This study investigated primary grade literacy teachers' knowledge of and practices in alternative assessment by examining the relationship between each and by identifying factors which influence each. Data collection consisted of a survey of 73 elementary schools within one Intermediate Unit in Pennsylvania. Both quantitative and qualitative measures were analyzed to answer proposed research questions. Primary grade literacy teachers (n=482) were asked to respond to questions relating to their school and professional attributes, the professional development opportunities afforded them, and their knowledge or and practices in alternative assessment. Survey findings from 159 respondents show that small class size, district-sponsored training, and sufficient time for planning, implementation, collaboration, and reflecting contributed overall to teachers' knowledge of and practices in alternative assessment. Teacher knowledge of alternative assessment was also enhanced by administrator support, the availability of resources, the amount of scholarly reading done by teachers, and nondistrict-sponsored training. Teacher practices in alternative assessment were shown to increase when administrator support, sufficient resources, scholarly reading, and the professional freedom to choose assessment techniques increased. Based on these results, several recommendations for educators are made to prompt more effective assessment in primary grade classrooms. (Contains 5 tables and 28 references.) (Author/SLD)
Alternative Assessment: Primary Grade Literacy Teachers' Knowledge and Practices

Linda Doutt Culbertson
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Alternative Assessment:

Primary Grade Literacy Teachers’ Knowledge and Practices

Linda Doutt Culbertson and Wenfan Yan

Abstract

This research study investigated primary grade literacy teachers’ knowledge of and practices in alternative assessment by examining the relationship between each and by identifying factors which influence each. Data collection consisted of a survey method which included elementary schools (N = 73) within one Intermediate Unit in the state of Pennsylvania and in which both quantitative and qualitative measures were analyzed to answer proposed research questions. Primary grade literacy teachers (N = 482) were asked to respond to questions relating to their school and professional attributes, the professional development opportunities afforded to them, and their knowledge of and practices in alternative assessment. Survey results (N = 159) showed that small class size, district-sponsored training, and sufficient time for planning, implementation, collaboration, and reflection contributed overall to teachers’ knowledge of and practices in alternative assessment. Teacher knowledge of alternative assessment was also enhanced by administrator support, the availability of resources, the amount of scholarly reading done by teachers, and nondistrict-sponsored training. Teacher practices in alternative assessment were shown to increase when administrator support, sufficient resources, scholarly reading, and the professional freedom to choose assessment techniques increased. Based upon these results, several recommendations for educators are made to promote more effective assessment in primary grade classrooms.
Purpose of the Study

A recent report by the American School Board Association (Banach, 2001) highlighted “what’s hot and what’s not” in the world of education. Among those included as popular topics in educational circles were such things as expediency and achieving results. Those not so popular included leadership, the real world, enjoyment of school by students, and relevance. The following study, thereby, counters what is most popular in education today, and follows a paradigm of constructivism, a paradigm of what many educators agree is best practice for teaching and learning in all grades, but most essentially in the primary grades. As the public increasingly holds teachers more accountable for student progress, educators must seek to define not what is popular, but to address what works when assessing the progress of students.

The premise of this paper is that educators want the best programs possible for their students. Along with quality instruction, a major concern of literacy educators is the effort to monitor student progress (Taylor, et al., 2000) and thereby to reform assessment procedures to adequately reflect student needs. The role that schools in general, and teachers in particular, can play in providing assessment programs which truly demonstrate student learning is stressed in much of the current scholarly literature (Birenbaum & Feldman, 1998; Birrell & Ross, 1996; Earl & LeMahieu, 1997; Popham, 2001; Roe & Vukelich, 1997; Supovitz & Brennan, 1997; Tomlinson, 2001). With the ultimate goal of boosting academic achievement and emotional well being, alternative assessment has cultivated the interest of states, districts, individual schools, and classroom teachers as a reform that can bring about needed change (Kane & Khattri, 1995). Although many schools have attempted to implement alternative assessment
programs, little has been done neither to identify the components that contribute to successful implementation of those programs nor to contemplate why some programs produce positive results while others do not.

Ultimately, innovative assessment programs aimed at improving academic achievement and emotional well being of young children will depend largely on the skills of teachers (Jalongo, 2000). Although current literature supports the use of alternative assessment as a dynamic key to educational reform, our knowledge concerning the types and quality of support for teachers using alternative assessment is far less sustained. Little attention has been devoted to determining the state of teachers’ knowledge concerning alternative assessment nor to how teacher knowledge actually affects instructional practices. The present study addresses these issues by directly surveying classroom teachers to determine their knowledge of and practices in alternative assessment.

The purposes of this survey study are: 1) to investigate and examine the relationship between primary grade literacy teachers’ knowledge of and instructional practices in alternative assessment; and 2) to identify factors influencing primary grade literacy teachers’ knowledge of and practices in alternative assessment.

Theoretical Framework

Because assessment is the process of finding out what children know, can do, and are interested in (Darling-Hammond, Ancess, & Falk, 1995), it is based upon not only knowledge of content, but upon how students are thinking and processing information as well (Wittrock & Baker, 1991). Alternative assessment is concerned with a child’s actual performance over time on activities which are relevant to the learner and therefore is based upon “real life” experiences (Wiggins, 1993). In contrast to more traditional
assessment measures such as standardized testing or multiple-choice exams, alternative assessment is heralded as a more efficient way to determine the learning processes and strategies employed by students, and is seen as a way to discern what students are thinking (Glaser, 1991). Professional organizations such as The National Association for the Education of Young Children have discouraged the use of standardized testing procedures with primary grade children and have focused their efforts on providing high-quality alternative assessments which mirror the circumstances found in authentic experiences (Bredekamp & Copple, 1997; Perrone, 1991).

With its focus on improved instruction rather than comparisons of student achievement, Wittrock and Baker (1991) define worthy assessment as a process which "contributes diagnostic information about student preconceptions, comprehension strategies, attributions, and planning or metacognitive processes" (p. 1). Teachers can use information gained from assessment 1) to integrate classroom instruction and evaluation procedures (Shepard et al., 1996), 2) to provide evaluation techniques which are relevant to students (Travis, 1996), 3) to encourage students to take responsibility for their work (Gibboney & Webb, 2001), 4) to provide an ongoing, holistic picture of student performance (Shepard et al., 1996), and 5) to implement high quality instruction that is not only of interest to learners, but builds upon their knowledge and thought processes as well (Wittrock & Baker, 1991).

Although many practitioners recognize the potential of alternative assessment as a worthwhile endeavor in early childhood programs, many find the demands of such a practice to be threatening to its successful implementation. Studies of the Kentucky Instructional Results Information System (KIRIS), a high-stakes, performance-based
assessment program used to grant financial rewards to schools, support that teachers often feel ill-prepared to implement alternative assessment strategies (Guskey, 1994). “The perceptions of little time and lots of extra work, combined with inadequate experience, training, and materials, appeared to keep most teachers frozen in virtually the same instructional patterns that they had before the new assessment system” (Guskey, p. 53). Vitali (1993) supports this conclusion and adds that in most cases, alternative assessment programs alone do not cause teachers to change their instructional practices; only those teachers who teach in a manner conducive to the reform before alternative assessment programs are mandated provide instruction which reflects a constructivist theory of learning. Taken together, these studies suggest that only through intensive support for teachers in their efforts to meld assessment, instruction, and curriculum will positive changes in assessment practices occur (Kane & Khattri, 1995).

Although current research supports the use of alternative assessment as a valid and dynamic key to educational reform, the state of our knowledge concerning the types and quality of support for teachers using alternative assessment is far less supported. Even when educators are informed that they should be using alternative assessment, many are unaware of how to implement the practice in their classrooms (Abruscato, 1993; Roe & Vukelich, 1997). The perspectives of teacher knowledge and its effects on the instructional practices are imperative if changes in assessment programs are to reflect changes in literacy instruction as well (Allington, 1994; Au, 1993; Routman, 1996).

Thus, for educators, the question is less one of whether alternative assessment is a viable option and more of whether alternative assessment programs can be successfully implemented within current systems of curricular and instructional goals. Specifically,
the issue is not really one of assessment practices, but rather of the identification of positive influences on assessment practices that lead to improved literacy development.

Methods

A survey was conducted to examine primary grade literacy teachers' knowledge of and practices in alternative assessment. Schools were selected utilizing a list of districts provided by the Northwest Tri-County Intermediate Unit which consists of 17 school districts and 73 elementary schools in three counties in Pennsylvania. Completed and returned surveys numbered 159 (95.8% of those who signed consent forms). Data were collected during the 1998-1999 school year.

Content validity of the survey questionnaire was established through the ratings of early childhood literacy teachers, university professors, and school administrators. Only those statements which were agreed upon by 90% of the educators were considered for the final instrument. Piloting of the survey was then completed to evaluate survey items for clarity and balance. To achieve internal consistency, certain questions were rephrased and repeated on the questionnaire. Factor analysis was conducted to confirm that the survey instrument measured both teacher knowledge and practices. Reliability of the questionnaire was examined using Cronbach's alpha method. Results show that these coefficients ranged from .63 to .74.

The final survey instrument contained eight items referred to as Teacher/school attributes, which described such areas as teacher levels of education, years of experience, and school settings. The second portion of the questionnaire asked respondents to rate Likert items in order to describe their knowledge of and practices in alternative assessment. The third portion of the survey addressed the topic of Professional
Development Opportunities in areas such as administrator support, availability of resources, professional reading habits, and collegial interaction. Lastly, open-ended items were included on the survey instrument to invite respondents to write separate answers indicating their perceptions of alternative assessment.

Results

The first research objective was to specify characteristics which define primary grade literacy teachers' knowledge of and instructional practices in alternative assessment. Measures of central tendency and frequency distributions were utilized in the analysis of teacher and school attributes (Table 1) and professional development opportunities (Table 2).

(Place Table 1 and Table 2 about here.)

The area in which teachers most strongly indicated their knowledge of alternative assessment was teacher observation, with 95.6% indicating a positive response. Based on teachers' responses on the questionnaire, most primary grade literacy teachers feel that they have sufficient knowledge of alternative assessment in the areas of portfolios, graphic organizers, anecdotal records, classroom projects, and teacher observation. The area of peer evaluation was indicated as the one in which teachers had the least knowledge with only 52.2% of teachers indicating that they were comfortable with this form of assessment. Table 3 displays means and standard deviations for survey questions, which dealt with teacher knowledge of alternative assessment.

(Place Table 3 about here.)

The analysis also sought to describe primary grade literacy teachers' instructional practices in alternative assessment. Almost 85% of the surveyed teachers indicated that
they used some form of alternative assessment (e.g., portfolios, checklists, and projects) on a weekly basis. When asked if they used alternative assessment solely because their districts mandated it, 92.4% of respondents did not agree, indicating willingness on their part to utilize some form of alternative assessment. The area of teacher observation was the area in which most teachers agreed upon usefulness in their classrooms. Table 4 displays descriptive data for survey questions dealing with instructional practices in alternative assessment.

(Place Table 4 about here.)

In addition to describing teachers' knowledge and practices in alternative assessment, the relationship between the two areas was also investigated. Pearson correlation coefficients were computed to examine possible relationships between knowledge and practices with many significant at the .05 level. The most significant positive relationship found was between knowledge of portfolio assessment and teacher practice in the weekly use of portfolios \[r(159) = .445, p < .01\].

This study also sought to identify specific factors which influence primary grade literacy teachers' knowledge and practices. Teacher/school attributes (such as years of experience and class size) along with professional development opportunities (such as availability of resources and administrator support), which have been linked to successful reform efforts were examined. One way analysis of variance was computed to determine significant differences between each of the teacher/school attributes or professional development opportunities and those teachers who had higher degrees of knowledge of alternative assessment and those teachers who had higher use of or practice in alternative assessment. Class size was shown to have an impact on both knowledge and practices,
with smaller class-size resulting in higher mean values for teachers reported in all areas. Very few significant differences were noted in the areas of: (a) teachers' level of education; (b) years teaching experience; (c) teachers' total school enrollment; and (d) school demographic setting. Professional development opportunities, however, revealed significant differences in several areas. In many cases, teachers who reported stronger administrator support of alternative assessment had higher knowledge of and practices in the reform. Findings also indicated that teacher knowledge and practices were affected by the availability of resources, by the reading of scholarly journals, and by the freedom given to teachers to choose appropriate assessment strategies for their students. Overall, the results of analysis of variance indicate that there are specific teacher/school attributes and professional development opportunities that influence primary grade literacy teachers' knowledge of and practices in alternative assessment. Table 5 shows results of Inferential Analysis of these factors.

(Place Table 5 about here.)

In addition to quantitative analysis, participants were asked to respond to the following question on the survey instrument: What are some of the difficulties (constraints) in your practice of alternative assessment? Recurring themes, which appeared throughout the responses, were those of: (a) lack of time; (b) management difficulties; (c) difficulties in reporting; (d) lack of teacher knowledge; (e) large class size; and (f) reluctance to change. The lack of time was the number one item mentioned as a difficulty or constraint to teachers' practice of alternative assessment. A computer word count showed that the word "time" had 211 occurrences in teacher responses to this
question. In fact, of the 141 teachers who reported difficulties in their practice, 129 or about 91.5% reported the lack of time as a constraint.

In addition, a checklist was provided for teachers to indicate what types of assessment they used in their classrooms. Data indicate that almost all of the 159 participating teachers use the alternative practice of teacher observation as a form of assessment. Over half of the responding teachers also use the alternative assessment practices of: (a) portfolios; (b) journal writing; (c) open ended questions; (d) checklists; (e) anecdotal records; (f) projects; (g) demonstrations; and (h) student self-assessment.

Educational Importance of the Study

As public policy increasingly focuses on the accountability of teachers, the acknowledgment that classroom teachers must play a role in reforming assessment procedures to adequately reflect student needs must increase, thus fully recognizing the importance of teacher expertise in the process. Alternative assessment is lauded as a valid reform that can bring about needed change. However, this study confirms that teacher knowledge of alternative assessment alone is insufficient. Professional development opportunities must be provided for teachers in order to increase teacher practice.

In their study of schools which had successfully undergone restructuring initiatives, Newmann and Wehlage (1995) state,

When schools are unable to coordinate teachers' diverse aims for students into a curricular mission focused on high quality student learning, when teachers have few opportunities to work together to devise approaches suited to the school's student body, or when schools pursue multiple innovations without sustained,
long-term consistency, it is difficult for even the most gifted teachers to make a positive difference for students. (p. 29)

Allowing for varied background experiences of teachers, realizing the part played by teachers in the change process, and providing experiences in which continuous growth and development may occur, are key entities in reform efforts, not only for students, but for those who work with them as well. Implications for educators and policy makers resulting from this study include:

(a) Teacher knowledge and practices must be addressed simultaneously when initiating the reform of alternative assessment. Attempts to increase one area without the other may be futile. Traditional training, which focuses solely on increasing teacher knowledge will not suffice to improve teacher practices. Teachers must be given time for planning, implementation, collaboration, and reflection of their assessment program.

(b) Class size must be kept as low as possible to allow teachers to carry out an alternative assessment program. Meeting individual needs is an important element of alternative assessment which becomes increasingly difficult with each additional student.

(c) Teacher training must focus on developing one reform effort over time rather than targeting a different area with each teacher inservice. Sustained focus on alternative assessment may provide teachers with the time they need to make changes in their practice.
Sufficient resources must be provided for teachers to carry out alternative assessment programs. Physical supplies as well as human resources are necessary to successfully implement an alternative assessment program.

Conclusion

As the acknowledgment that classroom teachers must play a role in reforming assessment procedures to adequately reflect student needs increases, it is hoped that the expertise of teachers is fully recognized. The role of teacher knowledge must be recognized as a significant factor in teacher practices. With the ultimate goal of increasing the academic achievement and emotional well being of the students in their charge, teachers in this study view alternative assessment as a valid reform effort that with support can bring about needed change. Cizek (1995) states,

In sum, the real value of the emerging alternatives will be seen in whether they result in more attention to sound assessment practice, in more teacher involvement in designing high-quality assessment systems that respond to the individual needs of students, and in increased attention to the relationship between assessment and instruction. If these things occur, then the move toward assessment alternatives will be a tremendous benefit to American education. (p. 14)

As this study was limited to primary grade literacy teachers, further study is needed to determine additional factors which influence teacher knowledge and practices in alternative assessment. The survey data, supported by the Review of the Literature, presents a picture of alternative assessment as a complex, challenging, and worthwhile
endeavor, which overwhelmingly depends upon teacher knowledge and practices for its success in the classroom.
References


change with heart and mind (pp. 149-168). Alexandria, VA: Association for
Supervision and Curriculum Development.


http://www.elibrary.com


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<th>Teacher and School Attributes</th>
<th>N</th>
<th>Mean</th>
<th>Std. Deviation</th>
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<td>Years taught</td>
<td>159</td>
<td>16.840</td>
<td>9.5300</td>
</tr>
<tr>
<td>Current number of students in class</td>
<td>156</td>
<td>22.110</td>
<td>8.6500</td>
</tr>
<tr>
<td>Number of teachers in building who teach in same grade or area of specialization</td>
<td>159</td>
<td>3.2800</td>
<td>1.8900</td>
</tr>
<tr>
<td>Total school enrollment</td>
<td>156</td>
<td>489.800</td>
<td>182.5700</td>
</tr>
<tr>
<td>Valid N (listwise)</td>
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<td></td>
<td></td>
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</table>

<table>
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<tr>
<th>Frequency</th>
<th>Percent</th>
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<tr>
<td>Teacher Gender</td>
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<tr>
<td>Valid Male</td>
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<tr>
<td>Female</td>
<td>153</td>
<td>96.2</td>
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<tr>
<td>Total</td>
<td>159</td>
<td>100.0</td>
</tr>
<tr>
<td>Highest educational degree attained</td>
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</tr>
<tr>
<td>Valid Bachelor's Degree</td>
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<tr>
<td>Master's or Equivalency</td>
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<td>Master's +</td>
<td>25</td>
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<td>Suburban</td>
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<tr>
<td>Rural</td>
<td>91</td>
<td>57.2</td>
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<tr>
<td>Total</td>
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### Table 2

**Professional Development Opportunities**

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<th></th>
<th>N</th>
<th>Mean</th>
<th>Std. Deviation</th>
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<tr>
<td>Administrator support</td>
<td>159</td>
<td>2.4200</td>
<td>.7900</td>
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<td>Resources provided</td>
<td>159</td>
<td>2.4800</td>
<td>.7400</td>
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<td>Reading scholarly journals</td>
<td>157</td>
<td>2.5500</td>
<td>.6800</td>
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<tr>
<td>Freedom to choose assessment format</td>
<td>157</td>
<td>2.8900</td>
<td>.6700</td>
</tr>
<tr>
<td>Number of inservice days in</td>
<td>158</td>
<td>2.2300</td>
<td>.8000</td>
</tr>
<tr>
<td>alternative assessment</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Nondistrict sponsored workshops</td>
<td>158</td>
<td>1.9900</td>
<td>.9200</td>
</tr>
<tr>
<td>or conferences in assessment</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Common planning time/collaboration</td>
<td>159</td>
<td>1.9900</td>
<td>1.0800</td>
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<tr>
<td>with other professionals</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Valid N (listwise)</td>
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<td></td>
<td></td>
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*Note.* Data were based upon a four point scale with 1 = Strongly Disagree, 2 = Disagree, 3 = Agree, and 4 = Strongly Agree.
Table 3
Knowledge of Specific Alternative Assessment Practices

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<th>N</th>
<th>Mean</th>
<th>Std. Deviation</th>
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<td>portfolio assessment</td>
<td>159</td>
<td>3.020</td>
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<td>graphic organizers</td>
<td>159</td>
<td>3.000</td>
<td>0.760</td>
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<tr>
<td>anecdotal records</td>
<td>159</td>
<td>3.140</td>
<td>0.690</td>
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<td>159</td>
<td>3.430</td>
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<td>classroom projects</td>
<td>159</td>
<td>3.180</td>
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<td>peer evaluation</td>
<td>159</td>
<td>2.570</td>
<td>0.690</td>
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Valid N (listwise) 155

Note. Data were based upon a four point scale with 1 = Strongly Disagree, 2 = Disagree, 3 = Agree, and 4 = Strongly Agree.
Table 4

Instructional Practices in Alternative Assessment

<table>
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<tr>
<th>practices in weekly use of alternative assessment</th>
<th>n</th>
<th>mean</th>
<th>std. deviation</th>
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<tbody>
<tr>
<td>Practices in district mandated assessment</td>
<td>158</td>
<td>3.1900</td>
<td>.5800</td>
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<td>Practices in student self-assessment for reflection</td>
<td>157</td>
<td>2.6900</td>
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<td>Practices in student self-assessment for report card grades</td>
<td>156</td>
<td>2.3700</td>
<td>.6600</td>
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<tr>
<td>Practices in use of teacher made tests</td>
<td>157</td>
<td>2.6600</td>
<td>.7000</td>
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<tr>
<td>Practices in weekly use of portfolios</td>
<td>158</td>
<td>2.5600</td>
<td>.7700</td>
</tr>
<tr>
<td>Practices in daily teacher observation</td>
<td>159</td>
<td>3.3300</td>
<td>.6400</td>
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</tbody>
</table>

Note. Data were based upon a four point scale with 1 = Strongly Disagree, 2 = Disagree, 3 = Agree, and 4 = Strongly Agree.
Table 5

Results of Inferential analysis of Factors Influencing Knowledge of and Practices in Alternative Assessment

<table>
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<tr>
<th></th>
<th>Class Size</th>
<th>Administrator Support</th>
<th>Availability of Resources</th>
<th>Scholarly Reading</th>
<th>District Sponsored Training</th>
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<th>Professional Freedom to Choose Assessment Techniques</th>
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<tr>
<td>Knowledge</td>
<td>X</td>
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<td>X</td>
<td>X</td>
<td>X</td>
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<tr>
<td>Practices</td>
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V. WHERE TO SEND THIS FORM:

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