Secondary Pre-service Teachers' Perceptions of an Ideal Classroom Environment

Frederick J. Bartelheim and Daniel R. Conn
University of Northern Colorado

The classroom environment can impact students’ motivation and engagement, and can influence students’ academic learning. In some cases, pre-service teachers’ influence on the classroom environment may not always be conducive for student learning. This exploratory study investigated pre-service teachers’ perceptions of an ideal classroom environment. Specifically, this study focused on the effect of a 16 week initial field experience, and the school level (high school or middle school) of the field experience on secondary pre-service teachers’ perceptual changes of an ideal classroom environment. As a means of collecting data to address the focus of this study, the participants completed the Classroom Environment Scale (Form I) on three different occasions during the initial field experience. Results of the data analysis revealed that the participants’ perceptions of an ideal classroom environment remained consistent but were focused on attributes that contribute to a classroom environment conducive to academic success.

Keywords: classroom environment, secondary pre-service teachers, classroom perceptions, field experiences

The classroom environment is often considered a predictor of students’ academic achievement and school satisfaction (Pickett & Fraser, 2010; Fraser, 2007). As Patrick, Kaplan, and Ryan (2011) note, the classroom environment impacts students’ motivation, engagement, and achievement. Efforts of reform in teacher preparation programs have focused on the need to address classroom environments as part of pre-service teachers’ training. Generally, this need is addressed through initial, intermediate, and advanced field experiences that focus, in part, on pre-service teachers’ observations of classroom practices conducive to academic and social learning.

Initial field experiences can represent a viable means of gathering information about pre-service teachers’ perceptions about classroom events (Montecinos et al., 2011; Clift & Brady 2005). The initial field experience was used in this study to investigate secondary pre-service teachers’ perceptual changes of an ideal or preferred classroom environment.

In this study, an ideal classroom environment was defined as a classroom environment that maintains such attributes as student involvement, positive relationships between students and teachers, planned activities, organized functions, varied class activities, creative thinking, and the use of new and/or varied instructional techniques. These attributes have been found to contribute to academic success by various studies that have investigated classroom environments (Allodi, 2010; Meece, Anderman, & Anderman, 2006; Patrick, Kaplan, & Ryan; 2011; Zedan, 2010).

As a means of gathering information about the perceptions of an ideal classroom environment, the participants in this study completed the Classroom Environment Scale (Form I) (Moos & Trickett, 1986) on three different occasions during a 16 week initial field experience. The Classroom Environment Scale (CES) was selected because Form I of the instrument addresses value orientations by measuring perceptions of an environment ideally liked or preferred (Fraser & Fraser, 1986).
Results of the data analysis revealed that the participants’ perceptions of an ideal or preferred classroom environment remained consistent during the initial field experience. However, their preferences focused, for the most part, on attributes that contribute to a classroom environment conducive to academic success.

**Review of the Literature**

Research has shown that the classroom environment can be a predictor of students’ academic achievement and school satisfaction (Evans, Harvey, Buckley, & Yan, 2009; LaRocque, 2008; Fouts, 1990) and that a positive classroom environment will encourage students to be more excited about their school experience and their learning (Evertson, Emmer, & Worsham, 2006). Others have found that the classroom environment can strongly influence affective, behavioral, and cognitive learning outcomes, and that the environment of the classroom is a teaching construct that consistently influences academic learning (Fraser & Tobin, 1991). If teachers positively impact the classroom environment, they positively motivate students’ academic success (Evans et al., 2009).

Classroom environments can affect teachers as well. Grayson and Alvarez (2008) found that the classroom environment can contributed to teacher burnout, especially with regard to emotional exhaustion. Negative events in the classroom and/or school setting are likely to impact a teacher’s decision to leave the profession (Martin, Sass, & Schmitt, 2012). High rates of teacher turnover can affect a school’s effectiveness (Darling-Hammond, 2003) and have a detrimental impact on student learning (Guin, 2004). As such, supportive and friendly classroom environments are critical for retaining effective teachers (Pickett & Fraser, 2010).

Given the complexity of the classroom environment, pre-service teachers are often uncertain about how to mentally process and make decisions about classroom events. Studies that have investigated pre-service teachers and classroom environments have found that pre-service teachers’ impact on the classroom environment may not always be conducive for student learning. In some cases, a classroom environment established by a pre-service teacher may tend to be low in academic achievement, low in objective thinking, low in practical applications of a skill or subject matter, and high in authority problems (LaRocque, 2008; Phifer, 2007).

Additionally, some university field supervisors and mentor teachers report that pre-service teachers, who are unsuccessful in their practicum, or field experiences, are not able to create a classroom environment conducive to academic, emotional, and social learning (Moore, 2003; Skrobola & Knowles, 1992). Phifer’s (2007) study of unsuccessful student teaching experiences found that classroom climate factors, over content knowledge factors, were cited as the primary reasons pre-service teachers were removed from the classroom.

Often a gap exists in teacher preparation programs between what teacher educators tell pre-service teachers regarding “life” in the classroom and what actually exists. As such, field experiences represent a component of teacher preparation generally focused on assisting pre-service teachers in connecting theory and practice (Fletcher & Luft, 2011). However, field experiences can have different intentions with regard to their purpose, objectives, and settings (Wilson, Floden, & Ferrini-Mundy, 2001). Some field experiences tend to focus on procedural concerns and routine tasks (e.g., lesson planning, management) (Fletcher & Luft, 2011), while others focus on teaching as an inquiry-oriented practice (Moore, 2003).

Kagan (1992) notes the importance of changing pre-service teachers’ beliefs during their field experiences, as effecting personal beliefs makes effecting teacher behavior possible. For example, Ng, Nicholas, and Williams (2010) found a significant shift among the pre-service teachers in their study from an initial belief that good teaching means being in control, to a belief in good teaching means building relationships with students. As Allodi (2010) and Zedan (2010) found, the climate in educational environments is often shaped by the relationships between teachers and students, and among students themselves.

Many research studies on field experiences tend to focus on the student teaching phase, moderately on intermediate field experiences, with fewer investigating initial field experiences (Montecinos et al., 2011). Research focused on the effect and impact of field-based coursework in teacher preparation needs to be broad-based, inclusive of all phases of field experiences (Clift & Brady 2005; Wilson, Floden, & Ferrini-Mundy, 2002).

In this study, the initial field experience was used to collect data on the participants’ perceptions of an ideal or preferred classroom environment. Specifically, this study investigated the effect that an initial field experience and the school level of the field experience had on the participants’ perceptions of an ideal classroom environment.

**Research Questions**

Two research questions were investigated in this exploratory study:

1. What changes, if any, in secondary pre-service teachers’ perceptions of the ideal classroom environment changed as a result of an initial field experience?
2. What effect, if any, does the school level (High School or Middle School) have on secondary pre-service teachers’ perceptions of an ideal classroom environment?

**Method**

**Participants**

This study took place at a mid-size university in a western state whose primary mission is teacher education. Thirty-six secondary pre-service teacher education
students, 16 males and 20 females, participated in this study. The participants ranged in age from 19 to 26, with a median age of 20.

At the time of this study, all of the participants were sophomores or juniors enrolled in the university’s secondary teacher education program. Also, the participants were completing a 16 week initial field experience in either a public high school (grades 9-12) or a public middle school (grades 7-8). Twenty-four of the participants were completing the field experience in a high school setting, and twelve of the participants were completing the field experience in a middle school setting.

All of the schools in this study are located in a mid-size suburban school district with over 20,000 students. Sixty-five percent of the students represent various cultural backgrounds inclusive of Hispanic, Asian/Pacific Islander, and African-American. The median household income for families in this district is approximately $52,000 with over sixty percent of the students qualifying for free or reduced lunch programs.

**Procedure**

Each participant in this study completed the Classroom Environment Scale (Form I) (Moos & Trickett, 1986) on three different occasions during a 16 week initial field experience. Specifically, the participants first completed the Classroom Environment Scale (Form I) during week one of their field experience, again during week eight of their field experience, and again during week sixteen of their field experience.

At the time of each administration, all of the participants were completing a field experience in a high school or a middle school setting. The overall goal of the initial field experience in the university’s secondary teacher education program is to provide teacher candidates an authentic school environment to observe everyday teaching practice. Teacher candidates are placed in classrooms with certified teachers in their area of content.

At the beginning of the field experience, teacher candidates observe the classroom setting and instruction being provided. As the semester progresses, teacher candidates participate with the classroom students under the direction of the classroom teacher. Generally, this participation includes providing individual, small group, or large group instruction based on the teacher candidate’s comfort level.

**Instrumentation**

In this study, the Classroom Environment Scale (CES) Form I (Moos & Trickett, 1986) was used as a means of gathering information about the participants’ perceptions of an ideal classroom environment during an initial field experience. Since its development, the CES has been widely used in studies to capture perspectives about educational environments. For example, Raviv, Raviv, and Reisel (1990) used the CES to investigate teachers’ and students’ perceptions of an actual and preferred classroom environment in 78 sixth grade classroom settings. Also, Baek and Choi (2002) used the CES to measure the psychological characteristics of the classroom environment. McEachron, Baker, and Bracken (2003) investigated the relationship between academic disciplines and teacher/student interactions using the Classroom Environment Scale. The CES (Form I) was selected for this study because the instrument addresses value orientations by measuring perceptions of an environment ideally liked or preferred (Fraser & Fraser, 1986).

The CES (Form I) is divided into three conceptual dimensions of the classroom environment; Relationship, Personal Growth/Goal Orientation, and Systems Maintenance and Change. The Relationship dimension addresses student involvement in the classroom, as well as feelings of friendship between students, and teachers’ support of students.

The Personal Growth/Goal Orientation dimension emphasizes completing planned activities, as well as students’ competition for recognition and grades. The Systems Maintenance and Change dimension addresses organized and coherent functions in the classroom and the amount of variety in class activities.

The higher the mean on a conceptual dimension indicates a preference for this classroom dimension in an ideal classroom environment. The lower the mean would indicate that this classroom dimension is least preferred in an ideal classroom environment. The mean on each conceptual dimension of the CES (Form I) can range from 1 to 10.

The CES (Form I) contains nine subscales (Involvement, Affiliation, Teacher Support, Task Orientation, Competition, Order and Organization, Rule Clarity, Teacher Control, and Innovation), each containing 10 true/false items representing the three conceptual dimensions (Figure 1). Examples of items on the CES (Form I) are: “Students will put a lot of energy into what they do here.” (Involvement), and “The teacher will explain what will happen if a student breaks a rule.” (Rule Clarity), and “Students in this class will get to know each other really well” (Affiliation).

The nine CES subscales internal consistency range from .67 to .86. Test-retest reliabilities range from .85 to .95; content validity was established by independent raters’ agreement of the items for the three conceptual dimensions (Moos & Trickett, 1974; Trickett & Quinlan, 1979). The higher the mean on a subscale indicates the participants’ preference for this classroom component in an ideal classroom environment. The lower the mean would indicate that this component is least preferred in an ideal classroom environment. The mean on each subscale of the CES (Form I) can range from 1 to 10.
Data Analysis and Results

When using the Classroom Environment Scale, means and standard deviations are commonly reported; means are examined for any statistical significance (for example, see Raviv et al., 1990). The data in this study was generated by the completion of Form I of the Classroom Environment Scale (CES) on three different occasions during the participants’ 16 week initial field experience. Means and standard deviations for each of the three CES conceptual dimensions and the nine subscales within each dimension were calculated for the total participant group.

In addition, the calculated means and standard deviations of the CES dimensions and the related subscales were categorized based on the school level field experience setting (high school, middle school).

In this study, differences for the means in the aforementioned cases were analyzed by the use of a one-factor repeated measures ANOVA (p<.05) to detect any overall differences between the related means. This statistical test was used because this study investigated perceptual changes of the participants over three points in time and employed the same instrument each time.

The statistical analysis revealed that no significant changes were found in the perceptions of an ideal or preferred classroom environment for the total participant group. This would suggest that the initial field experience did not necessarily influence their perceptions of an ideal classroom environment.

However, an examination of the means and standard deviations on all CES dimensions and related subscales did reveal a consistent preference of an ideal classroom environment among the total participant group. In other words, the participants remained comparatively consistent on all three dimensions and the related nine subscales of the CES and were focused mainly on attributes that contribute to a classroom environment conducive to academic success.

As Table 1 indicates, the participants’ of this study relatively prefer a classroom environment that supports student involvement, a feeling of friendship between students, and teacher support of students (as measured by the Relationship dimension). An emphasis on completing planned activities, as well as a moderate level of competition among students for recognition and grades (Personal Growth/Goal Orientation dimension), appears to be preferred by the participants of this study. Finally, organized and coherent functions in the classroom, and a variety of class activities as measured by the System Maintenance & Change dimension indicates a reasonable preference for these participants.

Table 1
Means and Standard Deviations of the CES Dimensions for the Total Participant Group (N = 36)

<table>
<thead>
<tr>
<th>CES Dimension</th>
<th>Week 1 of the Field Experience</th>
<th>Week 8 of the Field Experience</th>
<th>Week 16 of the Field Experience</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>M</td>
<td>SD</td>
<td>M</td>
</tr>
<tr>
<td>Relationship</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Involvement</td>
<td>7.17</td>
<td>2.12</td>
<td>7.33</td>
</tr>
<tr>
<td>Affiliation</td>
<td>7.22</td>
<td>1.97</td>
<td>7.11</td>
</tr>
<tr>
<td>Teacher Support</td>
<td>6.68</td>
<td>2.05</td>
<td>7.21</td>
</tr>
<tr>
<td>Personal Growth/Goal Orientation</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Task Orientation</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Competition</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Means and standard deviations for each of the nine CES subscales were also analyzed for the total participant group. As Table 2 indicates, six of the nine subscales,
(Involvement, Affiliation, Teacher Support, Task Orientation, Order & Organization, and Rule Clarity) represent a relative preference of these components in an ideal classroom environment. In other words, the participants prefer classrooms where students participate in classroom activities, have a sense of friendship among classmates, experience teacher support, complete planned activities, maintain a level of order and organization, and have established rules and procedures.

Three of the nine subscales (Competition, Teacher Control, and Innovation) represent a more or less emphasis on these components in an ideal classroom environment. As such, the participants prefer a classroom with moderate levels of student competition for grades and recognition, teacher control, student contribution in classroom activities, as well as the teacher's use of new techniques and encouragement of creative thinking.

Table 2
Means and Standard Deviations of the CES Subscales for the Total Participant Group (N = 36)

<table>
<thead>
<tr>
<th>CES Subscales</th>
<th>Week 1 of the Field Experience</th>
<th>Week 8 of the Field Experience</th>
<th>Week 16 of the Field Experience</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>M</td>
<td>SD</td>
<td>M</td>
</tr>
<tr>
<td>Involvement</td>
<td>7.39</td>
<td>2.31</td>
<td>7.67</td>
</tr>
<tr>
<td>Affiliation</td>
<td>6.36</td>
<td>2.70</td>
<td>6.86</td>
</tr>
<tr>
<td>Teacher Support</td>
<td>7.78</td>
<td>1.35</td>
<td>7.47</td>
</tr>
<tr>
<td>Task Orientation</td>
<td>7.53</td>
<td>2.31</td>
<td>8.08</td>
</tr>
<tr>
<td>Competition</td>
<td>5.83</td>
<td>1.78</td>
<td>6.33</td>
</tr>
<tr>
<td>Order &amp; Organization</td>
<td>8.28</td>
<td>2.06</td>
<td>8.36</td>
</tr>
<tr>
<td>Rule Clarity</td>
<td>8.64</td>
<td>1.55</td>
<td>8.22</td>
</tr>
<tr>
<td>Teacher Control</td>
<td>5.42</td>
<td>2.06</td>
<td>5.58</td>
</tr>
<tr>
<td>Innovation</td>
<td>6.56</td>
<td>2.20</td>
<td>6.28</td>
</tr>
</tbody>
</table>

Data in this study was also grouped and analyzed based on the school level experience (High School and Middle School). The statistical test revealed that no significant changes were found in the perceptions of an ideal or preferred classroom environment based on the school level experience (Table 3). As such, the participants remained somewhat consistent on the all three CES dimensions.

Table 3
Means and Standard Deviations of the CES Dimensions by School Level of Field Experience*

<table>
<thead>
<tr>
<th>CES Dimension by School Level</th>
<th>Week 1 of the Field Experience</th>
<th>Week 8 of the Field Experience</th>
<th>Week 16 of the Field Experience</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>M</td>
<td>SD</td>
<td>M</td>
</tr>
<tr>
<td>Relationship</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>High School</td>
<td>7.33</td>
<td>1.95</td>
<td>7.32</td>
</tr>
<tr>
<td>Middle School</td>
<td>6.83</td>
<td>2.44</td>
<td>7.36</td>
</tr>
<tr>
<td>Personal Growth or Goal Orientation</td>
<td>6.77</td>
<td>2.09</td>
<td>7.15</td>
</tr>
<tr>
<td>High School</td>
<td>6.77</td>
<td>2.09</td>
<td>7.15</td>
</tr>
<tr>
<td>Middle School</td>
<td>6.71</td>
<td>2.02</td>
<td>7.33</td>
</tr>
<tr>
<td>System Maintenance &amp; Change</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>High School</td>
<td>7.09</td>
<td>2.00</td>
<td>7.08</td>
</tr>
<tr>
<td>Middle School</td>
<td>7.48</td>
<td>1.87</td>
<td>7.17</td>
</tr>
</tbody>
</table>

*High School N = 24; Middle School N = 12

Finally, the data in this study was also examined in regards to the nine subscales of the CES based on the school level field experience setting (High School and Middle School). As Table 4 indicates, the participants
were somewhat consistent on the subscales of Involvement, Affiliation, Teacher Support, Task Orientation, Order & Organization, and Rule Clarity indicating a relative preference of these attributes in an ideal classroom environment. The three subscales of Competition, Teacher Control, and Innovation indicate a preferred classroom with moderate levels of these components.

The analysis of the data based on the participants’ content major and gender did not yield any significant and/or statistical differences.

**Discussion**

The focus of this exploratory study was to investigate the effect of a 16 week initial field experience, and the school level of the field experience, on secondary pre-service teachers’ perceptual changes of an ideal classroom environment. Although relatively consistent throughout their initial field experience, these perceptions, or preferences, focused mainly on attributes that contribute to a classroom environment conducive to academic success.

The analysis of the data regarding the three dimensions of the CES for the total participant group indicates that the perceptions of an ideal classroom environment includes preferences for a classroom that supports student involvement, a feeling of friendship between students, and teacher support of students. This finding is similar to Allodi’s (2010) study on the climate in educational environments and Zedan’s (2010) study on classroom climate. Both studies’ results revealed that classroom environments are influenced by relationships among students, the relationships between teachers and students, and a sense of involvement.

Additionally, completing planned activities, organized and coherent functions in the classroom, and a variety of class activities indicates a reasonable preference of an ideal classroom environment for the participants of this study.

The analysis of the data regarding the nine subscales reveals a more in-depth view of the participants’ preferences of an ideal classroom environment. These preferences include classrooms where students participate in classroom activities, have a sense of friendship among class peers, experience teacher support, complete planned activities, maintain a level of order and organization, and have established rules and procedures.

One additional finding based on the nine subscales indicates that the participants prefer a classroom with moderate levels of student competition for grades and recognition, teacher control, student contribution in classroom activities, as well as the teacher’s use of new techniques and encouragement of creative thinking. Two of these preferences, student competition for grades and recognition along with teacher control, may not necessarily be optimal for student success in the classroom (Nichols & Zhang, 2011).

Since these preferences emerged during an initial field experience, intermediate and advanced field experiences may influence these preferences. As Kagan (1992) states, field experiences represent an important opportunity for changing pre-service teachers’ beliefs that may lead to more effective teaching behavior.

However, students’ contributions in classroom activities, and new techniques and encouragement of creative thinking have been reported as classroom components for student success (Patrick et al., 2011; Meece et al., 2006).

As with any research endeavor, the findings of this exploratory study should be considered in light of some limitations. First, the sample size (N = 36) in this study may limit the generalizability of the findings. Future research could increase the participant number as a means of presenting a broader view of pre-service teachers’ perceptions of an ideal classroom setting as measured during an initial field experience.

Second, data was only collected during an initial field experience. Although a viable level of field experience to investigate, additional research in this area could follow and collect data as the participants complete intermediate and advanced field experiences. This may provide useful information regarding the effect these levels of field experiences have on pre-service teachers’ changing perceptions, or preferences, of attributes that contribute to a classroom environment conducive to academic success.

Finally, the initial field experiences that the participants in this study completed did not represent an even distribution among the school settings. This may also limit the generalizability of the findings. Future research could focus on just one school level which may provide a more extensive view of pre-service teachers’ perceptions of an ideal classroom environment at that particular school level.

Since research has shown that a positive classroom environment affects students’ academic achievement, the classroom environment is an important issue to focus on during initial, immediate, and advanced levels of field experiences in teacher preparation. In this study, the participants’ perceptions of an ideal classroom environment focused primarily on those attributes that contribute to academic success. This suggests that teacher education programs design field experiences that assist prospective teachers’ in establishing classroom environments that positively motivate students’ academic learning.

Field experiences are a critical component of teacher preparation and can benefit pre-service teachers in multiple ways, including the opportunity to connect the conceptual and theoretical knowledge gleaned from teacher preparation coursework. Given the level of the field experience, the focus for the pre-service teacher may vary. However, field experiences must be carefully structured to provide the learning desired and the learning that encompasses all aspects of the professional role (Hanline, 2010).
In addition to procedural concerns and routine tasks, field experiences that address aspects of the classroom environment will better prepare prospective teachers for their future classrooms and schools. As Fraser and Tobin (1991) have found, the environment of the classroom is a teaching construct that consistently influences academic learning.

References


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Author Notes
Frederick J. Bartelheim
University of Northern Colorado
School of Teacher Education
McKee 284
Greeley, Colorado 80639
frederick.bartelheim@unco.edu

Frederick J. Bartelheim is a Professor in Educational Foundations and Curriculum Studies in the School of Teacher Education at the University of Northern Colorado. He is the Coordinator of the Masters of Arts in Teaching: Curriculum Studies Program. His research interests include teacher preparation, educational foundations, curriculum, and web-based teaching.

Daniel R. Conn
University of Northern Colorado
School of Teacher Education
McKee 216
Greeley, Colorado 80639
conn0906@bears.unco.edu

Daniel R. Conn is a doctoral student in the School of Teacher Education at the University of Northern Colorado, pursuing his Ed. D. in Educational Studies: Curriculum, Innovations, and Education Reform. His research interests include teacher preparation, curriculum, rural education, and web-based teaching.