Experienced and Preservice Teacher Beliefs about How Best to Teach Beginning Reading

April D. Nauman, Ph.D.
Northeastern Illinois University
Arlene C. Borthwick, Ph.D.
National-Louis University
Terry Stirling, Ph.D.
Northeastern Illinois University

Abstract: *Q methodology was used to explore inservice and preservice teachers' beliefs about how to best teach beginning reading. Two separate studies and analyses were done; and the Q sorts from two P-sets were subjected to second-order factor analysis. In Study 1, 36 undergraduate and graduate education students at a Chicago area university performed a Q sort of 39 cards describing common literacy activities. Q statistical analysis identified six factors, two consisting almost entirely of inservice teachers and four consisting mainly of preservice teachers. In Study 2, 56 participants sorted the Q deck of literacy activities. This study population included teachers from many regions of Illinois with more varied academic backgrounds than the original sample. Q analysis identified five factors, one consisting only of experienced teachers, two consisting mainly of novices, and two split between inservice and preservice teachers. Second-order factor analysis revealed substantial concordance between the Study 1 and 2 solutions. Clear contrasts in beliefs about good reading instruction were noted between the expert and novice groups. In general, experienced teachers shared a similar perspective, despite the fact that their teaching environments and student populations varied greatly. The expert perspective was characterized by a view that reading is a multifaceted process; an emphasis on internal motivation; an emphasis on teacher and parent modeling of reading to enhance children's motivation and skill; knowledge of recent research, especially on balanced literacy approaches and the role of prior knowledge in comprehension; the importance of keeping young children engaged in learning and preserving their self-esteem; and rejection of older teaching techniques that seem developmentally inappropriate, autocratic, or dull. Conversely, the novice perspective heavily emphasized traditional phonics instruction and displayed a lack of knowledge of educational terminology, instructional practices and concepts, and young children. Implications are discussed.*

Authors' Addresses: Nauman, Northeastern Illinois University, Department of Reading, 5500 N. St. Louis Ave., Chicago, Illinois; 60625; a-nauman@neiu.edu.
Borthwick, National-Louis University, Chicago, Illinois; aborthwick@nl.edu.
Stirling, Northeastern Illinois University, Chicago, Illinois; t-stirling@neiu.edu.

Operant Subjectivity, 2004 (January), 27 (2), 84-103.

Background

Understanding teacher beliefs has been an important topic in the field of education. In the past two decades, much research has been conducted on teacher beliefs, judgments, and decision-making processes (e.g., Shavelson and Stern 1981; Banach 1984; Kagen and Smith 1988). Research has shown that teachers' theoretical beliefs about reading instruction affect their decisions about instructional practice (Kamil and Pearson 1979; Leu and Misulis 1986; Blanton and Moorman 1987).

Methods used previously to study teacher beliefs about literacy instruction have included self-report surveys (Kagen and Smith 1988; Ketner, Smith, and Parnell 1997; Baumann and Hoffman 1998), reflective journaling and interviews (e.g., Wimett and Blachowicz 1997), and Likert-scale instruments (Knudsen and Anderson 2000; Knudsen and Maxson 2001). Though these methods are useful, Q methodology is uniquely suited to the study of teacher beliefs. Because a plethora of instructional strategies and activities is currently available to teachers for teaching beginning reading, time-pressured classroom teachers are continually making forced choices about which activities to include and which to omit. Thus, forced-choice Q methodology is highly relevant for exploring teacher beliefs that are likely to affect practice.

Evolving Beliefs about Effective Early Literacy Instruction

The past 30 years have witnessed important changes in the thinking of educators about the reading process and effective reading instruction (summarized in Table 1, Appendix). In the 1960s, 1970s, and into the 1980s, educators emphasized the importance of decoding, assuming that comprehension would automatically follow the correct pronunciation of words (Cooper 2000). When educators began to notice that comprehension was not an automatic result, researchers searched for discrete *comprehension skills* to include in instruction (Otto et al. 1977). Reading instruction continued to be dominated by the teaching and practicing of individual skills (Cooper 2000).

In the 1970s and 1980s, researchers in the fields of linguistics, psychology, and education began to focus on understanding how readers comprehend text (e.g., Anderson and Pearson 1984; Rosenblatt 1978; Spiro 1979). Halliday (1975) and other researchers proposed that children learn language holistically, rather than in fragments, the latter being how reading was traditionally taught in schools. The notion that children learn through the support of adults and peers, articulated by Vygotsky (1978), also became popular. Together, these and other important researchers (e.g., Goodman 1965; Clay 1985; Teale and Sulzby 1986) contributed to the broad perspective known as *whole language*. *Whole language*-based curricula

emphasized authentic literature, the integration of subjects through thematic units, cooperative learning, and internal motivation. In this student-centered approach, learning was primarily inductive; direct teacher instruction was minimized. Especially de-emphasized was the direct instruction of phonics in a sequenced program.

Through the 1990s, criticism of the *whole language* approach to reading instruction prompted educators to look more pragmatically at reading instruction in schools. Today, teacher education and faculty development programs generally promote the concept of *balanced literacy*, which may be seen as an attempt to glean the best from the basic skills and whole language approaches. In fact, research on effective elementary school teachers suggests that such teachers are "disciplined eclectics with regard to phonics approaches and whole language practices" (Baumann and Hoffman 1998). One popular example of a balanced approach to reading instruction is the "Four Blocks" (Cunningham 2003), an instructional program that includes an even balance of guided reading, word study (including phonics instruction), writing, and independent reading. The National Reading Panel, a group of experts convened in 1997 by the U.S. National Institute of Child Health and Human Development in conjunction with the Secretary of Education to evaluate the efficacy of different approaches to teaching reading, has emphasized the importance of phonics instruction and phonemic awareness as well as comprehension and fluency (National Reading Panel 2000).

Previous studies of teacher beliefs about beginning literacy instruction have focused on defining or comparing theoretical orientations, particularly *whole language* versus *basic skills* approaches (Ketner, Smith, and Parnell 1997; Knudson and Anderson 2000; Knudson and Maxson 2001). Given that educators have entered an era of *balanced literacy* instruction, a new look at teacher beliefs is warranted.

In the current investigation, we explored the beliefs of inservice and preservice teachers about which literacy practices and activities are most necessary and which are most unnecessary in teaching beginning reading. Our initial goal was to delineate the range of perspectives among graduate and undergraduate education students on how best to teach beginning reading.

Methods

Study 1

In our initial study, a convenience sample of 20 graduate students and 16 undergraduate students participated in whole -group Q sorts. The graduate students, most of whom were certified, experienced elementary teachers, were enrolled in a Masters in Reading Program at a Chicago university. These inservice teachers were enrolled in a course on primary reading instruction. The undergraduate students were education majors in a course on

the psychology of instruction and learning. Each participant was given a 39-item Q deck of common literacy learning activities and instructed to sort the deck ranking the items from most necessary to most unnecessary. Participants provided demographic data and wrote an explanation for why they ranked the top five and bottom five items as they did.

The Q-set (see Appendix 1) consisted of common literacy activities taken from current major sources on literacy instruction used in teacher education classes at our university (e.g., Cooper 2000; Cunningham and Allington 1999; Morrow 2001; Ruddell 2002; Tompkins 2001) or observed in area classrooms. Most of the 39 items reflected current research and accepted views on the reading process and reading instruction. However, 12 items (numbers 3, 5, 8, 10, 12, 16, 17, 22, 26, 27, 31, and 37), taken from observations of area classrooms, reflected instructional practices and beliefs that are not generally supported by current research. These still very common, more *traditional* practices, such as children writing book reports and copying word definitions out of dictionaries, can be traced to the *basic skills* era.

Data from Study 1 were analyzed with PQMethod version 2.11 software (freeware, Schmolck 2002) using principal components factor analysis and varimax rotation of factors.

Study 2

After completing our initial study, we conducted a second study with a different group of participants. Because our initial population consisted of only two classes of students, and we wished to gain a better understanding of the range of viewpoints on teaching beginning reading, we were especially interested in including inservice teachers not enrolled in our Masters in Reading Program. Therefore, 1 year later, we repeated this study with another sample of 56 inservice and preservice teachers.

The second study P-set included 10 teachers attending a professional conference on the teaching of reading (the Illinois Reading Conference in Springfield, March, 2002). This group of participants (the conference teachers) came from different regions of Illinois, including rural areas, and had varied academic backgrounds. In addition, another group of 18 Masters in Reading Program students at our university and 28 undergraduate education majors in two different general education courses were included.

These participants followed the same procedure as in Study 1, each sorting a deck of numbered Q statements, ranking the same 39 items from most necessary to most unnecessary and writing an explanation of why they ranked the top five and bottom five items as they did. Demographic data were again obtained.

The Q sort data were analyzed as in Study 1. The factors for P-sets 1 and 2 were derived independently. Because our analyses of these data sets

identified six factors in Study 1 and five in Study 2, we performed one more analysis to determine whether we could achieve a more parsimonious solution. A second order factor analysis was undertaken to identify corresponding factors across the two P-sets, which yielded a substantial concordance between the two solutions. Second-order factor analysis findings are discussed later in the results.

Findings

Study 1

The 20 inservice teachers in Study 1 were aged 23 to 50 years old and had 2 to 28 years of teaching experience. They had completed undergraduate education between 1970 and 2000 (spanning the *basic skills*, *whole language*, and *balanced literacy* eras). Teaching environments included high-needs city schools, lower middle-class suburban schools, and affluent suburban schools in the Chicago area. Their student populations ranged from mostly African-American, Latino, or white to a racially mixed student body, with many non-native English speakers. The 16 undergraduates were aged 22 to 49 years and had attended a range of schools, including public, private, and parochial; urban, suburban, and rural; high-, mid- and low-socioeconomic status (SES); mostly white, mostly Latino, and mixed race.

PQMethod factor analysis identified six factors, which explained 61% of the variance. Factors 1 and 5 consisted almost exclusively of inservice teachers, whereas Factors 2, 3, 4, and 6 consisted mainly of the preservice undergraduates. Thus, Factors 1 and 5 were considered expert groups. Clear contrasts were noted between the expert factors and Factors 2 and 4, which were considered novice groups.

Factors 1 and 2: Motivation

Factor 1, consisting of twelve graduate students and one undergraduate, was termed *The Internal Motivators.* This group felt that teachers reading aloud to children and encouraging children to use invented spelling were among the most necessary activities for teaching beginning reading. In their

Distinguishing Statements for Study 1 Factor 1: Internal Motivators*

No.	*Statement*	*Score*
1	Teacher reads aloud while children listen.	2
34	Teacher encourages children to use invented spelling.	2
8	Teacher provides direct instruction of comprehension strategies.	-1
36	Teacher communicates frequently with parents about reading and homework expectations for their children.	-1
22	Children write book reports.	-2

**Statements are abbreviated. See Appendix for complete statement.*

explanations of why they ranked these activities as they did, Factor 1 members emphasized the need to develop a love of reading in young children (through teacher modeling), the need to provide children with authentic reading experiences, the need to foster children's internal motivation, and the value of reading-writing connections.

Factor 2, a novice group consisting of two undergraduates, expressed a view that contrasted sharply with that of Factor 1. Thus this factor was termed *The External Motivators*. To Factor 2, "Book contests with prizes" — a way to externally motivate children — was ranked as most important among the distinguishing statements.

Distinguishing Statements for Study 1 Factor 2: External Motivators*

No.	*Statement*	*Score*
27	Book contests with prizes	1
24	Teacher integrates reading and writing activities.	-1
1	Teacher reads aloud while children listen.	-2
32	Writer's Workshop	-2

**Statements are abbreviated. See Appendix for complete statement.*

Factors 4 and 5: Prior Knowledge

Factor 4, consisting of three undergraduate students, was termed *The Knowledge-Naïve,* a contrast to Factor 5, consisting of three graduate students, termed *The Knowledge Builders.* These two factors expressed contrasting views on the need to build prior knowledge and to understand the backgrounds of students. In explaining why she felt it was not necessary that "Teachers build children's prior knowledge through hands-on experiences, field trips, videos, and explanations," one undergraduate wrote, "Hands on activities are great, but sitting down and reading great literature is the best way to continue to read." By contrast, an inservice teacher on Factor 5 listed knowledge building as one of the most necessary activities, explaining, "It all begins with prior knowledge."

Distinguishing Statements for Study 1 Factor 4: Knowledge-Naïve*

No.	*Statement*	*Score*
39	Teachers involve parents in school-sponsored literacy activities and programs.	2
26	Accelerated Reading programs	0
9	Teacher models comprehension strategies.	-1
33	Teachers build children's prior knowledge.	-2

**Statements are abbreviated. See Appendix for complete statement.*

Distinguishing Statements for Study 1 Factor 5: Knowledge Builders*

No.	*Statement*	*Score*
33	Teachers build children's prior knowledge.	2
25	Teacher conducts surveys of children's and parents' attitudes toward reading.	2

**Statements are abbreviated. See Appendix for complete statement.*

Factors 3 and 6: Vocabulary Development

The remaining two factors, 3 and 6, both consisted of three undergraduate and one graduate student. Factor 3 emphasized the need to enhance vocabulary and spelling through "word walls" (a large bulletin board displaying high frequency words and/or word families), to make reading-writing connections using student-centered Writers' Workshop, and for parents to read to their children. This group was termed *Wordsmiths* to reflect their emphasis on word knowledge. Members of Factor 6 felt that oral storytelling was necessary and that direct instruction of letter-sound relationships was not necessary. This factor was termed *Storytellers*.

Distinguishing Statements for Study 1 Factor 3: Wordsmiths*

No.	*Statement*	*Score*
13	Presence of word walls	2
32	Writer's Workshop	2
35	Parents read to children.	1
30	Informal assessments	-2

**Statements are abbreviated. See Appendix for complete statement.*

Distinguishing Statements for Study 1 Factor 6: Storytellers*

No.	*Statement*	*Score*
14	Oral storytelling	1
3	Children take turns reading aloud (in a small group or whole class) while teacher listens.	0
16	Teacher gives direct instruction of letter-sound relationships.	-2

**Statements are abbreviated. See Appendix for complete statement.*

Study 2

The 18 *graduate students* in Study 2 were 24 to 45 years old and had teaching experience ranging from less than 1 year to 14 years. They had completed their undergraduate education between 1989 and 2004. Teaching environments included high-needs city schools, lower middle-class suburban schools, and affluent suburban schools in the Chicago area. Their student

populations ranged from mostly African-American, Latino, or white to a racially mixed student body, with many non-native English speakers.

The 10 *conference teachers* were aged 25 to 54 years and had 1 to 27 years of teaching experience. Half of this group had been teaching for more than 10 years. Conference teachers primarily taught in low-SES public schools in suburban, urban, and rural locations across Illinois. The majority taught student populations that were mostly white or mostly African American.

Finally, the 28 *undergraduates* were aged 19 to 47 years and had attended a range of schools, including public, private, and parochial; urban, suburban, and rural; high-, mid- and low-SES; mostly white, mostly Latino, and mixed race.

Q factor analysis of Study 2 data identified five factors, explaining 55% of the variance. Factor 1 consisted only of expert teachers, paralleling Factor 1 in Study 1. Interestingly, 8 of the 10 conference teachers and 10 of the 18 graduate students loaded on this factor. The teacher preference for more contemporary activities and rejection of older teaching techniques prompted the name *Keeping Current.* This expert factor agreed on the importance of word walls (an activity emphasized by Cunningham in her *balanced literacy* approach) and frequent communication with parents about reading and homework expectations for their children (reflecting the contemporary emphasis on the need for parental involvement in the early school years).

Distinguishing Statements for Study 2 Factor 1: Keeping Current*

No.	*Statement*	*Score*
13	Presence of word walls	2
36	Teacher communicates frequently with parents about reading and homework expectations for their children.	1
32	Writer's Workshop	0
14	Oral storytelling	-1
25	Teacher conducts surveys of children's and parents' attitudes toward reading.	-1
3	Children take turns reading aloud (in a small group or whole class) while teacher listens.	-1
31	Formal assessments	-1
27	Book contests with prizes	-2
37	Children look up words in dictionary.	-2

**Statements are abbreviated. See Appendix for complete statement.*

This group rejected the older practices such as round-robin style reading and children looking up word definitions in dictionaries. Reasons given for these choices reflected a concern for keeping young children interested and engaged in learning, preserving young children's self-esteem, and fostering positive attitudes toward reading. Also in their explanations of why they made the choices they did, Factor 1 members emphasized the importance of teacher and parent modeling as well as early writing.

Factors 3 and 5: Direct Modes of Teaching

Factors 3 and 5 were novice factors, each consisting of seven undergraduates and one experienced teacher (one conference teacher loaded on Factor 3 and one graduate student on Factor 5). Factor 3, *Focus on Phonics,* stressed the necessity of phonics as taught by direct teacher instruction and practiced on worksheets. Activities not evidently related to learning phonics or practicing with print, such as building prior knowledge, oral storytelling, and dramatization, were ranked as most unnecessary. Similarly, participants who defined Factor 5, *Practice with Print,* wanted to immerse beginning readers in print. Six of the seven most important activities named by this group involved different modes of reading, the seventh being children practicing phonics on activity sheets. Like the other novice factor, the Factor 5 novices ranked practices not obviously connected to deciphering the printed page as most unnecessary.

Distinguishing Statements for Study 2 Factor 3: Focus on Phonics*

No.	*Statement*	*Score*
16	Teacher gives direct instruction of letter-sound relationships.	2
17	Children practice phonics on activity sheets.	2
24	Teacher integrates reading and writing activities.	1
5	Children read assigned stories silently by themselves.	1
9	Teacher models comprehension strategies.	0
37	Children look up word definitions in dictionary.	0
22	Children write book reports.	0
7	Children do repeated readings in different modes.	0
33	Teachers build prior knowledge.	-1
14	Oral storytelling	-1
29	Children dramatize stories.	-1
27	Book contests with prizes	-2
34	Teacher encourages invented spelling.	-2

**Statements are abbreviated. See Appendix for complete statement.*

Distinguishing Statements for Study 2 Factor 5: Practice with Print*

No.	*Statement*	*Score*
1	Teacher reads aloud while children listen.	2
6	Children read anything they choose for 15 to 30 minutes at regularly scheduled times in school.	2
7	Children do repeated readings in different modes.	2
4	Children read to each other without teacher presence.	1
17	Children practice phonics on activity sheets.	2
35	Parents read to children.	1
5	Children read assigned stories silently by themselves.	1
20	Presence of a classroom library	0
9	Teacher models comprehension strategies.	-1
33	Teachers build prior knowledge.	-2
32	Writer's Workshop	-2

**Statements are abbreviated. See Appendix for complete statement.*

Factors 2 and 4: Pupil and Parent Involvement

Factors 2 and 4 were divided between novices and experts, Factor 2 consisting of three graduate and five undergraduate students, and Factor 4 consisting of three graduate and three undergraduate students. Factor 2,

Distinguishing Statements for Study 2 Factor 2: Creativity and Connections*

No.	*Statement*	*Score*
33	Teachers build prior knowledge.	2
14	Oral storytelling	2
29	Children dramatize stories.	1
18	Teacher provides class time for journaling about stories read.	1
23	Teacher provides class time for journaling about personal experiences.	1
8	Teacher provides direct instruction of comprehension strategies	0
1	Teacher reads aloud while children listen.	-1
16	Teacher gives direct instruction of letter-sound relationships.	-1
37	Children look up words in dictionary.	-2
5	Children read assigned stories silently by themselves.	-2
31	Formal assessments	-2

**Statements are abbreviated. See Appendix for complete statement.*

Creativity and Connections, emphasized creative, child-centered activities such as dramatization and in-class journaling of responses to reading and about personal experiences. The issue that united experts and novices in Factor 4 was the need for parental involvement. The members of this factor, *Importance of Parents,* ranked three items related to parental involvement as most necessary.

Distinguishing Statements for Study 2 Factor 4: Importance of Parents*

No.	*Statement*	*Score*
36	Teacher communicates frequently with parents.	2
39	Teacher involves parents in school-sponsored literacy activities.	2
25	Teacher conducts surveys of children's and parents' attitudes toward reading.	1
30	Informal assessments	1
34	Teacher encourages invented spelling.	1
1	Teacher reads aloud while children listen.	0
17	Children practice phonics on activity sheets.	0
3	Children take turns reading aloud while teacher listens to assess and/or correct.	0
7	Children do repeated readings in different modes.	-1
6	Children read anything they choose for 15 to 30 minutes regularly in school.	-1
10	Teacher provides direct instruction of word meanings using graphic organizers.	-1
32	Writer's Workshop	-2
9	Teacher models comprehension strategies.	-2

**Statements are abbreviated. See Appendix for complete statement.*

Second-Order Factor Analysis

Studies with these two P-sets suggested that important differences exist between the beliefs of experienced and preservice teachers about how to best teach beginning reading. Our second-order factor analysis of the Study 1 and Study 2 outcomes was conducted to clarify these differences.

In a second-order, two-factor solution, explaining 50% of the variance, all six Study 1 factors and all five Study 2 factors loaded onto one of the two second-order factors (Factors A and B; see Table 2). Interestingly, all the expert factors, including the two "split" factors in Study 2, loaded onto Factor A. One novice factor from Study 1 also loaded onto this factor. Thus, four of the five novice factors loaded on Factor B. With this two-factor solution, the essential differences between experts and novices came more clearly into focus.

Factor A

The choices of Factor A, the expert factor, reflected an understanding of reading as a complex, multifaceted process. According to this factor, termed *Reading is Multifaceted,* successfully teaching young children to master this process requires building children's prior knowledge, the presence of a classroom library containing a variety of reading materials at different levels, the integration of reading and writing activities, the involvement of children in reading by creative responses (drawing and journaling about stories), teacher modeling of comprehension strategies, oral storytelling, and parental involvement.

These choices reflected current understandings of reading comprehension (i.e., the importance of prior knowledge and modeling comprehension strategies, even at the primary level), current thinking on the importance of literate environments (i.e., an extensive classroom library), and current appreciation of the need to help children make connections (between stories and self as well as between the literacy modes of reading and writing). The majority of activities ranked as most unnecessary by Factor A were older, pre-*whole language* era activities (such as phonics worksheets and looking up words in dictionaries). These items were ranked low because teachers considered them too frustrating or boring for young children, and required tasks which could damage young children's internal motivation and self-esteem, in turn hindering learning.

Factor B

By contrast, the choices of the novices in Factor B reflected the belief that reading is simply decoding — that is, the ability to correctly sound out words. This group emphasized phonics, as taught through direct teacher instruction, practiced on worksheets, and assessed in round-robin style reading aloud. These views and class activities can be traced to the pre-*whole language*, *basic skills* era of reading instruction. One distinguishing item ranked as most necessary by this group — children read anything they choose for a specified time during the school day — is an activity supported by more current research.

However, Factor B members viewed this activity as valuable primarily so that children could practice decoding skills, consistent with the *practice with print* perspective. Some older classroom techniques, such as writing book reports and looking up words in dictionaries, were viewed as too boring and ranked low by Factor B. However, the lowest ranking practices in the Factor B perspective were those distinguishing items that emerged during the *whole language* era as important to literacy learning, such as building children's prior knowledge, encouraging invented spelling, and oral storytelling — activities not clearly related to the ability to decipher the printed page.

Distinguishing Statements for Factor A: Reading is Multifaceted*

No.	*Statement*	*Score*
33	Teacher builds children's prior knowledge.	2
20	Presence of a classroom library	2
24	Teacher integrates reading and writing.	2
28	Children draw pictures to portray scenes, characters, and events in stories.	2
9	Teacher models comprehension strategies.	1
14	Oral storytelling	1
39	Teacher involves parents in school-sponsored literacy activities.	1
18	Teacher provides class time for journaling about stories read.	1
13	Presence of word walls	0
23	Teacher provides class time for journaling about personal experiences.	0
19	Teacher and children participate in phonemic awareness activities.	0
34	Teacher encourages invented spelling.	0
29	Children dramatize stories read.	0
3	Children take turns reading aloud (in a small group or whole group) while teacher listens.	0
6	Children read anything they choose for 15 to 30 minutes regularly in school.	0
4	Children read to each other (in pairs or small groups) without teacher presence.	0
30	Informal assessments	0
16	Teacher gives direct instruction of letter-sound relationships.	-1
25	Teacher conducts surveys of children's and parents' attitudes toward reading.	-1
10	Teacher provides direct instruction of word meanings using graphic organizers.	-1
5	Children read assigned story silently by themselves.	-1
12	Spelling instruction with lists of word families and regular quizzes	-1
26	Accelerated Reading programs	-1
22	Children write book reports.	-2
17	Children practice phonics on activity sheets.	-2
31	Formal assessments	-2
37	Children look up words in dictionary.	-2

**Statements are abbreviated. See Appendix for complete statement.*

Distinguishing Statements for Factor B: Reading is Decoding*

No.	*Statement*	*Score*
3	Children take turns reading aloud (in a small group or whole group) while teacher listens.	2
16	Teacher gives direct instruction of letter-sound relationships.	2
17	Children practice phonics on activity sheets.	2
6	Children read anything they choose for 15 to 30 minutes regularly in school.	2
19	Teacher and children participate in phonemic awareness activities.	1
20	Presence of a classroom library	1
10	Teacher provides direct instruction of word meanings using graphic organizers.	0
5	Children read assigned story silently by themselves.	0
24	Teacher integrates reading and writing.	0
28	Children draw pictures to portray scenes, characters, and events in stories.	0
12	Spelling instruction with lists of word families and regular quizzes	0
39	Teacher involves parents in school-sponsored literacy activities.	0
18	Teacher provides class time for journaling about stories read.	0
9	Teacher models comprehension strategies.	0
13	Presence of word walls	0
26	Accelerated Reading programs	0
22	Children write book reports.	-1
31	Formal assessments	-1
29	Children dramatize stories read.	-1
37	Children look up words in dictionary.	-1
23	Teacher provides class time for journaling about personal experiences.	-1
30	Informal assessments	-1
4	Children read to each other (in pairs or small groups) without teacher presence.	-1
14	Oral storytelling	-2
33	Teacher builds children's prior knowledge.	-2
34	Teacher encourages invented spelling.	-2
25	Teacher conducts surveys of children's and parents' attitudes toward reading.	-2

**Statements are abbreviated. See Appendix for complete statement.*

Conclusions

Our initial purpose for using Q methodology in these studies was to uncover the range of inservice and preservice teachers' perspectives on how best to teach beginning reading. However, our analyses in Studies 1 and 2 revealed that experienced teachers tended to cluster together, despite the fact that their teaching environments, teaching locations, student populations, years of experience, and dates of undergraduate education varied greatly. Furthermore, the experienced teachers' perspective contrasted markedly with that of the preservice undergraduates. Our second-order factor analysis enabled us to clarify the essential differences between expert and novice perspectives.

The experts' explanations of why they ranked the Q sort items as they did demonstrated several themes: (1) an understanding of reading as a multifaceted, complex process; (2) the importance of prior knowledge in reading comprehension and the need to help children connect their prior knowledge to text; (3) the importance of fostering internal motivation in young children; (4) the necessity for teacher and parent modeling of reading to motivate as well as instruct; (5) an awareness of recent research, especially research on *balanced literacy* approaches; and (6) a sensitivity to young children's frustration levels and self-esteem, with the understanding that feelings of inadequacy or boredom can hinder learning. Second-order analysis Factor A members tended to reject older teaching methods, embracing instead newer practices that can be traced to the *whole language* era, primarily because teachers felt that the older methods were disengaging and demotivating for young children.

By contrast, the preservice teachers tended to focus heavily on phonics instruction, reflecting the common layperson view that teaching reading means teaching decoding skills. The emphasis on accurate decoding, with the assumption that comprehension will automatically follow, can be dated to the *basic skills* era. The modes of teaching symbol-sound relationships chosen by the undergraduates — that is, round-robin style reading aloud, direct teacher instruction, and worksheets — are also practices from the *basic skills* era. The rejection of the more contemporary approaches to teaching reading often appeared to stem from a lack of knowledge of educational terminology, instructional practices and concepts, and young children. This was evident in the undergraduates' explanations of why they chose their most necessary and most unnecessary activities for teaching beginning reading. One undergraduate, for example, in explaining her low ranking of "Teachers encourage children to use invented spelling," wrote, "Invented spelling does not sound like anything educational."

These findings have important implications in the field of education. The differences between the beliefs of the inservice and preservice teacher

underscore the fact that some level of education and/or training is required for teaching beginning reading. Though this statement may seem obvious, U.S. policymakers continue to insist that the country's problems with low literacy can be ameliorated through the widespread use of minimally trained or untrained volunteers. These findings also challenge a major assumption currently made by professional educators as well as policymakers and other non-educators: that parents, simply by virtue of being parents, can play a major role in their children's literacy learning, even if the parents have little or no training or guidance in how to teach a young child to read.

These findings will also be useful to teacher educators, especially those of preservice teachers. Educators will likely need to challenge their undergraduates' novice view of reading as mere decoding, demonstrating that reading is instead a multifaceted process that requires making connections to prior knowledge, the use of comprehension strategies, and some level of internal motivation. Understanding that reading is more than decoding will help education students think more deeply about the activities that do not seem obviously connected to deciphering print, but that are seen today as essential to building reading ability: activities that increase children's prior knowledge, engage children meaningfully with books and school, and foster a love of literacy that will carry young children successfully through their many years of school.

References

Anderson, R.C., and Pearson, P.D. 1984. A schema-theoretic view of basic processes in reading comprehension. In *Handbook of reading research,* 255-91. Edited by P.D. Pearson. New York: Longman.

Banach, P. 1984. The impact of teachers' instructional beliefs on their teaching: Implications for research and practice. Paper presented at the Annual Meeting of the American Educational Research Association, New Orleans.

Baumann, J.F., and Hoffman, J.V. 1998. Where are teachers' voices in the phonics/whole language debate? *Reading Teacher* 51(8):636-51.

Blanton, W.E., and Moorman, G.B. 1987. *The effects of knowledge on the instructional behavior of classroom reading teachers, Research Report No. 7.* Boone, NC: Appalachian State University Center on Excellence in Teacher Education.

Brown, S.R. 1993. A primer on Q methodology. *Operant Subjectivity* 16(3/4):91-138.

Brown, S.R. 1997. The history and principles of Q methodology in psychology and the social sciences. Presented at British Psychological Society meeting, London.

Clay, M.M. 1985. *The early detection of reading difficulties.* 3rd ed. Portsmouth, NH: Heinemann.

Cooper, J.D. 2000. *Literacy: Helping children construct meaning.* 4th ed. Boston: Houghton Mifflin.

Cunningham, P.M., and Allington, R.L. 2003. *Classrooms that work: They can* all *read and write.* 3rd ed. New York: Longman.

Goodman, K.S. 1965. A linguistic study of cues and miscues in reading. *Elementary English 42:* 639-43.

Halliday, M.A.K. 1975. *Learning how to mean.* New York: Elsevier North-Holland.

Kagen, D.K., and Smith, K.E. 1988. Beliefs and behaviors of kindergarten teachers. *Educational Research* 30(1):26-35.

Kamil, M. and Pearson, P.D. 1979. Theory and practice in teaching reading. *New York University Education Quarterly* 10:83-108.

Ketner, C.S. 1997. Relationship between teacher theoretical orientation to reading and endorsement of developmentally appropriate practice. *Journal of Educational Research* 90(4):212-20.

Kim, J., and Mueller, C.W. 1978. *Introduction to factor analysis: What it is and how to do it.* Beverly Hills, CA: Sage.

Knudson, R.E., and Anderson, K. 2000. Survey of elementary education students' reading instructional beliefs. *Psychological Reports* 86:883-92.

Knudson, R.E., and Maxson, A. 2001. Use of the survey of elementary education students' reading instructional beliefs. *Psychological Reports* 88:451-5.

Leu, D.J., and Misulis, K. 1986. Prior knowledge and comprehension of basal teacher's guides. Paper presented at the annual meeting of the National Reading Conference, Austin, Texas.

McKeown, B., and Thomas, D. 1988. *Q methodology.* Newbury Park, CA: Sage Publications.

Morrow, L.M. 2001. *Literacy development in the early years*, 4th ed. Boston: Allyn & Bacon.

National Reading Panel. 2000. *Teaching children to read: An evidence-based assessment of the scientific research literature on reading and its implications for reading instruction.* Washington, D.C.: National Institute of Child Health and Human Development.

Otto, W., et al. 1977. *The Wisconsin design for reading skill development: Comprehension.* Minneapolis: NCS Educational Systems.

Rosenblatt, L. 1978. *The reader, the text and the poem.* Carbondale, IL: Southern Illinois University Press.

Ruddell, R.B. 2002. *Teaching children to read and write: Becoming an effective literacy teacher,* 3rd ed. Boston: Allyn & Bacon.

Schmolck, P. 2002a. PQMethod (Version 2.11, adapted from mainframe-program Qmethod written by John Atkinson, 1992) [Computer Software]. Neubiberg, University of the Bundeswehr Munich. Available as freeware at:*//www.rz.unibw-muenchen.de/~p41bsmk/qmethod/.*

———. 2002b. *PQMethod Manual.* Downloaded and installed from Schmolck, P. 2002a as: PQManual.htm.

Shavelson, R.J., and Stern, P. 1981. Research on teachers' pedagogical thoughts, judgments, decisions, and behavior. *Review of Educational Research* 51:455-98.

Spiro, R.J. 1979. *Etiology of comprehension style.* Champaign, IL: Center for the Study of Reading, University of Illinois.

Teale, W.H., and Sulzby, E. 1986. *Emergent literacy: Writing and reading.* Norwood, NJ: Ablex.

Tompkins, G.E. 2001. *Literacy for the 21st century,* 2nd ed. Upper Saddle River, NJ: Merrill Prentice Hall.

Vygotsky, L.S. 1978. *Mind in society.* Cambridge, MA: Harvard University Press.

Wimett, C., and Blachowicz, C. 1997. In their own words: Urban preservice teachers' elaborated constructs of literacy and literacy instruction. In *Inquiries in literacy theory and practice,* 319-34. Edited by C.K. Kinzer, K.A. Hinchman, and D.J. Leu. Chicago: National Reading Conference.

Appendix

Q-set

Question: Which of these are most necessary to teaching beginning reading, and which are most unnecessary? (Assume that the children are free of learning disabilities, physiological handicaps, and extreme psychosocial hardships, such as homelessness, physical or sexual abuse, etc.)

No.	*Statement*
1	Teacher reads aloud while children listen.
2	Teacher reads aloud while children follow along (in Big Book or in their own copies of the book).
3	Children take turns reading aloud (in a small group or whole class) while teacher listens to assess and/or correct the child's reading.
4	Children read to each other in pairs or small groups without teacher presence.
5	Children read assigned story silently by themselves.
6	Children read anything they choose for 15 to 30 minutes at regularly scheduled times during the school day (Sustained Silent Reading).
7	Children do repeated readings of the same story in different "modes" (e.g., listen to teacher read, read it to each other, read it to themselves).
8	Teacher provides direct instruction of comprehension strategies, such as prediction, inference, questioning, monitoring, retelling, and summarizing.
9	Teacher models comprehension strategies (prediction, inference, questioning, monitoring, retelling, and summarizing), and children practice.
10	Teacher provides direct instruction of word meanings (vocabulary) using graphic organizers.

Q-Set (cont'd.)

No.	*Statement*
11	Teacher provides class time for children to play word games.
12	Teacher provides spelling instruction with lists of word families and regular quizzes.
13	Presence of Word Walls displaying high-frequency words and/or word families.
14	Oral storytelling (by teacher, children, or guest speaker).
15	Literature Circles
16	Teacher gives direct instruction of letter-sound relationships (phonics).
17	Children practice phonics by completing activity sheets.
18	Teacher provides class time for journaling about stories and books read.
19	Teacher and children participate in phonemic awareness activities.
20	Presence of a classroom library containing a variety of reading materials at different reading levels.
21	Teacher provides class time for talking informally about stories and books read.
22	Children write book reports.
23	Teacher provides class time for journaling about personal experiences.
24	Teacher integrates reading and writing activities.
25	Teacher conducts surveys of children's and parents' attitudes toward reading.
26	Accelerated Reading Programs
27	Book contests with prizes
28	Children draw pictures to portray scenes, characters, and events in stories read.
29	Children dramatize parts (or all) of stories read.
30	Informal assessments (e.g., teacher jots down notes about how students read and handle books, observations, etc.).
31	Formal assessments (pencil-and-paper tests, standardized tests, individual reading inventories, diagnostic tests).
32	Writer's Workshop (including the stages of the writing process: prewriting, drafting, revising, editing, and publishing; peer editing; conferencing with teachers).
33	Teacher builds children's prior knowledge through hands-on experiences, field trips, videos, and explanations.
34	Teacher encourages children to use invented spelling.
35	Parents read to children at home.
36	Teacher communicates frequently with parents about reading and homework expectations for their children.
37	Children look up word definitions in dictionaries and write them down.
38	Teacher assists children in finding books and other reading materials they feel excited about.
39	Teacher involves parents in school-sponsored literacy activities and programs.

Table 1. Past and Current Approaches to Beginning Literacy Instruction

Basic Skills 1960s - 1980s)	***Whole Language 1980s -1990s)***	***Balanced Instruction 1990s - Present)***
Reading task broken into parts, taught separately.	Reading task viewed holistically.	Instructional time divided equally among*: •Phonics or word study •Teacher-led instruction with children reading aloud in small groups (*guided reading*) •Writing •Independent reading (*sustained silent reading*)
Phonics emphasized, taught in teacher-directed, sequenced series of lessons.	Phonics instruction minimized, knowledge to be intuited.	
Comprehension assumed to follow from accurate decoding.	Comprehension strategies and building prior knowledge emphasized.	
Academic subjects are taught separately.	Subjects and language modes (reading, writing, speaking, listening) are integrated.	Some integration of subjects and modes occurs.
Instruction is direct, teacher-led.	Learning is student-centered, inductive.	Balance teacher-directed and student-centered activities.
Basals with controlled text (e.g., "Dick and Jane") used.	Authentic literature/trade books used.	Both basal programs and authentic literature used.
Learning occurs through seatwork, worksheets, drill.	Learn cooperatively, in small groups and at learning centers.	Balanced among whole-group instruction, small-group learning, and individual work.
Motivation tends to be external.	Internal motivation fostered.	Mix of external and internal motivating techniques included.

Information obtained primarily from J. D. Cooper. 2000. *Literacy: Helping children construct meaning,* 4th ed. Boston: Houghton Mifflin.

*For example, Cunningham's "Four Blocks" Approach, from Cunningham, P.M., and Allington, R.L. 2003. *Classrooms that work: They can all read and write,* 3rd ed. Boston: Allyn & Bacon.

Table 2. Second Order Factor Loadings

Study 1 (S1) and Study 2 (S2) Factors	***Factor A***	***Factor B***
S1 Factor 1	**0.7216**	0.3966
S1 Factor 2	0.2685	**0.3433**
S1 Factor 3	**0.5083**	0.4332
S1 Factor4	0.0237	**0.6791**
S1 Factor 5	**0.4671**	0.3937
S1 Factor 6	**0.8019**	-0.0321
S2 Factor 1	**0.7438**	0.4702
S2 Factor 2	**0.8201**	-0.0304
S2 Factor 3	-0.0701	**0.8037**
S2 Factor 4	**0.5300**	-0.1163
S2 Factor 5	0.0372	**0.5760**

**Boldface numbers represent significant factor loadings.*