BEGINNING TEACHERS’ PUPIL CONTROL IDEOLOGIES: AN EMPIRICAL EXAMINATION OF THE IMPACT OF BELIEFS ABOUT EDUCATION, MENTORSHIP, INDUCTION, AND PRINCIPAL LEADERSHIP STYLE

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This empirical study examined changes in beginning teachers’ pupil control ideologies (PCI). Quantitative analyses were conducted with regard to shifts in PCI that may be associated with internal beliefs about education and with external factors such as mentorship, induction programs, and school leadership style. Follow-up interviews facilitated a more thorough understanding of the quantitative data analysis. Results indicate that beliefs about education significantly predict beginning teachers’ PCI, while other factors appear less important. Implications for teacher education and teacher professional development are discussed in relation to factors associated with authentic, beliefs-based beginning teacher classroom practices.

Introduction

More than 40 years ago, Hoy (1967) reported that many teachers became more custodial in their interactions with pupils when they entered the bureaucratic organizational context of schools. Some teachers, though, did not follow this pattern and instead moved towards a more humanistic pupil control ideology (PCI) (Willower, Eidell, & Hoy, 1967). Hoy asked whether certain individuals’ beliefs made them more “successful in adapting to such organizational demands”, while others’ beliefs made it less likely that they would “adapt and [therefore be more likely to] subsequently leave the school and perhaps the profession” (p. 155). In subsequent
years, researchers have called for more empirical studies concerning the interaction of teachers’ beliefs about education with specific aspects of teachers’ classroom behaviours and management strategies (Barratt, 1994; Ikejaiku, 2000; Solomon, Battistich, & Hom, 1996). The present study answers both calls by exploring empirically the possible relationships between and among beginning teachers’ beliefs about education, perceptions of school contextual factors, and perceptions of their own classroom management style as measured by PCI.

Purpose

The purpose of this study is two-fold: a) to compare the PCI of beginning teachers (2-5 years of teaching experience) with their PCI at the end of their pre-service year; and b) to determine the relationship between the PCI of beginning teachers and internal and external factors.

Research Questions

The following questions guide this study:

1. Do beginning teachers tend to become more or less custodial, as measured by PCI, during their beginning years of teaching?

2. What is the relationship between beginning teachers’ PCI and: (a) internal beliefs about education, and (b) external factors (context and program variables)?

Operationalization of Terms

Beginning Teachers

In the present study, “beginning teachers” are those who have taught full-time for a minimum of 200 days and a maximum of 1000 days. These numbers are aligned with the Ontario
school calendar, wherein a school year is considered to be 194 days. As such, participants were in their second to fifth year of full-time teaching.

**Internal Factors**

Internal factors in the present study refer to participants’ beliefs about education as measured by the Educational Beliefs Questionnaire (EBQ).

**External factors**

There are three external factors in the present study. These are: perception of mentor teachers’ classroom management style, perceived importance of new teacher induction program, and perception of school transformational leadership. These three external factors compose the “Context and Program Factors” variable cluster.

**Pupil Control Ideology**

The present study measures PCI using Willower et al.’s (1967) PCI Form (Appendix C). An individual’s score on the PCI indicates her or his placement on a continuum from humanistic to custodial. This score is considered an indicator of classroom management style in the present study. Teachers who score on the “humanistic” side (less than 50 on the PCI Form) tend to create an ‘educational community’ atmosphere in their classrooms, where student interaction and cooperation are paramount. Self-discipline, a democratic atmosphere, shared decision making, interpersonal sensitivity, and open communication are all important.

A more custodial orientation (50 or higher on the PCI Form) is characterized by teachers with rigidly controlled classrooms where the maintenance of order predominates. For custodial
teachers, schools are understood to be autocratic, hierarchical organizations with a downward flow of power and communication to students, who are generally perceived as irresponsible and undisciplined (Willower et al., 1967).

**Induction**

In this study, induction refers to the formal Ministry of Education-mandated New Teacher Induction Program (NTIP) undertaken by Ontario (Canada) school boards, in which new Ontario teachers are required to participate during their first year of teaching. The program components include an orientation to the school and board, in-school mentorship by experienced teachers, and professional development and training designed for new teachers (Ontario College of Teachers, 2007). Participants were asked to self-identify with regard to participation in an induction program.

**Mentorship**

Mentorship is guidance from a more experienced teacher colleague. This mentorship may be formal, as a part of the NTIP program; otherwise, it is considered informal.

**Beliefs about Education**

In the present study, “beliefs about education” refers to participants’ philosophical orientations as determined by the Educational Beliefs Questionnaire (EBQ) (Silvernail, 1992a; 1992b). The EBQ designates individuals as i) traditionalist, ii) progressivist or iii) romanticist in their orientation to education based on their beliefs about five educational concepts: role of the
teacher; role of the student; method of instruction; nature of curriculum content; and purpose of schools.

The traditionalist orientation centres on learning a set of predetermined facts and skills which are in the possession of an elite group. The role of the school is seen as transmitting essential knowledge and perpetuating the predominant culture. Strong authority roles for teachers, passive roles for students, and drill and practice are valued. Effectiveness is a product of quantifiable cognitive achievement.

The progressivist orientation encourages students to discover ‘facts’ and learn skills that are most relevant in the students’ relationships to the world. The school’s role is to foster the intellectual process through the inquiry method of learning, with teachers as facilitators and students actively involved. The purpose of education is to produce outcomes in the cognitive, but also the affective and behavioural domains. Effectiveness is equated with success in producing ‘productive’ citizens.

The romanticist orientation focuses attention on children, who are free to experience themselves and society by choosing the direction of any educational program or evaluation. Schools are fonts of new social ideas and individual self-awareness. Knowledge creation occurs as each child develops understandings of how current social issues relate to him or her. Teachers guide the natural development of each student. Effectiveness, as a linear function of input and process factors, may or may not be evident (Rideout & Morton, 2007; Silvernail, 1992a).

Authenticity

For the purposes of this study, authenticity is the alignment, during the beginning teacher period, of one’s educational beliefs and one’s actions in the classroom, based on the presumption
of moral endeavour (Chickering, Dalton, & Stamm.; Cranton & Carusetta, 2004a; 2004b; Cranton, 2001; Spivey, Collins, & Bishop, 2003). This conception of authenticity also includes the concepts of genuineness (Chickering et al., 2006; Taylor, 1991; Trilling, 1972/2006) and self-knowledge.

**Theoretical Framework**

The theoretical foundations of this research are perhaps best understood within the framework of two theoretical camps, identified as internal and external. The internal camp is typified by Festinger’s (1957) cognitive dissonance theory, which would predict that a teacher’s PCI would be consistent with her or his internal beliefs about education. Otherwise, the teacher would experience cognitive dissonance and be motivated to change either pupil control strategies or internal beliefs in order to reduce and ultimately eliminate the dissonance. According to the internal (cognitive dissonance) camp, in the present study participants’ beliefs about education (i.e., philosophical orientation as determined by the EBQ) should predict their PCI.

Alternatively, the external camp is consistent with the social development and social impact theories of Vygotsky (1978) and Latané (1981). From this perspective, changes in beginning teachers’ PCI are most accurately accounted for by external contextual and program factors. If this theoretical camp is seen as best explaining changes in PCI, external bureaucratic and sociological influences would be seen as having a stronger impact on teachers’ classroom interactions with students. If this is the case, administrators interested in improving teacher preparation programs might be better served to examine the external, sociological conditions rather than addressing teachers’ internal beliefs.
Review of Literature

The literature review addresses research related to the external and internal factors under investigation. A review of research related to the impact of school structure and school leadership style is followed by an examination of literature relevant to induction programs. After this review of external factors, the final section addresses the role of internal educational beliefs in relation to teaching behaviour. An extensive explanation of the philosophical underpinnings of three types of beliefs, as designated by the EBQ, is provided.

The Impact of Bureaucratic Structure and Leadership Style

Research has revealed a connection between school bureaucratic structure, principal leadership style, and teachers’ orientations to pupil control. Halpin’s (1956) early findings are consistent with what can be generalized from such studies: bureaucratic school culture is closely associated with principal bureaucratic behaviours. Similarly, after examining roles and actions associated with principals and teachers within organizations, March and Simon (1993) concluded that the behaviour of the principal, as it extends throughout the organization, influences the behaviours of teachers. In Lunenburg and Mankowsky’s study (2000), the School Description Inventory (SDI) (Anderson, 1970) was administered to 20 high school administrators, 297 teachers, and 7376 students to solicit perceptions of school bureaucratic structure. Using teachers’ SDI responses, it was hypothesized that a positive relationship would exist between bureaucratic and hierarchical behaviour on the part of the principal and custodial pupil control orientations as identified by the Pupil Control Ideology Form (Willower, Eidell, & Hoy, 1967). This hypothesis was confirmed, with Pearson correlation coefficients of .63, .81, .67, .61, and .78 with regard to the various specific attributes. This study concluded that public school teachers’
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PCI are more custodial in schools that are more bureaucratic, and more humanistic in less bureaucratic schools.

On the other hand, a transformational leadership style (Bass & Avolio, 1994; Burns, 1978; Leithwood & Jantzi, 2000) fosters a number of characteristics associated with more humanistic school cultures. Such cultures are consistent with McGregor’s (1960) Theory Y, wherein managers view employees as self-motivated, responsibility-taking, and trustworthy; the Ohio State Studies’ (Halpin, 1956;1966) interpretation of effective leadership within the context of democratic consideration of employee’s interests; and Willower, Eidell, and Hoy’s (1967) depiction of humanistic pupil control ideologies as facilitating trusting and empowering interactions between teachers and students.

A large-scale empirical investigation of the influence of principal leadership style on school climate and student achievement was conducted by Bulach, Lunenburg, and McCallon (1995). The researchers employed a diverse sample of 2,834 third grade students, 506 teachers, and 20 principals in twenty elementary schools in Kentucky, U.S.A. No statistically significant differences in school climate or in students’ achievement were found to be related to principal leadership styles. Analyses of variance revealed that involvement of parents and community in the school was the only subscale which had a significant F ratio (F = 5.556, p < .01). While the researchers concluded that school climate does not depend on leadership style, they did note a strong tendency for the principals in the study to use the promoter style of leadership, which has a strong orientation toward meeting the needs of people and involving parents and the community in the decision making process.

Under current school leadership models, principals are more likely to build learning communities within which teacher development occurs as the result of processes, activities, and
relationships (Lambert, 2002). Lambert indicated that the concept of principal as sole instructional leader leaves talents of teachers untapped; that in order for a school to be democratic, inclusive, and a learning community, teachers must be empowered. To achieve this, principals must be transformative leaders. Melton (2007) similarly reported that beginning teachers become contributing, developing members of the learning community when they are treated as partners in the process. Principals who move past the assumption that “hierarchy equals expertise” (p. 27) recognize the expertise in others and lead in the transformative manner essential in order for learning communities to be effective.

**Professional Development Programs**

Within the field of professional development, Smith and Ingersoll (2004) examined induction programs, which in their discussion included mentorships. They identify two primary but distinct purposes of induction programs. Some are “primarily developmental and designed to foster growth on the part of newcomers; others are also designed to assess, and perhaps weed out, those deemed ill suited to the job” (p. 683). They also identify a number of studies that examine two types of effects on teacher outcomes. The first is teacher attitudes towards job satisfaction and commitment; the second is teacher retention and turnover. These researchers reported that beginning teachers who participated in induction processes such as mentorships from the same subject field and in collaborative activities with other teachers were less likely to change location or to leave teaching early.

Smith and Ingersoll (2004) found that a variety of induction supports, activities, and practices rarely made a difference on their own to the particular outcomes being measured (professional growth/retention); however, they noted that these factors rarely existed in isolation.
As the number of supports increased, so did the positive outcomes, but the more rigorous the programs became due to increases in supports, the fewer the number of teachers receiving them.

Mitchell, Reilly, and Logue (2008) indicated that beginning teachers traditionally have four options: they can ask for quick fix solutions, sign up for professional development seminars, mimic without internalizing the foundations for the more experienced teacher’s actions, or leave the profession. These researchers suggest that professional development programs, including induction programs and mentorships, tend to favour a particular instructional method, strive for universality of approach, or place a high emphasis on measurable learning outcomes and systems goals that are external to the teacher and her beliefs about education. For such reasons, professional development may not be seen by beginning teachers as useful to their everyday work life at the beginning of their career (Public Education Network, 2002).

The Ontario College of Teachers (OCT) conducted a Transitions to Teaching study (McIntyre, 2007) to measure specific aspects of Ontario’s New Teacher Induction Program (NTIP). Over 91% of 2006 graduates hired into publicly funded regular teaching jobs participated in the NTIP. The degree to which beginning teachers were exposed to a number of performance-led school management criteria (Dymoke & Harrison, 2006) was reported. These criteria included grounding in policy, administrative, school community, and curricular contexts. Fifty-seven percent were exposed via formal school orientations and 89% via school board orientations. Ninety-seven percent reported professional development in program priority areas such as literacy and numeracy; planning, assessment, and evaluation; and classroom management. Thirty-five percent identified mentoring as a major professional development activity. Fewer than 20% reported observing their mentors for one or more hours per month.
Fewer than 17% reported being observed for an hour or more per month, and 47% indicated that their teaching was never observed. Negative comments on mentoring related most frequently to quantity and/or quality of time with mentors.

McIntyre’s (2007) report in Professionally Speaking, the voice of the OCT, reported NTIP success based on the criteria of program participation and completion. The report does not address the impact that teachers believed the program had on their personal and professional development and effectiveness. In contrast to this approach, Knapper (2005, 2009) advocates for assessing not only the completion of learning activities, but the impact of these professional development programs on educators. He contends that participants’ learning outcomes and competencies must be measured after program completion to determine whether the learning outcomes (enduring knowledge, abilities, and attitudes essential for successful completion of job requirements) have been achieved. When this type of assessment was conducted in Alberta (Couture, 2009), for instance, only half of the participants in a five-year study reported finding their mentorship induction program helpful. In comparison, based on McIntyre’s report, it appears that completion of activities in Ontario’s NTIP, not the impact of these activities (i.e., achievement of learning outcomes) was the main measure of success.

Abell, Dillon, Hopkins, McInerney, and O’Brien (1995) purposefully investigated the impact of mentorship within a beginning teacher induction program. Qualitative interviews revealed that the most productive mentorships were those in which mutual trust and respect, as well as a mutual understanding of and appreciation for the complexity of teaching, existed between the mentor and beginning teacher. This study points to the importance of acknowledging and appreciating new teachers’ educational beliefs and understandings,
something Knowles (1992) identified as a common oversight of many teacher induction programs.

The Role of Beliefs

Beliefs about, or philosophy of, education have been identified as the foundation for one’s actions, for what one intends to do and how, in relation to teaching and learning (Galbraith, 2000; Livingston, McClain, & DeSpain, 1995; Ornstein & Hunkins, 2004; Sergiovanni, 2000; Sheppard & Gilbert, 1991). Over time, a variety of educators have become closely identified with particular sets of beliefs about or philosophies of education. For example, Rousseau (1712-1778) created the fictional Emile (1762/1991) in order to demonstrate his romanticist orientation. Dewey (1859-1952) was known as the father of progressivism, and Bagley (1874-1946) was a staunch defender of traditionalist values in education.

The philosophical foundations of these three orientations can be understood within a broad ‘philosophy of science’ subjectivist and objectivist conceptual framework as described by Burrell and Morgan (1979). This conceptual framework delineates the philosophical foundations of pre-service teachers’ beliefs, with subjectivists tending to be aligned with the romanticist and progressivist orientations, and objectivists with traditionalist orientations. Further, Burrell and Morgan articulate these philosophical foundations in a manner which facilitates a deeper understanding of the connection between these three orientations and placement, based on classroom practices, on the PCI humanistic-custodial continuum. The traditionalist orientation is consistent with beliefs associated with a custodial PCI score. Traditionalist beliefs are also consistent with the objectivist viewpoint, characterized by a realist ontology, positivist epistemology, deterministic view of human nature, and a nomothetic methodology. Out of such a
position arises the custodial rote memorization and decontextualized learning tactics prominent in the work of Ebbinghaus and Binet (as cited in Smith, 1998) and the educational beliefs espoused by E. D. Hirsch (1996) in *The Schools We Need, and Why We Don’t Have Them*. Smith (1998) refers to practices arising from the traditionalist philosophy as being consistent with the “official theory of learning and forgetting” (p. 4).

On the other hand, the progressivist and romanticist orientations correspond with beliefs reflected in the humanistic range of the PCI scale. Rousseau’s (1762/1991) romanticism and to a lesser degree, Dewey’s (1897) progressivism, are anti-positivist, voluntarist, relativist and ideographic subjectivist orientations to education. A progressivist position is evident in Alfie Kohn’s (1998) response to Hirsch’s *The Schools We Need...* Kohn emphasizes a humanistic approach to education in *The Schools Our Children Deserve: Moving Beyond Traditional Classrooms and “Tougher Standards”*. This position is consistent with Smith’s “classic theory of learning and forgetting”, (1998, p. 3).

In a meta-analysis of research from the preceding decade, Kagan (1992) reported that teacher education programs lacked a systematic reflective approach which encouraged pre-service teachers to surface and explore their beliefs and images, or to compare experiences of the practicum with these pre-existing images. There appeared to be no effort to assist the pre-service teacher in the development of new images of oneself as teacher. Kagan concluded that, in the place of reflective integration of theory and practice, teaching practica were more likely to facilitate imitative responses based on relationship and contextual factors than responses based on one’s own educational beliefs.

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Goodreau and Fredua-Kwarteng (2006) identified the continuing need to facilitate reflection, application, contextualization, and internalization of knowledge and values in teacher preparation programs.

Korthagen, Loughran and Russell (2006) conducted an analysis of three similarly structured pre-service teacher education programs in Australia, Canada and the Netherlands. They identified several principles of effective teacher education, each grounded in reflection. These principles included (a) meaningful collaboration that facilitates reflective responses to the competing and conflicting demands of the classroom, (b) role of community and close working relationships among novice peers, and (c) writing tasks and research that require an engagement by pre-service teachers of their own situation, practice, preconceptions and socialization.

Dymoke and Harrison (2006), in a qualitative study of second year teachers’ opportunities for further professional development, concluded that school support systems do not encourage critical reflection. Their professional development instead appears to be driven by performance-led school management systems, as identified earlier in relation to the Ontario New Teacher Induction Program.

Contextualizing the Study

In a meta-analysis of studies from the preceding decade, Hoy (2001) concluded that the shift to a more custodial PCI was still prominent. Rideout and Morton (2010) reported that pre-service teachers tended to become more custodial during the pre-service teacher education program. This shift in Pupil Control Ideology (PCI) was associated more with external socialization factors and less with internal factors such as beliefs about education.
Rideout and Morton (2007, 2010) measured PCI of pre-service teachers at the beginning and end of a one-year pre-service teacher education program. PCI means of 50.70 (N=725, SD=7.102) at the beginning of the pre-service program and 53.33 (N = 467, SD = 7.91) at the end represented a significant shift from a more humanistic to a more custodial PCI ($t = 145.60$, $p < .001$). Multivariate analyses of variances (ANOVAs) revealed that pre-service teachers who reported observing teacher-centred (custodial) role models during the teacher education program were more likely to become more custodial as measured by PCI. On the other hand, those who reported observing predominantly student-centred or collaborative teachers were less likely to become more custodial. In other words, pre-service teachers tended to imitate the classroom management style of the teachers they observed. Philosophical orientation (educational beliefs), on its own, was not seen as predictive of PCI at the end of the pre-service program. The authors concluded that the external factors, which facilitated mimetic practices (Kickbusch, 1996) or “shallow and imitative” (Kagan, 1992, p. 142) learning were predictive of PCI, but that internal beliefs about education were not.

The present study extends Rideout and Morton’s (2010) study by following a small sample of these same participants into their beginning years of full-time teaching.

**Method**

This research follows an explanatory mixed methods design (Creswell, 2008), with quantitative and qualitative data from the beginning years being compared to data collected during the pre-service year (Rideout & Morton, 2007, 2010). The quantitative data for this study was collected through the use of four quantitative mail-in questionnaires. This was followed by qualitative data collection in the form of one-on-one interviews.
This design was chosen to access the powerful mix of quantitative and qualitative data that would provide more detailed and in-depth information than could be gained from one source alone (Creswell, 2008; Miles & Huberman, 1994). More specifically, the qualitative interview data extended explanations and deepened researchers’ insights into the “how” and “why” of changes in participants’ PCI scores over time. Interviews provided the additional benefit of member checking (Creswell, 2008), a means of checking the validity of quantitative results based on participants’ descriptions of their own lived experiences (Bentz & Shapiro, 1997; Van Manen, 1997).

Participants

Participants were recruited from a pool of 474 pre-service teachers who had participated in a previous study and subsequently been hired by one of two Ontario school boards. Permission was granted by the boards to invite ‘qualifying’ graduates in their employ to participate in this follow-up study. Although it was suspected that only a small percentage of the original pool was actually employed by these boards and otherwise qualified for this study, exact employment numbers were not available from the boards. Participants were informed of the voluntary nature of their participation, their right to withdraw from the study, and the confidentiality of their responses. Thirty-one individuals, of whom 24 met the qualifying criteria for participation in the study, completed the questionnaires. Of these 24, eight were teaching at the primary-junior level, seven at the junior-intermediate level, and nine at the intermediate-senior level. Seven participants were between 25 and 30 years of age, 13 were between 30 and 40, and four were 40 or older. Seventeen were female and seven were male. Regarding teaching experience, five had taught between 200 and 600 days; nineteen had taught more than 600 but less than 1000 days.
**Instruments**

*Demographics and Experiential Questionnaire.* The demographics/experiential questionnaire (Appendix B) was developed to obtain information about participants’ demographics (age, gender), teaching experiences (duration, location, level), teacher preparation program, and participation in a teacher induction program.

*PCI Form.* The PCI Form (Willower et al., 1967) (Appendix C) consists of 20 Likert-type items as a means of locating educators’ pupil control orientations on a humanistic-custodial continuum. Much work has been done regarding the validity and reliability of the PCI Form. Willower et al. (1967) reported split-half reliability coefficients in two samples of .95 (N = 170) and .91 (N = 55). Gaffney and Byrd-Gaffney (1996) provided relevant information regarding the continued validity of the original PCI Form, including Graham et al.’s (1985) alpha coefficient of .90, and Hoy and Woolfolk’s (1990) alpha coefficient of .72.

*Educational Beliefs Questionnaire (EBQ).* Silvernail’s (1992a) EBQ, consisting of 20 Likert-type items (Appendix D), was used to collect data concerning pre-service teachers’ beliefs about education. It facilitated the identification of these beliefs as romanticist, progressivist, or traditionalist by providing scores on each of the three scales. Factor analysis used to determine the construct validity of the EBQ showed all twenty items as having loadings over .35, with a minimum difference of .20 in loading between factors. Calculations for internal consistency estimates yielded an alpha coefficient of .73 (Silvernail, 1992a).

*Transformational Leadership Questionnaire (TLQ).* The TLQ (Ross & Gray, 2006) (Appendix E) contains 12 items “measuring teacher perceptions that their principal leads by developing the capacity of the organization and its members to adapt to the demands of a
changing environment” (p. 804). It assesses four of six global transformational leadership criteria identified by Leithwood, Jantzi, and Steinbach (1999), i.e., good professional practice, individualized support, intellectual stimulation, and high performance expectations.

**Procedure**

The quantitative phase of the study involved administration of four forms: the Demographic and Experiential Questionnaire (Appendix B), the PCI Form (Appendix C), the EBQ (Appendix D), and the Transformational Leadership Questionnaire (Appendix E). Qualifying teachers were invited by board facilitated electronic bulletin-board postings and emails to participate in the study. All four questionnaires were sent by surface mail with self-addressed, stamped envelopes to respondents who expressed interest in participating. Follow-up emails encouraged respondents to complete and return the forms. Data were analyzed using t-tests, correlation analyses, and multiple regression analyses to determine the degree to which the independent variables were associated with and accounted for the variance in PCI.

After quantitative data collection, selected participants were contacted by email to request a follow-up interview. Ten (6 female, 4 male) of the 24 participated in the interview. Five of the interviewees taught at the high school level, and five at the elementary level. The interviewer had no previous relationship with the participants and no knowledge of participants’ PCI scores before the interviews were conducted. The concealment of quantitative data from the interviewer was seen as advantageous in minimizing interviewer bias (Bogdan & Biklen, 2003; Schensul, LeCompte, Nastasi, & Borgatti, 1999; Shank, 2002). Participants chose the interview location (their school, their home or the researcher’s office) based on their own preference. The interviews were semi-structured: each interviewee was asked the same five questions (Appendix
A), and the interview direction was determined by interviewees’ responses. The five standard, key questions (Mills, 2003) were intended to extend understanding of the quantitative findings by exposing reasons for changes in PCI scores.

At the beginning of each interview, definitions of the terms “humanistic” and “custodial”, which identified positions on the PCI continuum, were reviewed. Interviews were digitally recorded and transcribed; participants were given pseudonyms. The first stage of qualitative analysis involved open coding of all participants’ responses, which included naming or “conceptualizing” words and passages from the interview data (Strauss & Corbin, 1998). From this initial coding, themes were identified in the group as a whole. Next, responses to each of the five interview questions across participants were combined to gain a deeper understanding of participants’ experiences and processes of change in the early years of teaching. Finally, the quantitative and qualitative findings were compared.

Limitations

As noted in Procedure, steps were taken to reduce researcher bias. Nevertheless, the potential still existed for the researchers’ philosophical and sociological orientations to be inadvertently reflected in the findings of this study. Researcher orientations might be best characterized as having been influenced by a subjectivist philosophy of science (Burrell & Morgan, 1979), a progressivist view of the classroom (Dewey, 1938/1963), a humanistic approach to interaction between teachers and learners (Willower, Eidell, & Hoy, 1967), and a constructivist approach to child development (Piaget, 1955). Care was taken to guard against any bias in relation to procedure or reporting of outcomes in this study.
The definition of beginning teacher as being between 200 and 1000 days of full-time teaching covers a wide range of experience. While this group is treated as a single group of teachers (beginning years teachers), the amount of teaching experience varies from those in their second year to those in their fifth year of full-time teaching. The researchers acknowledge that particular changes, and predictors of those changes, might be associated with the earlier or later stages of this “beginning” period. With this being stated, it is also encouraging to find that 19 of the 24 participants were in their fourth or fifth year of teaching and that length of time teaching was not significantly correlated with PCI.

The most significant limitation of this study is the sample size. Data collected from this convenience sample was sufficient for the purposes of the data analyses, but the findings of these analyses should not be generalized onto larger populations. While the quantitative analysis identified results that were confirmed and further clarified by the qualitative data, it is appropriate to treat these findings as a foundation for future more elaborate examinations of larger and more diverse beginning teacher populations.

**Results**

In order to address the research questions, three steps were followed with regard to the quantitative data. A t-test, Pearson Product Moment correlations analyses and multiple regression analyses were conducted.

**T-Test**

First, a one-sample t-test was conducted in order to compare the PCI means of the participants at the end of the pre-service teacher education program (53.33, N = 466, SD = 7.91)
and at the beginning-years data collection point in the present study (49.83, N = 24, SD = 9.06). There was a significant difference, \( t = 26.94, p < .001 \). Participants tended to become more humanistic during the beginning years of teaching.

This finding was supported and further explained by the qualitative data. Nine of 10 interview participants perceived themselves as more humanistic in their classroom management style during the beginning years of teaching than during the pre-service program. The most common explanations for this change involved participants’ perceptions that they had more freedom and confidence in dealing with students during the beginning teaching years than during the pre-service practicum. Elaborating upon this difference, participants felt that during the pre-service year, their associate teachers’ classroom management styles were relatively custodial and believed that imitating that style was necessary in order to receive a positive evaluation. This was consistent with earlier findings (Rideout & Morton, 2010), i.e., that regardless of their own beliefs about education, pre-service teachers tended to conform to the style of their associate teacher during the pre-service teacher education program. The following interview excerpts typify explanations of a shift to a more humanistic style of classroom management in the early years:

Frank: I would definitely say more humanistic now. Associates were generally custodial so I conformed to whatever they did.

Rita: In the B.Ed. [pre-service program], I was trying to follow someone else’s classroom rules – adapting to the teachers’ system. I was very aware of what their style was so I got good evaluations.

Boris: In the pre-service, it was definitely more of the custodial – me telling the students what to do a lot of the time. And it also depended on the teacher I was with.

Denise: At first, I was more rigid and controlled; I wanted to make sure I followed the rules of the schools; rules of other people’s classrooms … but this is my fourth year so I’m more flexible.
The process of change as articulated by interview participants provides deeper insight into how that change in classroom management style came about. Three recurring and overlapping themes were: a) increased flexibility, b) a heightened focus on the students rather than on the formal curriculum, and c) a deeper understanding of what education is all about. These ideas are illustrated in the following comments.

Patricia: I used to think about them as learning vessels and now I care about them and try to get to know them as people. … I guess that’s what I’ve learned – that there’s more to teaching than teaching material.

Frank: You have to be dynamic – you have to be flexible in your approach. It’s a case-by-case and student-by-student basis and you have to be flexible all the time.

Diane: At that time [during pre-service] I didn’t have a strong philosophy but now, I can actually know it and put it in my classroom … My classroom is more of a community – more cooperation and learning from peers, more exploration.

Wendy: When you’re in your own classroom for the whole year, day after day, you have to be more flexible – and you can’t be as flexible [when you are] a student teacher.

In addition to explaining the shift in PCI to a more humanistic style, these qualitative responses indicate a shift from being directed by external factors (e.g., associate teachers’ style and expectations) to being directed by internal factors, i.e., one’s own beliefs about education.

Pearson Product Moment Correlational Analyses

Secondly, Pearson Product Moment Correlational Analyses between the variables in each of the variable clusters and the PCI scores were computed, in order to examine the relationship between the variables and PCI scores (see Tables 1, 2).

Context and Program Factors variable cluster. Table 1 illustrates the Pearson Product Moment Correlation Coefficients for PCI scores and Context and Program Cluster variables.
There was a significant correlation between PCI and perception of transformational leadership ($r = -.423, p < .05$). This negative correlation indicates that participants who perceived the school leadership to be highly transformational (mean > 4.49 on a six-point scale) had lower (more humanistic) PCI scores (PCI mean = 47.67). Participants with a lower perception of transformative leadership (mean < 4.50) had a higher (more custodial) PCI score, (PCI mean = 56.33), $t(24) = 2.19, p < .05$. The other two variables within the Context and Program Factors cluster (induction program and classroom management style of mentor teachers) were not significant correlates of PCI.

Table 1

*Pearson Product Moment Correlation Coefficients for the PCI Scores and the Context and Program Factors Variable Cluster*

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<thead>
<tr>
<th>CATEGORY</th>
<th>CORRELATION COEFFICIENT</th>
<th>NUMBER</th>
<th>PCI MEAN</th>
<th>STANDARD DEVIATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Classroom Management Style of Mentor Teachers</td>
<td>.325</td>
<td>Student-directed</td>
<td>3</td>
<td>44</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Collaborative</td>
<td>20</td>
<td>50.2</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Teacher-directed</td>
<td>1</td>
<td>60</td>
</tr>
<tr>
<td>Importance of Induction Program</td>
<td>-.091</td>
<td>Low, minimal</td>
<td>17</td>
<td>50.35</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Moderate, high</td>
<td>7</td>
<td>48.57</td>
</tr>
<tr>
<td>Perception of Transformational Leadership (TL)</td>
<td>-.423*</td>
<td>Perception of low orientation to TL (&lt;4.5 on a six-point scale, six high)</td>
<td>6</td>
<td>56.33</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Perception of high orientation to TL (&gt;4.49 on a six-point scale, six high)</td>
<td>18</td>
<td>47.67</td>
</tr>
</tbody>
</table>

* Correlation is significant at the 0.05 level (2-tailed).
Beliefs about Education variable cluster. In order to conduct the correlation analysis, participants were divided into two groups for each orientation: low and high. The breakpoint for the scores allowed for consistency in high/low case numbers across the three orientations and within each orientation. For the romanticist orientation, high scores were those greater than 2.5 on a 5-point scale. For progressivist scores, high scores were those greater than 2.75, and for traditionalist scores, high scores were those greater than 2.25. With regard to the ‘high score’ romanticist and progressivist groups, 11 of the 13 cases were “true romanticists” or “true progressivists” (i.e., their romanticist and progressivist scores respectively were higher than their other scores). On the other hand, in the case of traditionalist scores, only one individual (score = 2.38) was a “true traditionalist” (i.e., score was higher than the corresponding romanticist and progressivist scores). As a result, data analysis in relation to the traditionalist scores was not considered reliable and was not considered further.

Table 2 illustrates the Pearson Product Moment Correlation Coefficients for the PCI scores and the romanticist and progressivist beliefs about education scores.

<table>
<thead>
<tr>
<th>Table 2</th>
<th>Pearson Product Moment Correlation Coefficients for the PCI Scores and the Beliefs about Education Variable Cluster</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><strong>CORRELATION COEFFICIENT</strong></td>
</tr>
<tr>
<td>Romanticist Orientation</td>
<td>.652**</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>Progressivist Orientation</td>
<td>.812**</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**. Correlation is significant at the 0.01 level (2-tailed).

There were significant correlations between PCI and each of the romanticist and progressivist sets of beliefs about education: between PCI and romanticist orientation ($r = .652$, $p$
< .01), and between PCI and progressivist orientation ($r = .812, p < .01$). A squaring of the $r$ correlation coefficient revealed a 42.5% correlation for romanticist scores with PCI scores, and a 65.9% correlation for progressivist scores with PCI scores. While this PCI-beliefs about education correlation is significant with both orientations, it is stronger for those with progressivist orientations (65.9%) than those with romanticist orientations (42.5%).

**Multiple Regression Analyses**

Thirdly, a series of Multiple Regression Analyses were conducted with respect to the Context and Program Factors and Beliefs about Education variable clusters, with the PCI scores as the dependent variable. The $R^2$ coefficients indicated strength of the variable clusters with respect to explained variance, and by comparison, the most predictive variable cluster for PCI scores. Standardized Beta scores and $t$ values are reported in Tables 3 and 4.

*Context and Program Factors variable cluster.* The Context and Program Factors variable cluster contained the variables of mentor classroom management style, importance of induction program, and evidence of transformational leadership. These variables were entered into the regression function of SPSS as independent variables. The dependent variable was PCI score. The context and program variable cluster was not significant in predicting the PCI scores of the participants, $R^2 = .207, F(3,21) = 1.745, p > .05$. None of the independent variables contributed significantly to prediction of PCI scores. See Table 3 for the standardized Beta values.
Table 3
*Beta Coefficients for the Multiple Regression Analysis Utilizing the Context and Program Factors Variable Cluster*

<table>
<thead>
<tr>
<th>Variable</th>
<th>Standardized Coefficients Beta</th>
<th>T</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mentor’s classroom management style</td>
<td>.254</td>
<td>1.212</td>
<td>.240</td>
</tr>
<tr>
<td>Importance of induction program</td>
<td>-.023</td>
<td>-.107</td>
<td>.915</td>
</tr>
<tr>
<td>Perception of transformational leadership</td>
<td>-.319</td>
<td>-1.454</td>
<td>.162</td>
</tr>
</tbody>
</table>

Beliefs about Education variable cluster. Data from the Beliefs about Education variable cluster were entered into the regression function of SPSS as independent variables. The dependent variable was the PCI scores. This variable cluster was significant in predicting the PCI scores of the participants, \( R^2 = .831, F(3, 34) = 32.825, p < .01 \). The variable cluster summary indicated that it appeared to account for 83.1% of the variance in the PCI scores of participants. See Table 4 for the standardized Beta values.

Table 4.
*Beta Coefficients for the Multiple Regression Analysis Utilizing the Beliefs about Education Variable Cluster*

<table>
<thead>
<tr>
<th>Variable</th>
<th>Standardized Coefficients Beta</th>
<th>t</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Romanticist beliefs</td>
<td>.369</td>
<td>3.468</td>
<td>.002</td>
</tr>
<tr>
<td>Progressivist beliefs</td>
<td>.456</td>
<td>3.768</td>
<td>.001</td>
</tr>
<tr>
<td>Traditionalist beliefs</td>
<td>.347</td>
<td>3.258</td>
<td>.004</td>
</tr>
</tbody>
</table>

As noted in the correlation analysis, statements concerning the statistical significance of the traditionalist orientation were not considered valid due to the limited number of participants who could be considered traditionalist in their beliefs. The two remaining variables, romanticist
beliefs and progressivist beliefs, contributed significantly to prediction of PCI scores, with Beta scores of .369 and .456 respectively.

Qualitative interview data support and further explain the quantitative results regarding the influence of internal (beliefs about education) and external (context and program) factors during both the pre-service teacher program and during the beginning years. Nine of 10 interviewees stated their belief that external factors were more influential in their classroom management style during the pre-service year than during the beginning teaching years. Correspondingly, they perceived that internal factors (beliefs about education) had become more influential on their classroom management style during the beginning years. The following quotations articulate participants’ perceptions of a shift from being influenced largely by external factors during the pre-service teacher education program to being influenced more strongly by internal factors during the beginning years of teaching:

Wendy: Then [during pre-service] – more important were the external – it’s their classroom so you follow their style – you just try to be consistent with what the associate teacher does. Now it’s more about what works for me … more internal.

Gordo: Definitely a shift toward internal. Maybe what I’ve got internalized now originated outside and they’ve just become a part of me now. I feel that it’s become a part of my technique – not someone else’s.

Boris: At the beginning, external were more important … Now, in the classroom for a couple years, it’s more my beliefs about education that affect decisions rather than what other people think I should be like.

Some interview responses suggest that the influences of mentorships, induction programs and school leadership factors, which were initially seen as external, may have become internalized over time. The external influences appear to be playing a role, but now as mediated by teachers’ belief systems. These influences may no longer be experienced by beginning teachers as external.
Beginning Teachers’ Pupil Control Ideologies

Summary

These findings provide specific answers to the questions guiding this study. Firstly, when compared to their pre-service program, beginning teachers tended to become more humanistic as measured by PCI. Secondly, several variables were identified as correlates of the PCI scores of these beginning teachers. The higher their perception of a transformational school leadership style, the more humanistic beginning teachers’ PCI scores were. While high romanticist and high progressivist beliefs were correlated with a more custodial PCI, the correlation was stronger for progressivists than romanticists. Perhaps the findings with the strongest implications for beginning teachers and their mentor/hosts arise from the Multiple Regression Analyses: With regard to variable clusters, the Beliefs about Education variable cluster was significant in predicting participants’ PCI scores while the Context and Program Factors variable cluster was not.

Discussion

More than 20 years ago, Hoy and Jalovick (1979) identified a lack of critical empirical investigations into the educational rhetoric associated with beliefs about education. They indicated that ideas concerning beliefs about education were praised by their advocates and eschewed by their opponents; however, “[a] review of the literature yields mostly opinions, prescriptions, and anecdotes, not generalizations based on research findings” (p. 45). In response, the present study provides empirically grounded findings that beliefs about education significantly predict beginning teachers’ PCI.

The qualitative data affirm this quantitative finding and offer explanation as to why beliefs about education were predictive of PCI during the beginning years of teaching but not in
the pre-service year. During the pre-service teaching practica, teacher-candidates were imitating their associate teachers’ styles. This response appears to be counter-productive to the objectives of the Association of Canadian Deans of Education (ACDE, 2006) Accord on Initial Teacher Education: Six of the Accord’s twelve principles emphasize the foundational importance of reflection as a cornerstone of teacher education. During the pre-service program, pre-service teachers tended to demonstrate that acting authentically, that is, by basing their practices on their beliefs about education, was less important than obtaining a positive evaluation. In contrast, during the beginning years of teaching, participants felt free from the threat of negative evaluation. This enabled them to experiment with and develop new teaching strategies, to be more flexible with students, and to give students opportunities to make choices. These changes are characteristic of a more humanistic PCI. Participants said they felt freer to teach in a style that was aligned with their beliefs about education.

Taking this one step further, if one conceives of authenticity in this context as the alignment of one’s educational beliefs with one’s actions in the classroom, based on the presumptions of self knowledge, genuineness (Chickering, Dalton, & Stamm, 2006; Taylor, 1991; Trilling, 1972/2006) and moral endeavour (Chickering et al., 2006; Cranton & Carusetta, 2004a; 2004b; Cranton, 2001; Spivey, Collins, & Bishop, 2003), one might posit that these beginning teachers are becoming more authentic in their teaching practice. That is, in the absence of full-time supervising teachers who evaluated the teacher candidates and who tended to be perceived during the pre-service program as custodial, beginning teachers’ practices tended to become more closely aligned with their beliefs. As such, beginning teachers may be achieving a higher degree of success in this regard than that achieved in the pre-service teacher education program. In comparison to the reports in the literature (Cochran-Smith & Zeichner, 2005; Kagan,
Beginning Teachers’ Pupil Control Ideologies

1992; Korthagen, Loughran, & Russell, 2006) and evidence from Rideout and Morton (2010) of pre-service imitative practice, it appears that beginning teachers’ beliefs about education are playing a more meaningful role in facilitating authentic, reflective practice.

Within the Beliefs about Education variable cluster, it was noted that the correlation between progressivist beliefs and PCI was stronger than the correlation between romanticist beliefs and PCI. It appears that participants with progressivist beliefs tend to accommodate a more custodial approach to the classroom than participants with romanticist beliefs. In this regard, Rideout and Morton (2010) pointed to the adaptability, in situations with a higher perceived expectation of custodial approach, of pre-service teachers with progressivist beliefs. “Progressivist pre-service teachers may tend to be less bound by rigid philosophical orientations and more willing or able to adapt to the socialization pressures of the school” (p. 82). Should this relationship be further validated in studies of greater numbers, it could provide valuable information to those who plan and conduct professional development for beginning teachers. That is, teachers with predominantly progressivist beliefs might be more pliable and open to experimenting with new strategies and curricula whereas teachers whose beliefs about education tend to be more romanticist might be more resistant.

While beliefs about education were predictive of PCI, the external Context and Program Factors variable cluster was not. This finding is particularly noteworthy in light of the following descriptive statistics. When asked about the classroom management style of the teachers who had influenced their classroom practice most during the beginning years, 83% identified their mentors’ style as collaborative. Secondly, 75% of respondents rated their school leaders ‘high’ (4.5 or higher on a 6-point scale) on transformative leadership characteristics. Thirdly, all but one respondent reported participating in a new teacher induction program. This finding of “non-
predictiveness” contradicts previous research (Halpin, 1956; Lunenburg & Mankowsky, 2000; March & Simon, 1993) identifying a positive relationship between principal leadership style and teachers’ PCI. It is possible that in the present study, given that the teachers were in their beginning years, the impact of contextual factors such as principal leadership and mentor teacher’s classroom management style had not yet manifested themselves in participants’ teaching practices. Alternatively, it is possible that, since the PCI Form, the EBQ questionnaire and the items on the experiential questionnaire that address principal leadership style were based on participants’ perceptions, that they simply did not perceive these factors to be highly influential, even if they were.

Regarding participation in the new teacher induction program, 17 of the 24 participants rated its importance in shaping their classroom practice as “not at all” or “minimal.” Given the perception of minimal impact of the induction program, it is not completely surprising that this variable was not predictive of PCI. This finding may be seen as validating Knapper’s (2005; 2009) claim that measuring the completion of professional development programs and courses is not nearly as important or relevant as measuring the outcomes, such as participants’ learning and competencies as a result of such interventions.

The finding that the external variable cluster was neither significant nor predictive of PCI is not without precedent. In their study of the impact of transformational leadership on classroom learning, Ross and Gray (2006) concluded that the indirect effect of transformational leadership on classroom outcomes, as mediated by teachers’ beliefs, “was small” (p. 808), accounting for only 17% of the variance in outcomes. From such findings, it seems reasonable to conclude that the association between external factors and classroom practice appears to be tenuous, and mediated by beginning teachers’ “internal” beliefs about education. This is a change from the
pre-service program, where the “external” influence of associate teachers’ classroom management style was not mediated by pre-service teachers’ beliefs, and was directly linked to pre-service teachers’ PCI (Rideout & Morton, 2010).

With regard to the theoretical foundations of this study, participants’ comments regarding their approaches to the classroom appear to be consistent with the study’s internal/external theoretical framework. In response to the interview question, “Which factors (internal/external) were more important then (during pre-service) and now? Explain,” 6 of 10 respondents indicated that external factors were more important during pre-service. Two indicated both internal and external, while only 2 indicated internal exclusively. In comparison, when asked about the most influential factors at present, i.e., during the beginning years of teaching, 9 of 10 stated that internal factors were more influential on their classroom management style. These findings may have implications for those interested in teacher development. Implications for practice and research are addressed next.

**Implications for Practice and Future Research**

Findings from this study suggest that external factors are more influential on classroom practice during the pre-service year, whereas during the beginning years, internal influences become more important. This has implications for teacher education program developers. Specifically, in the pre-service year, it might be more effective to address the potential impact of external influences on classroom management style. Specifically, findings suggest that in pre-service programs where associate teachers participate in pre-service teacher evaluations, pre-service teachers will be more inclined to imitate the associate teacher’s style (external factor) than to teach in accordance with their own beliefs about education (internal factor). Thus, while
teacher candidates are being encouraged to become reflective practitioners (ACDE, 2006), structural components of the program, such as evaluation, may subvert active manifestation of reflection in classroom practice. On the other hand, during the beginning teaching years, it might be prudent to focus in-service teacher education on the process of internalization of external influences, so that they might be seen as integral to the formation of maturing beliefs. The internalization of such professional support might be seen as a central route (Petty & Cacioppo, 1986) to outcomes consistent with the aims of teachers and administrators alike. In the context of these understandings, it becomes important to consider implications for beginning teacher development programs.

This study took place in Ontario, where, the New Teacher Induction Program must be offered by all publicly funded school boards and completed by all new teachers. Given that survey and interview responses suggest limited impact of this program on participants’ teaching practice, an NTIP program review may be beneficial. Such a review should identify specific areas of effectiveness and areas needing improvement, based on teachers’ perceptions, as opposed to identification of official component completion rates (Knapper, 2009). In order to obtain such candid data, researchers should have no immediate connection with participating teachers’ status or evaluation.

This study has operationalized the concept of authenticity within a teacher-centric framework. Teachers’ practices are identified as authentic if their actions in the classroom are aligned with their beliefs about education. Their practices might be considered inauthentic if they behave in a manner that appears to be primarily imitative of mentors and lacking in reflection concerning the beliefs/actions alignment.
Based on such understandings, school board personnel and others responsible for beginning teacher development might consider alternatives to what Petty and Cacioppo (1986) identified as “peripheral routes,” which are sometimes used to ensure teachers’ practices conform to the most recent board-approved initiatives. Peripheral routes lead to changes in behaviour arising from conditioned emotional responses, credible, attractive sources of new information, and similar influences. They do not acknowledge the importance of beliefs as foundations for behaviour. Such changes in behaviour are not likely to be sustainable, and may result in high levels of stress, low sense of accomplishment, and high attrition (Bauch & Goldring, 1998; Dewitt, 1999; Wiley, 2000). It appears that this approach to teacher development may lead, at best, to inauthentic practice. As an alternative, Petty and Cacioppo (1986) identify a more effective approach, a “central route” which encourages the weighing of logic and content of persuasive messages, and which promotes change from the beliefs level up as a means of achieving sustainable outcomes.

While both the “central route” and the “peripheral route” may lead to persuasion, Petty and Wegener (1998) reported that the “central route” was more likely to be successful. Changes in behaviour arising from attitude changes tend to last longer, and attitude changes are more likely to occur if people have been presented with logical content on which to “elaborate.” Petty and Cacioppo (1986) conclude that ‘central route’ attitude changes are better predictors of behaviour than approaches associated with peripheral processes.

While the teacher-centric conception of authenticity is appropriate in the classroom context, it appears that a broader conceptualization of authenticity, one that incorporates bureaucratic as well as pedagogical initiatives, is needed. For example, often principals and school board personnel are responsible for facilitating teacher professional development.
Whereas authenticity has been discussed above in a teacher-centric context, a consideration of results from this study and prominent themes in the literature might suggest that, additionally, at the systems and leadership level, a more elaborate protocol might enhance the ability of teachers, school leaders and other education stakeholders to proceed authentically in “systemic alignment.”

Finally, while the internal/external framework of this study was appropriate for identifying inanimate elements in a predictive model, participant responses signifying an “internalizing of external influences” suggest that these internal and external elements do not exist in sterile, isolated environments. That is, as teachers progress in their careers, the line of distinction between internal and external influences may fade as external factors become internalized. In this regard, in order to reflect the vitality present in the real world of education systems, and following from the preceding comments regarding “systemic alignment,” an open systems approach that accommodates a more organic, symbiotic process might be warranted. Future research is encouraged that might develop a robust, vibrant theoretical framework within which such a pathway to system-wide authenticity can be better understood.
References


Appendix A:

Semi-structured Interview Questions

1. Bearing in mind the humanistic custodial range, how would you characterize your classroom management style?

2. What influences (internal or external) have had the strongest influence on your classroom management style? (Why?)

3. How is your approach to teaching (classroom management) different now than as a pre-service teacher?

4. Which factors (internal/external) were more important then (during pre-service) and now? Explain.

5. What else do you want us to know about your teaching style and the factors that have contributed to this?
Appendix B:

Demographic and Experiential Questionnaire

1. From which university did you receive your B. Ed.?

2. What year did you graduated from the B. Ed. program? _______

3. From which program did you graduate?
   - Concurrent B. Ed.
   - Consecutive B. Ed.

4. Which level of the program did you complete?
   - Primary/Junior
   - Junior/Intermediate
   - Intermediate/Senior

5. What is your current age?
   - Lower than 25
   - 25 to 29
   - 30 to 34
   - 35 to 39
   - Higher than 39

6. What is your gender?
   - Female
   - Male

7. Are you currently a
   - Permanent contract teacher?
   - Probationary contract teacher?
   - Long-term Occasional Teacher?
   - Occasional Teacher?

8. Allowing for 194 teaching days in a school year, estimate how many days you have been in school as a teacher since your graduation.
   - Less than 200
   - At least 200, but less than 600
   - 600 or more

9. At what level have you spent the majority of your teaching days?
   - Primary/Junior
   - Junior/Intermediate
   - Intermediate/Senior

10. Please identify the primary location in which your teaching has occurred.
    - Rural
    - Suburban
    - Urban

11. Overall, would the classroom management style of the teachers who have influenced your classroom practice since you completed your B. Ed. be most accurately characterized as
    - Student-directed?
    - Collaborative?
☐ Teacher-directed?

12. Are you currently participating in, or did you in the past, participate in a board or school sponsored new teacher induction program?
   ☐ Yes
   ☐ No

13. How important is/was the induction program in shaping your teaching practice?
   ☐ Highly important
   ☐ Moderately important
   ☐ Minimally important
   ☐ Not at all important
Appendix C:

PCI Form

DIRECTIONS: FOLLOWING ARE TWENTY STATEMENTS ABOUT SCHOOLS, TEACHERS, AND PUPILS. PLEASE INDICATE YOUR PERSONAL OPINION ABOUT EACH STATEMENT BY CIRCLING THE APPROPRIATE RESPONSE AT THE RIGHT OF THE STATEMENT.

<table>
<thead>
<tr>
<th>Statement</th>
<th>5 =Strongly Agree</th>
<th>4 =Agree</th>
<th>3 =Undecided</th>
<th>2 =Disagree</th>
<th>1 =Strongly Disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. It is desirable to require pupils to sit in assigned seats during assemblies.</td>
<td>5</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Pupils are usually not capable of solving their problems through logical reasoning.</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>3. Directing sarcastic remarks toward a defiant pupil is a good disciplinary technique.</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>4. Beginning teachers are not likely to maintain strict enough control over their pupils.</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>5. Teachers should consider revision of their teaching methods if these are criticized by their pupils.</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>6. The best principals give unquestioning support to teachers in disciplining pupils.</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>7. Pupils should not be permitted to contradict the statements of a teacher in class.</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>8. It is justifiable to have pupils learn many facts about a subject even if they have no immediate application.</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>9. Too much pupil time is spent on guidance and activities and too little on academic preparation.</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>10. Being friendly with pupils often leads them to become too familiar.</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>11. It is more important for pupils to learn to obey rules than that they make their own decisions.</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>12. Student governments are a good “safety valve” but should not have much influence on school policy.</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>13. Pupils can be trusted to work together without supervision.</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>14. If a pupil uses obscene or profane language in school, it must be considered a moral offense.</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>15. If pupils are allowed to use the lavatory without getting permission, this privilege will be abused.</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>16. A few pupils are just young hoodlums and should be treated accordingly</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>17. It is often necessary to remind pupils that their status in school differs from that of teachers.</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>18. A pupil who destroys school material or property should be severely punished</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>19. Pupils cannot perceive the difference between democracy and anarchy in the classroom</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>20. Pupils often misbehave in order to make the teacher look bad</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
</tbody>
</table>

Appendix D:

Educational Beliefs Questionnaire

<table>
<thead>
<tr>
<th>EDUCATIONAL BELIEFS QUESTIONNAIRE</th>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Partially Agree</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>1.</strong> The curriculum should contain an orderly arrangement of subjects that represent the best of our cultural heritage.</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td><strong>2.</strong> Students learning from other students is an important component of any learning environment</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td><strong>3.</strong> Schools should be sources of new social ideas</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td><strong>4.</strong> Demonstration and recitation are essential components for learning.</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td><strong>5.</strong> Schools exist to foster the intellectual process.</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td><strong>6.</strong> Schools exist to facilitate self-awareness.</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td><strong>7.</strong> There are essential skills all students must learn.</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td><strong>8.</strong> Teaching should center around the inquiry method.</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td><strong>9.</strong> Students should be allowed more freedom than they usually get in the execution of learning activities.</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td><strong>10.</strong> Students need and should have more supervision and discipline than they usually get.</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td><strong>11.</strong> Teachers should be facilitators of learning.</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td><strong>12.</strong> Schools exist to preserve and strengthen spiritual and social values.</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td><strong>13.</strong> Drill and factual knowledge are important components of any learning.</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td><strong>14.</strong> Ideal teachers are constant questioners.</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td><strong>15.</strong> Students should play an active part in program design and evaluation.</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td><strong>16.</strong> There are essential pieces of knowledge that all students should know.</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td><strong>17.</strong> Right from the first grade teachers must teach the student at his/her level and not at the level of the grade he/she is in.</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td><strong>18.</strong> The curriculum should focus on social problems and issues.</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td><strong>19.</strong> The student should be a receiver of knowledge.</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td><strong>20.</strong> The teacher should be a strong authority figure in the classroom.</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
</tbody>
</table>
### Appendix E:

**Transformational Leadership Questionnaire**

*Transformational Leadership Questionnaire*

(Ross & Gray, 2006b)

Directions: Please indicate the degree to which you agree or disagree with each of the following statements by circling the appropriate number.

<table>
<thead>
<tr>
<th>Transformational Leadership Questionnaire</th>
<th>Strongly disagree</th>
<th>Strongly agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Leaders in this school do not set a respectful tone for interaction with students.</td>
<td>1 2 3 4 5 6</td>
<td></td>
</tr>
<tr>
<td>2. Leaders in this school are unwilling to change own practices in light of new understandings.</td>
<td>1 2 3 4 5 6</td>
<td></td>
</tr>
<tr>
<td>3. Leaders in this school model problem solving techniques I can readily adapt for my work.</td>
<td>1 2 3 4 5 6</td>
<td></td>
</tr>
<tr>
<td>4. Leaders in this school promote an atmosphere of caring and trust among staff.</td>
<td>1 2 3 4 5 6</td>
<td></td>
</tr>
<tr>
<td>5. Leaders in this school fail to symbolize success and accomplishment within our profession.</td>
<td>1 2 3 4 5 6</td>
<td></td>
</tr>
<tr>
<td>6. Leaders in this school are not aware of my unique needs and expertise.</td>
<td>1 2 3 4 5 6</td>
<td></td>
</tr>
<tr>
<td>7. Leaders in this school provide moral support by making me feel appreciated for my contribution.</td>
<td>1 2 3 4 5 6</td>
<td></td>
</tr>
<tr>
<td>8. Leaders in this school do not stimulate me to think about what I am doing for my students.</td>
<td>1 2 3 4 5 6</td>
<td></td>
</tr>
<tr>
<td>9. Leaders in this school do not encourage me to pursue my own goals for professional learning.</td>
<td>1 2 3 4 5 6</td>
<td></td>
</tr>
<tr>
<td>10. Leaders in this school encourage us to evaluate our practices and refine them as needed.</td>
<td>1 2 3 4 5 6</td>
<td></td>
</tr>
<tr>
<td>11. Leaders in this school encourage me to try new practices consistent with my own interests.</td>
<td>1 2 3 4 5 6</td>
<td></td>
</tr>
<tr>
<td>12. Leaders in this school do not have high expectations for us as professionals.</td>
<td>1 2 3 4 5 6</td>
<td></td>
</tr>
</tbody>
</table>