Elementary Teachers’ Beliefs and Knowledge About Grade Retention: How Do We Know What They Know?

STACIE M. WITMER
Carlisle Area School District

LYNN M. HOFFMAN
Bucknell University

KATHARYN E. NOTTIS
Bucknell University

ABSTRACT. Elementary teachers’ beliefs, knowledge, and practice relating to retention were explored using an adapted version of the Teacher Retention Beliefs Questionnaire (Tomchin & Impara, 1992). A researcher-developed knowledge section was added to the original questionnaire to measure teachers’ propositional knowledge of retention. Thirty-five K–4 teachers from a rural school district in the northeastern United States completed the questionnaire. Teachers from all grade levels believed retention was an acceptable practice. Students’ academic performance was the most influential factor in retention decisions. Significant differences between K–2 and 3–4 teachers were found on several belief statements. Teachers’ knowledge about the effects and outcomes of retention, measured by factual questions, was low regardless of grade taught. The majority correctly answered knowledge questions based upon hypothetical students. No significant correlation was found between teachers’ knowledge and retention practice. Issues related to the measurement of teacher knowledge and implications of the findings are discussed.


Introduction

Years of research have shown that retention provides limited academic advantages to students (Mc Coy & Reynolds, 1999; Meisels & Liaw, 1993; Reynolds, 1992; Shepard & Smith, 1989), and yet the practice continues. According to the National Association of School Psychologists (NASP) (2003), approximately 15% of all American students are retained each year with 30–50% being held back before the ninth grade. Retention rates have increased over the last 20 years (NASP, 2003) as pressure to end social promotion has increased and satisfactory performance on newly introduced end of year standards-based assessments has become a new expectation for promotion to the next grade.

When decisions are made to retain students in grade, the primary goal is to remediate academic difficulties (Nason, 1991). However, grade retention is not an effective educational strategy for long-term academic improvement (Mc Coy & Reynolds, 1999; Meisels & Liaw, 1993; Owings & Magliaro, 1998; Shepard & Smith, 1989). Any small positive effects that have been seen with the retained students usually have not been sustained beyond a few years (Roderick, 1995). In addition, retention has been associated with a variety of negative effects, including greater academic failure (Meisels & Liaw, 1993; Reynolds, 1992), higher dropout rates (Roderick, 1995), and lower self-concept (Nason, 1991). Repeating a grade has been found to be the third most stressful imagined event in a child’s life, surpassed only by going blind and losing a parent (Shepard & Smith, 1990).

Teachers usually make the recommendation to promote or retain their students, with the final decision mitigated by varying input or pressure from parents and administrators (Kelly, 1999). Since teachers have this responsibility, it is important to identify and understand their beliefs and knowledge about retention.

Teachers’ Beliefs About Retention

Pajares (1992) has suggested that beliefs are the best indicators of the decisions individuals make throughout their lives. Beliefs are different from knowledge (Enters, 1994; Shepard & Smith, 1989; Tomchin & Impara, 1992) and often described interchangeably as attitudes, judgments, values, opinions, perceptions, ideology, and internal mental processes (Eisenhart, Shrum, Harding, & Cuthbert, 1988; Pajares, 1992). Beliefs are relatively static whereas knowledge changes as more and different knowledge is acquired (Nespor, 1987).

Teachers’ beliefs appear to underlie their judgments about students (Fang, 1996; Tomchin & Impara, 1992), although many times these beliefs are interwoven with knowledge, making it difficult to separate the two (Shepard & Smith, 1989). Many researchers (e.g., Shepard & Smith, 1989; Stipek & Byler, 1997) have identified teachers’ beliefs about retention as a way to explain their practice of retention. However, few studies have documented how teachers create their own belief systems throughout their teaching careers (Kagan, 1992).
It is known that teachers rarely alter their beliefs based on research studies they have read and are more likely to do so as a result of personal experiences or advice from colleagues (Kagan, 1992). Knowledge of research findings has been referred to as propositional knowledge (Smith, 1989) while knowledge from personal experiences has been labeled practical knowledge (Fenstermacher, 1994). Practical knowledge, “[I]s bounded by time, place, or situation. To claim to know something practically is to claim to know something about an action, event, or situation in a particular instance” (Fenstermacher, 1994, p. 28). This delineation is supported further by Calderhead’s (1996) efforts to differentiate among different sorts of teacher knowledge. It may be that straightforward questions about research results require teachers’ theoretical knowledge, while situational questions activate their personal practice or case knowledge. Consistent with the previous findings, research has also shown that teachers have tended to rely on practical knowledge more often than formal knowledge when making retention decisions (Shepard & Smith, 1989).

Researchers have examined teachers’ beliefs about grade retention using both questionnaires and vignettes with hypothetical situations (Manley, 1988; Tomchin & Impara, 1992). Manley (1988) used a researcher-developed questionnaire generated from two earlier studies (Faerber & Van Dusseldorp, 1984; Frazier, 1978), augmenting it with three vignettes describing a child with a school-related problem. Tomchin and Impara (1992) developed the Teacher Retention Beliefs Questionnaire (TRBQ) to assess teachers’ explicit views of retention. Items were originally developed from students’ permanent records, written policies, teacher interviews, and previous literature (Tomchin & Impara, 1992). The Retention Decision Simulation instrument was also developed by Tomchin and Impara (1992) to assess teachers’ implicit beliefs about retention. It consists of 40 vignettes about hypothetical students and was constructed using ten retention decision factors. Studies using these and other assessments have indicated that academic achievement is the most influential factor teachers consider when deciding to promote or retain a student (Enters, 1994; Kirby, 1996; Manley, 1988; Pouliot, 1999; Tomchin & Impara, 1992).

Previous research (e.g., Tomchin & Impara, 1992) has found that teachers’ beliefs may vary by grade taught. For example, Tomchin and Impara (1992) found that teachers in the earlier grades (K–3) had different beliefs than those in later grades (4–7). Teachers surveyed in the earlier grades agreed that students must master the basic skills before moving on to the next grade, reflecting an adherence to the prescribed curriculum and its standards for performance. Upper grade teachers’ beliefs about retention were not as consistent, with some teachers indicating approval of retention as a way to improve student outcomes, maintain standards, or demonstrate that lack of effort results in retention.

How does an awareness of research findings or propositional knowledge influence teachers’ retention decisions? Few studies have researched this question. Enters (1994) attempted to do so by adding a knowledge section to Tomchin and Impara’s (1992) TRBQ. However, this additional “knowledge” section inferred teachers’ knowledge was from workshops attended or books read, and asked them how personally important this knowledge was rather than assessing actual knowledge of research findings. There still appears to be a need to assess teachers’ knowledge about retention and its source (personal experience or research findings).

**Purpose of the Study**

Retention is an ineffective practice for helping academically slow or immature learners, yet many teachers continue to recommend that students be retained (McCoy & Reynolds, 1999; Shepard & Smith, 1989). These continuing recommendations appear to be based on teachers’ short-term personal experiences with retained students (Shepard & Smith, 1989).

These experiences lead teachers to believe retention is beneficial despite research to the contrary (Pouliot, 1999; Tomchin & Impara, 1992). However, these beliefs have been found to vary according to the grades a teacher has taught (Tomchin & Impara, 1992).

Enters (1994) attempted to measure teachers’ knowledge as well as beliefs about retention by adding questions to the TRBQ (Tomchin & Impara, 1992). These added knowledge questions assessed the source of their knowledge and its importance. An assessment is still needed to determine teachers’ actual knowledge of retention research.

Therefore, the purpose of this pilot study was to develop a knowledge assessment to measure teachers’ propositional knowledge about retention (knowledge of research findings) that could be easily added to a pre-existing instrument, in this case, an adapted version of the TRBQ (Tomchin & Impara, 1992). It was hoped that by including both beliefs and knowledge about grade retention in the same instrument a more complete picture of why teachers continue to recommend retention would emerge. In addition to the development of a knowledge test, the following questions were examined:

1. What are elementary teachers’ beliefs about grade retention and do they differ by grade taught?
2. What factors influence teachers’ decisions to retain students?
3. How much propositional knowledge do elementary teachers have about grade retention?
4. Do elementary teachers have higher levels of practical or propositional knowledge about grade retention?
5. What is the relationship between teachers’ propositional knowledge about retention and their practice of retaining students?

Method

Participants
Forty-one questionnaires were distributed, one per teacher, to those teaching kindergarten to fourth grade in the same rural school district in the northeastern part of the United States. The district consisted of four elementary schools with three enrolling approximately 100 students each and one reporting 696 students. All four schools were supervised by one principal housed at the largest school. The school district from which the sample was drawn had a history of retaining students. Records from 1996–2000, provided by district administrators, showed that 55 students had been retained in the four elementary schools. Completed questionnaires were received from 35 teachers (85% response rate). There were 27 female and 8 male teachers. All respondents were Anglo American. Questionnaires were then grouped into two categories (K–2 and 3–4). There were 21 teachers in the K–2 group and 14 teachers in the 3–4 group.

Materials
A researcher-developed knowledge section was added to an adapted version of Tomchin and Impara’s (1992) Teacher Retention Beliefs Questionnaire, prompting the original name of the questionnaire to be changed to the Teacher Retention Beliefs Knowledge Questionnaire (TRBQ). The new knowledge section then became the third part of the four-part questionnaire. Overall retention rates were also collected from the elementary school principal as well as information about the current district’s retention policy.

Part I of TRBQ measured teachers’ beliefs about grade retention using a four-choice Likert-scale format ranging from agree to disagree (1 = Agree, 2 = Tend to Agree, 3 = Tend to Disagree, and 4 = Disagree) and two open-ended questions. One item related to teachers of older students was altered from the TRBQ (Tomchin & Impara, 1992) to better reflect the sampled school district’s policy. “Students who do not make passing grades in two of the three major subject areas should be retained” (Tomchin & Impara, 1992, p. 203) was changed to read, “Students retained once in elementary school (grades K–4) should not be retained again in elementary school.”

Part II of the questionnaire assessed the differential importance of factors influencing teachers’ decision-making processes when deciding whether to retain a student. Subjects were requested to distribute 100 points across 11 factors. Seven of the listed factors had previously been found to be the most common in terms of influencing teachers’ decisions: (a) academic performance, (b) social/emotional maturity, (c) age in relation to others, (d) home environment, (e) effort being put forth, (f) child’s self-esteem, and (g) ability (Tomchin & Impara, 1992). However, in the current study, four factors were added after area school personnel enrolled in a graduate course at a small, private university in the same geographical area were asked to list factors that they considered when deciding to retain a student. These added factors were: presence of a learning disability, student transience, and attendance. Two factors found on the original questionnaire (Tomchin & Impara, 1992), size in relation to others and gender, were removed because none of the area school personnel mentioned them.

The researchers developed a 16-item knowledge retention assessment for Part III of the questionnaire. It consisted of thirteen multiple-choice and three open-ended questions. Five of the multiple-choice questions (#26, #28, #30, #33, #36) were patterned after the vignettes previously used in the literature (e.g., Tomchin & Impara), asking subjects to respond to hypothetical students and situations using their knowledge of the retention literature. These questions were designed to measure teachers’ practical knowledge. The other eight multiple-choice questions asked participants to respond to information about retention presented in a factual format. These questions were designed to measure teachers’ propositional knowledge. Five of the propositional knowledge questions (#35, #32, #37, #29, #31) were matched with the practical knowledge questions, each assessing the same information. Content validity for this part of the questionnaire was obtained by asking five university professors in the education department of a small private university to review questions in both formats. Their feedback was incorporated into the final version, found in Appendix A of this article. The open-ended questions asked respondents to indicate some predictors of retention, alternatives to retention, and to identify their primary source of knowledge about retention.

Part IV collected demographic information about the teachers as well as information about their practice of retention. Teachers’ practice of retention was assessed by asking teachers to indicate the number of students retained in the previous school year, the number of students recommended for retention but promoted in the previous school year, and the largest number of students retained in one school year. These three questions were additions to the original Teacher Retention Beliefs Questionnaire (Tomchin & Impara, 1992).

Finally, three multiple-choice questions added by Enters (1994) to the original TRBQ were also used. These questions assessed how teachers obtained their knowledge about retention by asking them to indicate the last time they read a journal article or other literature that discussed retention or attended a workshop or conference relating to retention, and to reflect on the amount of knowledge they had about retention.
Table 1
Descriptive Statistics for Beliefs of Those Teaching Grades K–2 and 3–4

<table>
<thead>
<tr>
<th>Belief</th>
<th>Grade taught</th>
<th>% who agreed</th>
<th>% who disagreed</th>
<th>Median score</th>
<th>n</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Retention is an effective means of preventing students from facing daily failure in the next higher grade.</td>
<td>K-2</td>
<td>19.0</td>
<td>9.5</td>
<td>2.0</td>
<td>21</td>
</tr>
<tr>
<td></td>
<td>3-4</td>
<td>28.5</td>
<td>0.0</td>
<td>2.0</td>
<td>14</td>
</tr>
<tr>
<td>2. Retention is necessary for maintaining grade level standards.**</td>
<td>K-2</td>
<td>0.0</td>
<td>33.3</td>
<td>3.0</td>
<td>20</td>
</tr>
<tr>
<td></td>
<td>3-4</td>
<td>14.2</td>
<td>0.0</td>
<td>2.0</td>
<td>14</td>
</tr>
<tr>
<td>3. Retaining a child in grades K–2 harms a child’s self-concept.</td>
<td>K-2</td>
<td>14.2</td>
<td>42.8</td>
<td>3.0</td>
<td>21</td>
</tr>
<tr>
<td></td>
<td>3-4</td>
<td>0.0</td>
<td>28.5</td>
<td>3.0</td>
<td>14</td>
</tr>
<tr>
<td>4. Retention prevents classrooms from having wide ranges in student achievement.</td>
<td>K-2</td>
<td>4.7</td>
<td>52.3</td>
<td>4.0</td>
<td>21</td>
</tr>
<tr>
<td></td>
<td>3-4</td>
<td>0.0</td>
<td>35.7</td>
<td>3.0</td>
<td>14</td>
</tr>
<tr>
<td>5. Students who do not apply themselves should be retained.**</td>
<td>K-2</td>
<td>0.0</td>
<td>57.1</td>
<td>4.0</td>
<td>21</td>
</tr>
<tr>
<td></td>
<td>3-4</td>
<td>0.0</td>
<td>14.2</td>
<td>3.0</td>
<td>14</td>
</tr>
<tr>
<td>6. Knowing that retention is a possibility does motivate students to work harder.</td>
<td>K-2</td>
<td>4.7</td>
<td>28.5</td>
<td>3.0</td>
<td>21</td>
</tr>
<tr>
<td></td>
<td>3-4</td>
<td>0.0</td>
<td>14.2</td>
<td>3.0</td>
<td>14</td>
</tr>
<tr>
<td>7. Retaining a child in grades 3–4 harms a child’s self-concept.</td>
<td>K-2</td>
<td>23.8</td>
<td>4.7</td>
<td>2.0</td>
<td>21</td>
</tr>
<tr>
<td></td>
<td>3-4</td>
<td>0.0</td>
<td>0.0</td>
<td>2.5</td>
<td>14</td>
</tr>
<tr>
<td>8. Retention is an effective means of providing support in school for the child who does not get support at home.</td>
<td>K-2</td>
<td>9.5</td>
<td>33.3</td>
<td>3.0</td>
<td>21</td>
</tr>
<tr>
<td></td>
<td>3-4</td>
<td>7.1</td>
<td>35.7</td>
<td>3.0</td>
<td>14</td>
</tr>
<tr>
<td>9. Students retained once in elementary school (K–4) should not be retained again in elementary school.**</td>
<td>K-2</td>
<td>57.1</td>
<td>0.0</td>
<td>1.0</td>
<td>21</td>
</tr>
<tr>
<td></td>
<td>3-4</td>
<td>28.5</td>
<td>0.0</td>
<td>2.0</td>
<td>14</td>
</tr>
<tr>
<td>10. Students who make passing grades but are working below grade level should be retained.</td>
<td>K-2</td>
<td>4.7</td>
<td>52.3</td>
<td>4.0</td>
<td>19</td>
</tr>
<tr>
<td></td>
<td>3-4</td>
<td>0.0</td>
<td>35.7</td>
<td>3.0</td>
<td>14</td>
</tr>
<tr>
<td>11. Retention in grades K–2 is an effective means of giving the immature child a chance to catch up.</td>
<td>K-2</td>
<td>28.5</td>
<td>4.7</td>
<td>2.0</td>
<td>21</td>
</tr>
<tr>
<td></td>
<td>3-4</td>
<td>21.4</td>
<td>7.1</td>
<td>2.0</td>
<td>14</td>
</tr>
<tr>
<td>12. Retention in grades 3–4 is an effective means of giving the immature child a chance to catch up.</td>
<td>K-2</td>
<td>0.0</td>
<td>19.0</td>
<td>3.0</td>
<td>21</td>
</tr>
<tr>
<td></td>
<td>3-4</td>
<td>7.1</td>
<td>14.2</td>
<td>2.0</td>
<td>14</td>
</tr>
<tr>
<td>13. Students receiving services from a learning support teacher should not be retained.</td>
<td>K-2</td>
<td>42.8</td>
<td>9.5</td>
<td>2.0</td>
<td>21</td>
</tr>
<tr>
<td></td>
<td>3-4</td>
<td>21.4</td>
<td>7.1</td>
<td>2.0</td>
<td>14</td>
</tr>
<tr>
<td>14. If students are to be retained, they should be retained no later than 4th grade.</td>
<td>K-2</td>
<td>23.8</td>
<td>4.0</td>
<td>2.0</td>
<td>21</td>
</tr>
<tr>
<td></td>
<td>3-4</td>
<td>14.2</td>
<td>14.2</td>
<td>3.0</td>
<td>14</td>
</tr>
<tr>
<td>15. In grades K–2, educate children (more than a year older than their classmates) cause more behavior problems than other children.**</td>
<td>K-2</td>
<td>4.7</td>
<td>66.6</td>
<td>4.0</td>
<td>21</td>
</tr>
<tr>
<td></td>
<td>3-4</td>
<td>0.0</td>
<td>21.4</td>
<td>3.0</td>
<td>14</td>
</tr>
<tr>
<td>16. In grades 3–4, educate children (more than a year older than their classmates) cause more behavior problems than other children.</td>
<td>K-2</td>
<td>9.5</td>
<td>33.3</td>
<td>3.0</td>
<td>20</td>
</tr>
<tr>
<td></td>
<td>3-4</td>
<td>0.0</td>
<td>28.5</td>
<td>3.0</td>
<td>14</td>
</tr>
<tr>
<td>17. Retention in grades K–2 permanently labels a child.</td>
<td>K-2</td>
<td>0.0</td>
<td>61.9</td>
<td>4.0</td>
<td>21</td>
</tr>
<tr>
<td></td>
<td>3-4</td>
<td>0.0</td>
<td>35.7</td>
<td>3.0</td>
<td>14</td>
</tr>
<tr>
<td>18. Retention in grades 3–4 permanently labels a child.</td>
<td>K-2</td>
<td>4.7</td>
<td>42.8</td>
<td>3.0</td>
<td>20</td>
</tr>
<tr>
<td></td>
<td>3-4</td>
<td>0.0</td>
<td>28.5</td>
<td>3.0</td>
<td>14</td>
</tr>
<tr>
<td>19. Children who have passing grades but excessive absences should be retained.</td>
<td>K-2</td>
<td>0.0</td>
<td>57.1</td>
<td>4.0</td>
<td>21</td>
</tr>
<tr>
<td></td>
<td>3-4</td>
<td>0.0</td>
<td>57.1</td>
<td>4.0</td>
<td>14</td>
</tr>
<tr>
<td>20. Children should never be retained.</td>
<td>K-2</td>
<td>0.0</td>
<td>71.4</td>
<td>4.0</td>
<td>21</td>
</tr>
<tr>
<td></td>
<td>3-4</td>
<td>0.0</td>
<td>78.5</td>
<td>4.0</td>
<td>14</td>
</tr>
</tbody>
</table>

**Significant differences in responses given by the two groups of teachers.

1 Scores ranged from 1–4, with 1 = agree, 2 = tend to agree, 3 = tend to disagree, 4 = disagree.

Design and Procedure
A within-subjects posttest design with no control group was used for the current study. All subjects received all parts of the TRBKQ. Descriptive statistics were used to answer questions related to overall beliefs and knowledge of the respondents. Responses of teachers in different grade levels on Part I of the TRBKQ were compared for two of the four response categories:
Agree and Disagree. Due to the small, nonrandom sample, group comparisons and descriptions of the relationship between knowledge and the practice of retention were made using nonparametric tests.

**Pre-Study Preparation.** Prior to the study, the TRBQ (Tomchin & Impara, 1992) was adapted for use. The 10 factors considered for retention decisions in Part II were adapted based on responses from 10 local teachers enrolled in a university graduate education course. In addition, a section assessing teachers' propositional knowledge of retention developed by the researchers was added. Content validity was obtained and revisions were made based on the reviewers' comments.

**Data Collection.** The researchers and the elementary principal supervising all four buildings developed a memo encouraging teachers' participation. This memo was distributed prior to data collection and was also attached to the TRBQ. Teachers anonymously and individually completed the questionnaire (TRBQ) and returned it in an envelope to a specially marked box in the mailroom of the largest elementary school in the district. These were collected and the data obtained were analyzed.

**Results**

Thirty-seven percent of the 35 teachers who returned the questionnaire had been teaching between one to ten years, 17% of the teachers had been teaching between 11 to 20 years, and 37% had been teaching 21 to 29 years. Only 8% of the teachers had been teaching for over 30 years. Sixty percent of the teachers reported that their highest level of education was a master's degree.

**Teachers' Beliefs About Retention**

Part I of the Teachers Retention Beliefs and Knowledge Questionnaire was used to discern elementary teachers' beliefs about grade retention and whether they differed as a function of grade level category (K–2, 3–4). It was hypothesized that teachers would agree that retention is an effective practice, and this was supported. It was found that 77% of the respondents believed retention was an effective practice for preventing failure in later grades and 94% of them disagreed with the statement, “Children should never be retained” (Item #20).

It was also hypothesized that there would be significant differences between the beliefs of the two groups of teachers (K–2 and 3–4), and some differences were found. Descriptive statistics for each item, along with variations in the responses provided by participants teaching grades K–2 and 3–4, can be seen in Table 1.

The Mann-Whitney test revealed there were significant differences on responses to four of the 20 questions. There was a significant difference between the two groups of teachers on whether retention is necessary to maintain grade level standards (Item #2). More teachers in grades K–2 disagreed with this statement than teachers in grades 3–4 ($U = 44.50, p < .01$). A significant difference was also found between the two groups of teachers on whether pupils who do not apply themselves in their studies should be retained (Item #5). More K–2 teachers than 3–4 teachers disagreed with that statement ($U = 78.0, p < .05$). Also, significantly more K–2 than 3–4 teachers disagreed with the statement, “In grades K–2...overage children cause more behavioral problems than other children” (Item #15), ($U = 83.0, p < .05$).

Finally, responses to Item #9, which stated, “Students retained once in elementary school (K–4) should not be retained again in elementary school,” tended to be in agreement with the school district’s retention policy that students can only be retained once in elementary school. Although the median response was 2.0, which equaled “tend to agree,” significantly more K–2 than 3–4 teachers agreed that students should only be retained once in elementary school, ($U = 88.0, p < .05$).

Open-ended responses revealed that some teachers relied more heavily on support services and their own interventions to prevent retention than they had in the past. One teacher noted that she had seen retention be both successful and unsuccessful while another indicated that she hesitated to recommend retention because of potential conflict with parents who disagreed with her recommendation.

**Factors Considered in the Retention Decision**

Responses to the second part of the Teachers Retention Beliefs and Knowledge Questionnaire indicated factors that influenced participants' decisions to retain. Respondents distributed 100 points across 11 factors to indicate the relative weight of each factor in their decisions. It was hypothesized that academic performance would be the most influential factor and this was confirmed. On average, academic performance was considered twice as important as the second most important factor. Table 2 shows the mean number of points assigned to each factor by K–2 and 3–4 grade teachers.

After academic performance, three other factors clustered together as second most important. Effort being put forth, ability, and social/emotional maturity had approximately the same mean score. None of the teachers added other factors in the blank space provided. There were some differences found between the K–2 and 3–4 teachers although the child's self-esteem was the only factor where a significant difference was found. Kindergarten through second-grade teachers gave significantly more weight to a child's self-esteem than third- and fourth-grade teachers ($U = 88.0, p < .05$).

**Teachers' Knowledge of Retention**

Part III of the Teacher Retention Beliefs and Knowledge Questionnaire was used to determine the teachers' knowledge about grade retention and to dis-
Table 2
Factors that Influence Retention Decisions: A Comparison of Mean Number of Points Assigned by K–2 (n = 21) and 3–4 (n = 14) Teachers

<table>
<thead>
<tr>
<th>Factor</th>
<th>Grades taught</th>
<th>Mean # of points</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Parental input</td>
<td>K–2</td>
<td>9.5</td>
<td>7.4</td>
</tr>
<tr>
<td></td>
<td>3–4</td>
<td>10.0</td>
<td>7.1</td>
</tr>
<tr>
<td>Learning disability</td>
<td>K–2</td>
<td>6.8</td>
<td>5.8</td>
</tr>
<tr>
<td></td>
<td>3–4</td>
<td>10.9</td>
<td>6.9</td>
</tr>
<tr>
<td>Academic performance</td>
<td>K–2</td>
<td>21.4</td>
<td>10.4</td>
</tr>
<tr>
<td></td>
<td>3–4</td>
<td>26.8</td>
<td>12.5</td>
</tr>
<tr>
<td>Social/emotional maturity</td>
<td>K–2</td>
<td>11.7</td>
<td>6.0</td>
</tr>
<tr>
<td></td>
<td>3–4</td>
<td>11.0</td>
<td>7.4</td>
</tr>
<tr>
<td>Transient student</td>
<td>K–2</td>
<td>4.0</td>
<td>4.6</td>
</tr>
<tr>
<td></td>
<td>3–4</td>
<td>2.7</td>
<td>3.4</td>
</tr>
<tr>
<td>Age in relation to others</td>
<td>K–2</td>
<td>6.0</td>
<td>3.4</td>
</tr>
<tr>
<td></td>
<td>3–4</td>
<td>4.0</td>
<td>3.4</td>
</tr>
<tr>
<td>Number of absences</td>
<td>K–2</td>
<td>3.6</td>
<td>3.6</td>
</tr>
<tr>
<td></td>
<td>3–4</td>
<td>2.1</td>
<td>3.1</td>
</tr>
<tr>
<td>Home environment</td>
<td>K–2</td>
<td>4.8</td>
<td>3.7</td>
</tr>
<tr>
<td></td>
<td>3–4</td>
<td>4.2</td>
<td>5.5</td>
</tr>
<tr>
<td>Effort being put forth</td>
<td>K–2</td>
<td>11.0</td>
<td>9.2</td>
</tr>
<tr>
<td></td>
<td>3–4</td>
<td>13.0</td>
<td>14.2</td>
</tr>
<tr>
<td>Child’s self-esteem**</td>
<td>K–2</td>
<td>9.8</td>
<td>7.5</td>
</tr>
<tr>
<td></td>
<td>3–4</td>
<td>5.1</td>
<td>4.0</td>
</tr>
<tr>
<td>Ability</td>
<td>K–2</td>
<td>12.6</td>
<td>8.2</td>
</tr>
<tr>
<td></td>
<td>3–4</td>
<td>11.0</td>
<td>7.3</td>
</tr>
</tbody>
</table>

**Significant difference, (p < .05)

1Points ranged from 0–100.

It was also suspected that teachers would more often correctly respond to questions about hypothetical situations where practical knowledge was assessed rather than factual questions where propositional knowledge was assessed, and this was supported. A Wilcoxon test revealed that teachers had significantly higher scores for hypothetical than factually based (T = 370, p < .001).

Sources of Knowledge
Thirty-two of the respondents indicated the source of their knowledge about retention. Forty-four percent of this group reported that personal experiences with retained students contributed the most to their knowledge while 22% attributed their knowledge base to talking to colleagues. Only three teachers (9%) reported that their knowledge about retention came from reading journal articles and/or attending workshops on retention.

When asked to indicate when they last read a journal article or other literature that discussed grade retention, 76% of the total sample of teachers reported a year or more. Eighty-seven percent of the teachers also reported that they attended a workshop, conference, or meeting on retention more than a year ago. Six percent (n = 2) of respondents noted that they had never attended a workshop, conference, or meeting on retention.

When asked to rate their knowledge of the current research about retention and its effects on students, 23% of the teachers reported that they had extremely limited knowledge, 56% of the teachers explained that they had somewhat limited knowledge about retention, and 21% of the teachers said they had moderate but not extensive knowledge about retention. No one indicated that his/her knowledge about retention was extensive.

Relationship Between Teachers’ Knowledge and Practice of Retention
The last research question examined the relationship between teachers’ knowledge about retention as measured in Part III of the Teacher Retention Beliefs and Knowledge Questionnaire and their practice of retaining students. Teachers’ practice of retention was operationally defined as the number of students recommended for retention last school year and the largest number of students recommended for retention in one school year. It was hypothesized that there would be a negative relationship between teachers’ knowledge
level and the number of students they retained. Spear- 
mans rank correlations revealed that there was no sig- 
nificant relationship between teachers’ knowledge 
455 scores and their practice of retention.

When asked to give an estimate of the total number of 
458 students recommended for retention in each of the 
460 grade levels taught during their careers, the greatest 
461 number of retained students was listed at the kindergar- 
ten level. Seven teachers (20%) had taught kindergar- 
ten at some time during their teaching careers and had 
465 retained a total of 43 students. The second largest 
467 number of students was retained in first grade. Twenty- 
470 eight percent \( (n = 10) \) had taught first grade at some 
473 time during their teaching career, and these teachers 
475 retained a total of 43 students. When asked “What is 
478 the largest number of students you have retained in one 
480 school year?” the overall mean was one student/school 
483 year \( (M = 1.13, SD = .99) \), although almost a third re- 
486 ported that they had never retained any students. How- 
489 ever, four of these teachers reported that this was their 
492 first year teaching.

Discussion

Several studies have examined teachers’ beliefs 
497 about and their practice of retention (Keaton, 1997; 
499 Shepard & Smith, 1989; Stipek & Byler, 1997; Tom- 
501 chin & Impara, 1992) but few have looked at teachers’ 
503 knowledge of retention and its relationship to their 
505 practice. Enters (1994) added a knowledge section to 
508 the Teacher Retention Beliefs Questionnaire (Tomchin 
510 & Impara, 1992) but questions inferred knowledge of 
513 retention from the number of articles read and work- 
516 shops attended. The current study, through the 
519 development and administration of the Teacher Retention 
522 Beliefs and Knowledge Questionnaire, attempted to 
525 assess teachers’ knowledge of retention research as 
528 well as their beliefs about retention to determine 
531 whether there was a relationship between their knowl- 
534 edge and practice of retention.

Consistent with other research findings (e.g., 
537 Byrnes & Yamamoto, 1986; Enters, 1994; Tomchin & 
540 Impara, 1992), K–4 teachers in this study believed that 
543 retention was an effective practice that could help cer- 
546 tain students be more successful in the classroom. Also 
549 consistent with the results reported by Tomchin and 
552 Impara (1992), teachers’ beliefs about retention dif- 
555 ered according to whether they taught younger or 
558 older elementary students.

Significant differences were found between teach- 
561 ers’ beliefs in grades K–2 and 3–4 on four different 
564 belief statements. First, teachers in grades K–2 tended 
567 to disagree more strongly than teachers of grades 3–4 
570 that retention was useful in maintaining grade level 
573 standards. It is possible that teachers of older students 
576 were more mindful of the high-stakes state assessments 
579 that many students first encounter in the primary 
582 grades. Second, consistent with previous findings (En- 
585 ters, 1994; Tomchin & Impara, 1992), K–2 teachers 
588 tended to disagree more strongly than their 3–4 coun- 
591 terparts that students who did not demonstrate effort 
594 and apply themselves to their studies would be candi- 
597 dates for retention. Perhaps teachers of younger stu- 
600 dents equated their lack of success with an inability to 
603 master basic skills while teachers of older students ex- 
606 pected to see the development of “habits of mind,” 
609 including observable effort, as a condition for promo- 
612 tion (Marzano, Pickering, & McTighe, 1993). Third, K–2 teachers disagreed more than grade 3–4 teachers 
that overage, retained students presented more behav- 
616 ioral problems than other students.

The majority of the participants agreed that students 
620 should not be retained more than once in their K–4 
years. This overall agreement aligns with the school 
623 district’s policy on multiple retentions and supports the 
626 findings of previous researchers (e.g., Smith & 
629 Shepard, 1988; Tomchin & Impara, 1992) who found 
632 that teachers in the same school tended to share similar 
635 beliefs. Smith and Shepard (1988) noted, “The beliefs 
638 held by individuals are related to beliefs held by others 
641 in the same environment; beliefs appear to be inter-

20
group placed more weight on a child's self-esteem than teachers in the 3–4 group. This is in contrast to the results of Enters' (1994) research, in which teachers in the upper grades listed students' self-esteem as a more important factor to consider. However, Enters' (1994) older grade level group extended to grade 7; perhaps middle school teachers are more aware of self-esteem issues among students at that transitional level. It is also possible that, after careful consideration, the teachers in the current study concluded that retention would not result in damage to the self-esteem of the particular students they had retained. Jemerson (1999) has noted that teachers sometimes feel that retention gives students a “gift” of an additional year in grade to improve reading and other academic skills, thereby increasing students' efficacy and self-esteem.

Of the four additional factors listed on the second part of the Teacher Retention Beliefs and Knowledge Questionnaire, two appeared to influence teachers' decision-making: parental input and the presence of a learning disability. Additional research with other groups of teachers will be needed to confirm the importance of parental input and a student's identification as a special needs student as possible factors in teachers' retention decisions.

Sakowicz (1996) noted that, “[Of] all the major issues in education, grade retention represents one of the clearest examples of noncommunication between research and practice” (p. 16). Responses to the knowledge questions support this observation. Teachers had minimal knowledge about the effects of retention; the average knowledge score was 30%. Despite their low level of propositional knowledge, teachers did respond more accurately to hypothetical questions about student retention, a finding that is not surprising given previous research (e.g., Schon, 1983) that has suggested that when a problem is situated, professionals tend to form intuitions based upon their own successes and failures that guide their practice. Shepard and Smith's (1989) conclusion that a discrepancy exists between teachers' personal and propositional knowledge about retention also appears to be supported here.

Overall, teachers described their knowledge of retention research as limited. The majority attributed their knowledge to personal experiences with retained students. Talking to colleagues was the second most frequently cited source of knowledge. This supports previous research (e.g., Kagan, 1992) that has suggested that teachers alter their personal beliefs based primarily on their own experiences or through the shared experiences of their colleagues rather than through the acquisition of knowledge derived from current research. Kennedy (1997) has suggested that teachers' lack of familiarity with research and research's minimal influence on their practice may be the result of one or more of the following: the research itself may not be sufficiently persuasive, the research is not relevant to teachers' practice, ideas from research have not been accessible to teachers, or the education system itself is unable to change. Teachers' responses indicated that they might not have had access to recent research on retention. They generally reported reading a journal article on retention or attending a workshop where retention was discussed one or more years ago.

It was hypothesized that a negative relationship would be found between teachers' knowledge levels, as measured by the Teacher Retention Beliefs and Knowledge Questionnaire, and the number of students they had retained. However, no significant correlation was found. This could be due to the small, nonrandom sample in this study, as well as the generally low knowledge levels of all participants. Low knowledge levels could be related to the type of questions used to measure that knowledge. Although content validity was obtained, reliability of the knowledge section of the instrument was not determined. Future research should determine reliability of the instrument as well as use larger, random samples from multiple school districts. Follow-up interviews with participants targeting their knowledge-base acquisition and their decision-making process would also provide a more in-depth understanding of their practice, as well as insights into their interpretation of the knowledge questions.

Ultimately, educators need to address how to improve students' academic skills and reduce failure. Teachers need to learn about and implement promising practices that prevent retention in their own school and in their own classrooms. In order for this to happen, meaningful strategies need to be designed to provide teachers with more accurate knowledge about retention either at the preservice or practice level. Tanner and Combs (1993) have suggested that teachers continue to perceive retention as a successful intervention either because they are unaware of retention research and promising alternatives to retention, or because they know the literature and discard its implications in favor of their personal beliefs. Connecting teachers effectively with retention research might be the first step in changing this ineffective practice.

References
25. Whether a student is promoted or retained, what does the majority of the current research say about the long-term effects on students' academic achievement?

a. Retention does not effectively increase academic achievement among low-achieving students.

b. Social promotion does not effectively increase academic achievement among low-achieving students.

c. Neither social promotion nor retention effectively increase academic achievement.

d. Both social promotion and retention effectively increase academic achievement.

26. According to the current research, how will Steven, a first-grader, most likely feel when he hears that he is going to be retained?

a. He will be indifferent toward the decision.

b. He will feel relieved because now he can "catch up" on his basic skills.

c. He will feel like he is being punished.

d. He will feel happy because he will be the leader in the class.

27. In general, what does the current research say about an extra year in kindergarten, pre-kindergarten programs, and/or transitional first programs?

a. Students do not experience any benefits from these extra-year programs.

b. Students become more mature as a result of these extra-year programs.

c. Students experience a benefit in academic achievement in these extra-year programs.

d. Students experience higher self-esteem from these extra-year programs.

28. According to current research, which student is most likely to drop out of school?

a. John who was held back one time in elementary school.

b. Brian who has been held back once in elementary school and once in middle school.

c. Matt who has been performing below average every school year, but has never been retained.

d. David who was recommended for retention but was promoted to the next grade level.

29. In general, what does the majority of the current research say about grade retention and academic gains?

a. Academic gains are not noticed until three or four years after the retention.

b. Any academic gains made during the repeated year increase over time.

c. Retained students make more academic gains than those who are promoted.
d. Any academic gains made during the repeated year fade over time.*

30. According to current research, which student is most likely to be retained?
   a. Brad, a White male, who is young for his grade and whose family is in the low socioeconomic status (SES) group.
   b. Jerome, an African American male, who is young for his grade, family is in the low SES group.*
   c. Maria, a Hispanic female, whose primary language is not English, family is in the high SES group.
   d. Lisa, a White female, the smallest and youngest in her class, family is in the high SES group.

31. What does the current research suggest when comparing the behavior of students who have been retained or socially promoted with students who have NOT been retained or promoted?
   a. Grade retention is not associated with children’s behavior problems.
   b. Grade retention is associated with decreased rates of behavior problems.
   c. Grade retention is associated with increased rates of behavior problems. *
   d. Social promotion is associated with increased rates of behavior problems.

32. In general, what does the majority of the current research say about retention and school drop-out rate?
   a. Students who are retained are more likely to drop out of school.*
   b. There is no correlation between being retained and dropping out of school.
   c. Students who are retained are less likely to drop out of school.
   d. Students are likely to drop out of school only if they have been retained more than once.

33. Tricia, Jen, Michelle, and Julie are all struggling academically. According to current research, which student would you expect to perform better academically three or four years from now?
   a. Jen who was retained at the end of the year.
   b. Michelle who was recommended for retention but was promoted to the next grade.*
   c. Tricia who was retained due to parent request.
   d. Julie who was retained due to social immaturity.

34. In general, what does the majority of research say about peer relatedness and grade retention in the elementary grades?
   a. Students will more often pick the retained student for help with academics, but not as a play partner.*
   b. Students will more often pick the retained student as a play partner, but not for help with academics.
   c. Retained students are not treated differently by their peers in elementary school.
   d. Promoted students experience rejection by their peers more often than retained students do.

35. In general, what does the majority of the current research say about retention and students’ self-concepts?
   a. Children in kindergarten and first grade are unaffected because of their age.
   b. Retention produces more positive effects than negative effects on students’ self-concepts.
   c. Retention has no effect on students’ self-concepts.
   d. Retention produces more negative effects than positive effects on students’ self-concepts. *

36. According to current research, which student will most likely be causing the most behavior problems in the elementary grades?
   a. Scott who is age appropriate for his grade and was never retained.
   b. Paul who is young for his grade due to his summer birthday.
   c. Jessica who is age appropriate for her grade, but was promoted to the next grade level.
   d. Kristin who is old for her grade due to being retained.*

37. In general, what does the literature say are some of the predictors of early grade retention among students?

38. What alternatives are there to retention?

39. Please check the one that most contributes to how you have obtained your knowledge about grade retention and social promotion.
   — reading journal articles and attending workshops
   — personal experiences with retained students
   — talking to colleagues
   — recent university coursework
   — other (please explain)

*Keyed answer.

About the authors: Stacie M. Witmer is a school psychologist in the Carlisle Area School District in Carlisle, PA. Her research interests include academic and behavioral issues of school-age children. Lynn M. Hoffman is an assistant professor of education at Bucknell University in Lewisburg, PA. Her research interests are in high school culture and adolescent rites of passage and their manifestation in yearbooks. Her teaching interests are in school administration and in the preparation of novice teachers. Kathryn E. Nottis is an associate professor of education at Bucknell University in Lewisburg, PA. An educational psychologist, she is primarily interested in conceptual learning in science and gender issues. Most recently, she has investigated the generation of science analogies by preservice teachers and studied the effect of learner and instructional variables on the learning of point and plane group symmetry in chemistry. Her teaching interests are in educational psychology and in the preparation of novice teachers.

Address correspondence to: Lynn M. Hoffman, Education Department, Bucknell University, Moore Avenue, Lewisburg, PA 17837.