers of art to do.

29. The major function of art education is to develop the child's general creativity.

30. Theories of learning that are taught in psychology courses have little or no relevance for the teaching of art.

31. Ability in art is not so much an unfolding of what's within the child, but rather the acquisition of certain skills of perception, imagination and production.
32. Teachers should not evaluate children's art.

33. Empirical research has little place in the field of art education.

34. The power that underlies human creativity is best preserved if it is not studied scientifically.

35. The field of art education would be better off if the term "art" were removed since art teachers should be interested in the student's general education.

36. The teaching of drawing is clearly inappropriate for children under twelve years of age – and perhaps not even after this age is it appropriate.

37. Helping pupils understand the period in which a work of art was created can be helpful in helping them appreciate the work.

38. A well thought out art curriculum will have particular skills and knowledge presented at each grade level.

39. Children should not be given grades in art.

40. There are no principles for teaching art and hence each teacher must create his/her own methods.

41. If art teachers would be less concerned with unlocking the child's creativity and more interested in developing the skills of perception and production more children would learn something from art classes.

42. Intermediate school students can learn a great deal about art by being asked to make a copy of a recognized work of art.

43. Given the lack of direction in the practice of art teaching, it wouldn't hurt at all to have a tightening up of art programs.

44. The teaching of Art History has no place in the elementary school classroom.

45. One of the most important contributions that a teacher of art can make is to help children appreciate the enormous achievements of those people who have created works of art.

46. Contests and other forms of competition have no place in an art program for intermediate school students.
47. One of the major reasons why art has not commanded a central place in the school curriculum is because art teachers have too often been unclear about what they were trying to accomplish.

48. Full engagement in art activities contributes to the child's emotional health.

49. Teachers should not criticize what children produce since children see the world differently from adults.

50. Specific periods of time should be set aside by the teacher for the teaching of art.

51. "Chalk and Talk" have no place in an art classroom.

52. Intellectual abilities are as important in the creation of art as they are in studying the standard academic subjects.

53. Although "teaching" and "learning" are used in the literature of the field of education these terms are, in fact, inappropriate for thinking about what art teachers and pupils do.

54. The use of stars, ribbons, grades and other extrinsic rewards are quite appropriate and useful for motivating children in art.

55. If teachers cannot distinguish works of art from other things in the world they should not be engaged in the teaching of art.

56. Having children draw still-lives is a good way to refine their perception.

57. Art should not be taught as a separate subject in the school curriculum.

58. Children are natural artists and teachers and other adults should not try to influence them or their work.

59. Learning how to analyze the visual components of a visual object is one of the best ways of experiencing it aesthetically.

60. Children's progress in art requires a systematic and sequentially organized art curriculum.
Background Questions: These questions will give some insight into your previous art experiences. Please complete these questions on the same answer sheet starting at response #61. Remember (C,3) stands for uncertain or not applicable.

61. I had positive experiences in my own elementary art education.

62. I had positive experiences in my own secondary art education.

63. I have continued my own art education beyond high school by attending art related courses.

64. I see myself as an artistic person.

65. I enjoy attending art museums, galleries, and art events.
APPENDIX B
THE PRACTICUM INTERVIEW
(Interview #1)

Introduction
This interview followed the observation of art lesson taught during the extended thirteen week practicum. All the purposeful sample of eight preservice teachers were interviewed at least once. Each question was followed by appropriate probes and questions were altered slightly to allow a flow of dialogue.

Six Questions
1. What was your intent with this lesson?

2. How did this lesson relate to what you did before and what you will be doing next?

3. How do you plan to evaluate what the students are learning?

4. What do you think influenced your choices of content and instruction in this lesson?

5. If this had been your classroom would you have done anything differently?

6. Is there anything else that I should know that would help me understand your beliefs about art education?
APPENDIX C
THE FINAL INTERVIEW
(Interview #2)

Introduction
This interview was held near the end of the final semester of course work after the student teachers had returned from the practicum to the university. The first question set up an individual vignette for each prospective teacher that was dependent on their own particular expressed grade level preference. As with the first interview, probes and slight alterations in the questions were necessary to keep the interview flowing smoothly.

Questions
1. In September you have been assigned to a grade____ classroom in a school in ______. When you think about your art curriculum for that class, what things come to your mind as you start to plan?

2. What would your first unit likely be?

3. When you are evaluating the students' work, what will you be looking for?

4. If the principal, for example, asked you to choose four or five pieces for display in the main hall, how would you make that choice?

5. What do you think have been the major influences on your beliefs about art education?

6. Are there any aspects of the teacher education program that could be changed to help you realize your vision of art education?

7. Is there anything else that you would like to add that would help me understand your beliefs toward art education?