

Theoretical orientations to literacy: the beliefs of effective teachers

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Abstract

Raising standards of literacy has become a key issue for education policy in many countries. A critical factor in any attempt to improve education is the quality and consistency of teaching: thus there has been an increasing interest in teachers themselves. This has included not only what teachers do, but also what they know and believe; and how teachers' knowledge and beliefs relate to classroom practice. This paper reports an exploratory study of the theoretical beliefs of a sample of 225 British primary school teachers who were identified as successful in teaching literacy. Its main aim was to examine the characteristics of effective teachers of literacy - in particular their background, experience, professional development, knowledge, beliefs and classroom practice - and to compare them with a sample of 71 primary school teachers who represented the range of effectiveness in literacy teaching. The findings of this study indicated differences in theoretical orientation to literacy within the effective teacher sample, according to the type of teacher training course taken, the number of years' experience of teaching gained after qualifying, and their highest level of professional qualification. There were also differences in theoretical orientation between the effective teachers and the comparison sample. The paper concludes that these differences in beliefs about literacy and its teaching have implications for policy and professional development.

Introduction

Improving the teaching and learning of literacy has been high on the education policy agenda in many parts of the world for a number of years now. In several countries, such as the USA, the UK and Australia, a focus on learning outcomes in literacy has led to ambitious programs of curriculum reform, professional development, or a combination of both (Westwood et al., 1997). Key features of current centralized programs are a highly structured, externally developed curriculum; the use of direct interactive teaching; and systematic teaching of phonics. Slavin (1996) argued that using a ready made, structured program, based on research evidence of what seemed to work, would free individual teachers and schools from the necessity of, metaphorically, reinventing the wheel; and enable them to concentrate on teaching. The arguments for using externally devised curricula and pedagogies appear seductively logical. It would be hard to fault any policy approach which was so strongly evidence-based.

Yet such curricula also carry with them potential problems. The teachers and schools who are key agents for change have no real stake in the success of new curricula or teaching methods. As teachers themselves are central to any attempt to improve the teaching of literacy in order to raise standards, this is an important issue. It is simplistic to assume that specifying certain kinds of knowledge and pedagogy for all teachers will necessarily result in an increase in student achievement. A growing body of research on teachers' cognition suggests that it is not only their behavior in the classroom which influences students' learning, but also teachers' knowledge (both formal and practical), values, beliefs, theories and thought processes. Interest in teachers' cognition, and its relationship to classroom practice, has coincided with an increasing concern with educational outcomes, accountability and the effectiveness of individual teachers and schools. The important role of teachers' beliefs in mediating the extent to which they will adopt innovations in curriculum or pedagogy, or accept advice and support from external sources, has been highlighted by a number of educational researchers (e.g. De Ford, 1985; Fullan, 1991; Richardson et al., 1991; Westwood et al., 1997) They have pointed

out that ignoring teachers' beliefs in implementing innovations can lead to disappointing results in the longer term.

The aim of the research reported in this paper was to examine the characteristics of a sample of British primary school teachers who were identified as effective in teaching literacy. Given the developing body of research on teachers, and the centrality of their role in the UK government's stated aim of raising standards of literacy, we investigated the educational background, and the teaching and professional development experience of these effective teachers. We also explored their knowledge, beliefs and classroom practices. In this paper, we report on part of the study which examined these teachers' beliefs about the teaching and learning of literacy, and compared them with those of a control group of teachers selected to include teachers with a range of effectiveness in teaching literacy.

Research on teachers' beliefs

Although teachers' beliefs and values, and their relationship to classroom action, are increasingly accepted as an important dimension in understanding teaching, this is an area of research in which there has been considerable diversity of approach. Part of the problem has been that teachers' beliefs, and their relationship to teachers' knowledge, have been defined in different ways in different studies. Some researchers, usually working within a psychological perspective (e.g. Kagan, 1990), assume beliefs and knowledge to be the same; whereas others, often with an interest in philosophy and epistemology (e.g. Fenstermacher, 1994), have drawn a distinction between them. A further challenge has been the fact that teachers' beliefs and values are often implicit and not easy to access directly. The relationship between beliefs and practice is complex: it appears to be dialectical rather than unilateral, in that practice does not always follow directly from beliefs; and, sometimes, changes in belief may come after, or as a result of, changes in practice. In an overview of research on the relationship between teachers' beliefs and practice, Fang (1996, p. 52) identifies the 'consistency thesis' as dominating much of this work. He points out that research has led to a variety of conclusions about

the degree to which teachers' beliefs and practices are consistent. He also points out that in research on reading, a substantial number of studies support the notion that teachers possess theoretical beliefs towards reading, and that such beliefs tend to shape the nature of their teaching (e.g. Harste and Burke, 1977; De Ford, 1985; Richardson et al., 1991). However, other studies (e.g. Bennett, et al., 1984; Desforjes and Cockburn, 1987) highlight apparent inconsistency between teachers' stated beliefs, intentions, and their observed classroom practice. Duffy and Anderson (1984) suggest that although there may be some congruence between practice and beliefs, the relationship is not strong.

Pajares (1992, p. 326) warns that regarding teachers' educational beliefs as detached from, and unconnected to, broader belief systems and values is 'ill-advised and probably unproductive'. He suggests that when teachers' beliefs about a subject are inconsistent with their practice in that area, it may be that different and weightier beliefs are the cause. Pajares argues that it is important to think of connections among beliefs, instead of conceptualizing beliefs as independent sub-systems. Apparently inconsistent findings can become clearer and more meaningful when educational beliefs are carefully conceptualized, and their implications seen against the background of a broader belief system.

It is also important to bear in mind that teachers' beliefs are not only individual and personal; they also have a socio-historical dimension, and are shaped, in part, by time, context and circumstance. Duffy and Anderson (1984) argue that while teachers might be able to articulate their beliefs outside the classroom, their actual practices were often governed by the nature of teaching and classroom life. Fang (1996, p. 54) also points out that a range of research (e.g. Davis et al., 1993) has shown that differences in the degree of consistency between beliefs and practice stemmed from the diverse contexts in which teachers worked, and the constraints which these imposed: for example, school climate; or the need to follow national, state and local district policies and mandates. Fullan and Hargreaves (1994) outline a number of contextual factors which help to shape teachers' beliefs and values. These include the times when they trained and entered the profession, and the dominant values of those times; the particular stage of their career, and the degree

of confidence in their own teaching. However, Pajares (1992) maintains that, overall, despite theoretical and methodological diversity, the research literature does suggest that teachers' beliefs influence their classroom practice and teaching decisions. But he also cautions that researchers need to examine and make explicit their assumptions, and operational definitions of teachers' beliefs in order to make clearer what has been considered to be a 'messy construct' (ibid., p. 329).

Methodology

The complexity of teachers' beliefs has also led to methodological diversity in their study. Pajares (1992) argued that if reasonable inferences about beliefs required assessments of what individuals say, intend and do, then teachers' verbal expressions, predispositions to action, and teaching behavior must all be items for study. Although Munby (1984) suggested that qualitative methodologies were especially appropriate to the study of beliefs, the choice of qualitative or quantitative approaches would ultimately depend on what researchers wished to know (Pajares, 1992, p. 327). Reviewing research on teacher cognition, Kagan (1990) argued that many studies of teacher beliefs were strongly embedded in a specific context; and while they had a high degree of internal validity, they were small in scale (usually between 1 and 12 subjects) and often appeared 'to be so context or teacher-specific that generalization seems risky' (p. 420). Wideen et al. (1998, p. 144) also pointed out that a difficulty in reaching a cohesive picture of the role of teachers' beliefs lies in their situated nature. They also remarked that while a high degree of contextualization in terms of methodology, and in reporting, contributed to the validity of such studies, it made comparisons and cross-generalizations problematic. In other words, internal validity may be achieved at the expense of external validity.

Notwithstanding the reservations indicated above regarding highly contextualized, qualitative studies, three substantial reviews of literature on teachers' beliefs (Kagan, 1990; Pajares, 1992; Fang, 1996) have highlighted the problems in using other approaches, such as self-report instruments. What agreement there is on ways of studying

teachers' beliefs suggests the desirability of multi-method approaches, using a range of tasks and instruments to elicit teachers' beliefs.

The focus of this paper is on teachers' theoretical beliefs about the teaching and learning of literacy, conceptualized as theoretical orientations. Harste and Burke (1977) defined theoretical orientation in reading as particular knowledge and beliefs held about reading: the philosophical principles that guide teachers in their decision-making.

The instrument

Within an extensive questionnaire survey covering a range of variables, we included a section which probed teachers' theoretical beliefs about literacy teaching and learning. Rather than investigate the range and diversity of individual teachers' beliefs, we wanted to examine whether there were any clear patterns of orientation to dominant philosophies of, and approaches to, literacy teaching; and also whether there were any differences between effective teachers of literacy and a control group. Individuals' beliefs and values, and the relationship between beliefs and practice, we intended to examine through observation, interview and through the completion of tasks.

In designing the section of the questionnaire related to teachers' beliefs, we drew upon existing research literature on teachers' theoretical orientations. De Ford (1985) had already constructed a theoretical orientation to reading profile (TORP), which was validated through a multi-method process of analysis. This instrument had been used extensively by other researchers in North America (e.g. Richards et al., 1987; Levande, 1990; Mergendoller and Sacks, 1994; Ketner et al., 1997). De Ford identified three clusters of theoretical orientations to reading which reflected differing degrees of emphasis on three levels of language processing: sub-word/word features, word/sentence features, and text-level features.

- The first orientation was bottom-up, focusing on sub-word and word-level language units first, and then working up to text. This was described by De Ford as a 'phonic' orientation.

- The second orientation emphasized building up an adequate sight vocabulary in reading, and learners' skill in recognizing whole words. This De Ford termed a 'skills' orientation.
- The third orientation was top down, and focused on the provision of good quality literature from the outset; with an initial emphasis on developing a sense of story and text as a framework for dealing with smaller units of language such as words and segments of words. This orientation was termed 'whole language'.

De Ford's instrument consisted of a total of 28 attitude statements, divided more or less evenly between the three orientations. Teachers whose practice appeared to be consistent with one of these orientations would be more likely to agree with statements related to that position.

For the purposes of our study, the De Ford TORP appeared to offer a useful initial way of exploring teachers' theoretical orientations to literacy within a questionnaire survey. As the examination of teachers' theoretical orientations formed only one part of a lengthy questionnaire, and its purpose was to identify any general patterns within a fairly large sample of teachers, to be further explored through interview, observation and the completion of literacy related tasks, the original TORP instrument was significantly modified. Thus from the original 28 statements, we selected six items relating to beliefs. A further six statements were selected, or rewritten, to represent the practical action a teacher would be likely to take if he/she had a particular orientation. Some items from the TORP were re-worded using terminology more familiar to British teachers.

As the TORP had investigated only orientations to the teaching of reading, a parallel set of three pairs of statements relating to the teaching of writing was devised which reflected the three identified theoretical orientations. In devising these, we examined research and professional literature on writing development and instruction to produce a parallel set of orientations to writing. We are, of course, aware that this section of our instrument was not as well validated as the section focusing on orientations to reading.

- The first orientation was concerned with word-level and presentation features in writing, such as spelling and handwriting: this was termed a ‘presentation’ orientation.
- The second prioritized understanding of writing as communication, engagement in the writing process and whole text composition: this was termed a ‘process’ orientation.
- The third orientation reflected a concern with textual organization, and the importance of learning the relationship between purpose, form and structure in writing: this was termed a ‘forms’ orientation.

Again, for each of these hypothesized orientations, two teaching activities were suggested which would be consistent with each. (The full list of statements used in the final instrument can be seen in Tables 2 and 3 below.)

Strength of agreement or disagreement with each of the 12 items for both reading and writing was measured using a Likert scale which offered the following choices: strongly agree (1); agree (2); neutral (3); disagree (4); and strongly disagree (5).

Modifications to the original De Ford TORP had already been used in a previous study investigating changes in student teachers’ beliefs about the teaching of reading (Wray and Medwell, 1994); and were also piloted with a smaller sample of teachers who were interviewed and classroom practices observed. Although it could be argued that changes to the original instrument had weakened the construct validity of the TORP, we felt that these changes reflected the focus on literacy (as opposed to reading) in this study. A further point is that we were not using the instrument to predict, or make firm claims about, the sample’s classroom practice. It was used to explore the patterns of theoretical orientation within a relatively large sample of effective teachers, and to compare them with a control group of teachers from similar primary schools. The patterns emerging from the questionnaire data would then provide a basis for further exploration through interview and observation. A further point, indicated earlier, was that the theoretical orientation profile was only one section in a much longer questionnaire, and we did not wish to discourage respondents from completing all the items. Indeed, the return rate for the questionnaire was relatively good for a postal survey (59 per cent of effective

teachers, and 47 per cent of the control group); and, most importantly, there were few missing values within the TORP item data.

Sampling

As there was no obvious sampling frame from which to choose effective teachers of literacy, we used a three-stage process to identify an appropriate sample. The first step was to ask for nominations from local inspectors in 14 areas. These included a range of geographical areas in England; areas with different demographic patterns (e.g. urban, suburban, rural) and school types (small schools, large primary schools and separate infant and junior schools). Through this process, we drew up a list of over 600 teachers, recommended as effective. Aware of the limitations of selecting a sample based only on personal recommendation, we also checked available external data sources on the recommended teachers and schools for evidence of effective literacy teaching. These included inspection reports, national assessment results, and official databases. Only those teachers for whom there was adequate evidence of effectiveness, from a range of sources, were retained. The next step was to contact the schools in which these teachers worked, and ask the principals whether they agreed that the person in question was effective at teaching literacy; and whether there was objective evidence to support that opinion. The key issue was whether they could supply evidence of above average pupil learning gains in the classes taught by these teachers (e.g. standardized test scores). Satisfactory answers to these questions led to inclusion in the final sample of 382 effective teachers, to whom the questionnaire survey was sent.

In addition, we identified a control group of 150 teachers chosen to represent a range of effectiveness. These were selected at random from schools with similar regional, demographic and other characteristics to those within which the effective teachers were working.

Completed questionnaires were returned by 225 of the effective teacher sample (return rate 58.9%); and by 71 of the control group (47.33%).

The specific questions addressed in analysis of the questionnaire data relating to theoretical orientation were as follows:

1. What were the theoretical orientations of the effective teacher and control group samples, and what were the differences, if any, between the two groups?
2. Were there any differences in theoretical orientation within the sample of effective teachers according to teaching experience, level of academic qualifications, or type of initial qualification?

Results

Theoretical orientations

Correlational analysis

As indicated earlier, the full instrument used in the study comprised twenty four Likert-type statements. Each of the three theoretical orientations towards the teaching of reading was represented by two statements; and the three theoretical orientations towards the teaching of writing were each represented by another two statements (a total of 12 statements). It was important to examine at the outset whether there were similar patterns of response for each of the six orientations. For this purpose, correlations between the pairs of statements representing particular orientations were calculated for the whole sample of teachers. The full correlation matrices for both the reading and writing orientations are given in Tables 1a and 1b.

Table 1a: Correlations between items representing theoretical orientations to reading

	Phonic 1	Phonic 2	Skill 1	Skill 2	Whole Language 1	Whole Language 2
Phonic 1	1.00	.54**	.28**	.34**	-.18**	-.17**
Phonic 2		1.00	.30**	.28**	-.16**	-.19**
Skill 1			1.00	.29**	-.08*	-.11
Skill 2				1.00	-.10	-.13*
Whole Language 1					1.00	.31**
Whole Language 2						1.00

Table 1b: Correlations between items representing theoretical orientations to writing

	Presentation 1	Presentation 2	Process 1	Process 2	Forms 1	Forms 2
Presentation 1	1.00	.34**	-.15*	-.22**	-.12*	-.19**
Presentation 2		1.00	-.13*	-.19**	-.01	-.14*
Process 1			1.00	.24**	.17**	.22**
Process 2				1.00	.23**	.21**
Forms 1					1.00	.39**
Forms 2						1.00

Note: * Correlation is significant at the 0.05 level (2-tailed).
 ** Correlation is significant at the 0.01 level (2-tailed).

As indicated in Tables 1a and 1b, correlations between the items reflecting similar orientations were statistically significant at the .01 level of confidence. That is, a similar pattern of response was given to each of the statements designed to investigate a particular orientation. Given these correlations, it was decided that each set of statements could be taken together as a pair for the subsequent analysis. It is to the descriptive presentation of the participants' responses that we first turn.

Descriptive statistics

The mean responses of both groups to each of the attitude statements are given in Table 2. Statements designed to reflect similar theoretical orientations were grouped together, and the first column of the table gives details of these orientations. Low mean responses represent agreement with the statement and high mean responses disagreement.

Table 2: Mean responses of both teacher groups to each statement

Theoretical orientation	Statements	Effective teachers			Control group		
		n	Mean	SD	n	Mean	SD
Phonic	When children do not know a word they should be instructed to sound out its parts.	203	2.67	1.18	68	2.01	0.89
	Phonic analysis (that is breaking a word into its sounds) is the most important form of analysis used when meeting new words.	215	3.24	1.18	70	2.49	1.11
Skills	It is necessary to introduce new words before they appear in a child's reading book.	212	3.67	1.21	71	3.44	1.08
	It is important for a word to be repeated a number of times after it has been introduced to ensure that it will become part of a child's sight vocabulary.	217	1.87	1.19	71	1.46	0.67
Whole Language	When coming to a word that is unknown, the reader should be encouraged to guess a meaning and carry on.	212	2.03	0.94	70	2.44	1.10
	If a child says 'house' for the written word 'home', the response should be left uncorrected.	212	2.46	1.11	70	2.90	1.33
Presentation	It is important to correct children's spellings as they write.	206	3.47	1.12	68	3.10	1.12
	Fluent, accurate handwriting is a very high priority in early writing teaching.	218	3.93	1.06	70	3.17	1.32
Process	If children have spelt a word wrongly but their attempt is clearly logically based it should usually be left uncorrected.	200	2.63	1.10	66	2.83	1.17
	In the early stages, getting children to be confident in writing is a higher priority than making sure they are accurate.	220	1.38	0.74	71	1.39	0.57
Forms	Most children's writing should be for audiences other than the teacher.	213	2.11	0.97	71	2.13	0.92
	Young writers should choose their own reasons for writing.	211	2.56	0.99	70	2.57	1.00

Table 2 indicates that the effective teachers appeared to be inclined towards a whole language orientation to the teaching of reading. Their responses indicated that they tended to give emphasis to students making sense of texts, and that they believed authentic texts should be used as the principal reading material rather than decontextualized sentences, or words. They also placed less emphasis than the control group on the importance of children's use of sound-symbol correspondences in decoding new words. Although both groups tended to disagree with the statement that young readers should be introduced to new words before meeting them in context in a book, both effective teachers and the control group agreed that repetition of words was important in early reading. This suggests a strong emphasis on building up young readers' sight vocabulary. Finally, in theoretical orientations towards the teaching of writing, the effective teachers of literacy disagreed with prioritizing presentation features in the teaching of writing, whereas the control group appeared to be neutral about this. Similar patterns of response were given by both groups to the items representing the process and forms orientations to writing.

It should be noted that there was no expectation that any of the six theoretical orientations represented by the modified TORP instrument would be mutually exclusive.

Nevertheless, the patterns of responses presented in Table 2 require further scrutiny and it is to the statistical analysis of these that we now turn.

Multivariate Analysis of Variance (MANOVA)

To make statistical comparisons between the two samples, items which reflect the same theoretical orientation were grouped together, resulting in six composite scores (six dependent variables). One-way MANOVAs were then performed to test for differences between effective teachers and the control group in the three theoretical orientations relating to the teaching of reading (phonic, skills and whole language), and in the three orientations related to the teaching of writing (presentation, process and forms).

Analysis of the effective teachers and the control group in the three theoretical orientations relating to reading indicated a multivariate effect ($F(3,252) = 10.87, p < .001$). Univariate analysis revealed that the multivariate difference was due to differences between the effective teachers and the control group in all three orientations.

Examination of the mean scores indicates that the control group appeared to agree with statements which reflect a phonic and a skills orientation. By contrast, the effective teachers appeared to be neutral towards these two orientations (with the exception of the item relating to building up sight vocabulary), and more inclined towards whole language. Analysis of differences between the effective teachers and the control group in the three theoretical orientations relating to writing, also indicated a multivariate effect ($F(3,247) = 6.88, p < .001$). Univariate analysis revealed that the multivariate difference was due to differences between the effective teachers and the control group in the presentation orientation ($F(1,271) = 19.30, p < .001$).

Examination of the mean scores indicates that both the effective teachers and the control group agreed with the process and forms orientations towards the teaching of writing. However, in relation to the presentation orientation, while the control group could be characterized as neutral (Mean = 3.14), the effective teacher group appeared to disagree (Mean = 3.70).

Teaching activities

Descriptive statistics

As outlined earlier, the questionnaire included another list of 12 teaching activities representing those activities which might be expected to be used by teachers subscribing to the three theoretical orientations to the teaching of reading and to the three orientations to the teaching of writing. The respondents were asked to rate each teaching activity according to their views about its likely usefulness in teaching reading and writing. Low mean responses represent agreement with the usefulness of the activity and high mean

responses disagreement with its usefulness. The mean responses of each group to each of the teaching activities are given in Table 3.

Table 3: Mean responses of both teacher groups to each teaching strategy

Theoretical orientation	Statements	Effective teachers			Control group		
		n	Mean	SD	n	Mean	SD
Phonic	Teaching letter sounds as a way of helping children build up words	221	1.64	.73	71	1.61	.76
	Children completing phonic worksheets and exercises.	220	3.03	1.29	69	2.51	1.05
Skills	Using flashcards to teach children to read words by sight.	220	2.70	1.24	68	2.31	.95
	Using graded reading schemes to structure children's introduction to reading.	215	2.42	1.20	70	2.11	.93
Whole Language	Children listening to tape-recorded versions of stories while following the text in a book.	222	1.64	.65	70	1.83	.68
	Using big books with a group of children to model and share reading.	221	1.30	.53	70	1.73	.74
Presentation	Children copying or tracing over an adult's writing.	219	2.98	1.27	68	2.71	1.07
	Regular spelling tests using published spelling lists.	220	3.40	1.24	69	2.75	1.16
Process	Children using the 'magic line' when writing: that is, when they reach a word they cannot spell, writing its initial sound followed by a line and then checking the correct spelling afterwards.	219	2.05	1.01	67	2.19	.80
	Asking children to comment upon and help revise each other's writing.	220	1.55	.72	71	1.93	1.05
Forms	Getting children to write to other children in other schools or areas of the country.	218	1.96	.79	69	1.94	.66
	Using worksheets or frames to guide children's writing in particular forms.	215	2.28	1.07	70	2.39	.91

As seen in Table 3, the effective teachers of literacy rated favorably teaching activities that linked with whole language and process orientations. For example, although they agreed with the activity which involved students sounding out the parts of an unknown word, they did not rate favorably the activity: 'Children completing phonic worksheets and exercises'. This was rated more favorably by the control group. This is consistent

with their reported beliefs, presented earlier. Moreover, the control group appeared to be more positive towards the teaching activities reflecting a skills orientation than the effective teachers group who were, in turn, very positive towards teaching activities associated with a whole language orientation. Again, these tendencies appeared to be consistent with their reported beliefs. Finally, in relation to the teaching of writing, the effective teachers did not rate favorably the teaching of spelling by means of spelling lists. Consistent with their tendency to emphasize communication over presentation, they were more likely to place higher value on children helping each other revise their writing.

Correlational analysis

To investigate whether teachers' responses to the statements about teaching activities showed a similar pattern to their responses to statements about literacy teaching, we computed correlations between each composite score representing a theoretical orientation and the teaching activities designed to reflect all three orientations. The correlations for the effective teachers, for both reading and writing, are shown in Tables 4a and 4b; and for the control group in Tables 5a and 5b.

Table 4a: Correlations between theoretical orientations to the teaching of reading (total scores) and statements about teaching activities – effective teachers of literacy

Orientations	Teaching Activities					
	Phonic 1	Phonic 2	Skill 1	Skill 2	Whole Language 1	Whole Language 2
Phonic	.34**	.35**	.31**	.30**	-.09	-.13
Skill	.17*	.34**	.33**	.34**	.13	-.11
Whole Language	-.05	-.27**	-.18*	-.16*	.16*	.28**

Table 4b: Correlations between theoretical orientations to the teaching of writing (total scores) and statements about teaching activities – effective teachers of literacy

Orientations	Teaching Activities					
	Presentation 1	Presentation 2	Process 1	Process 2	Forms 1	Forms 2
Presentation	.21**	.36**	-.14*	-.15*	-.15*	.14*
Process	-.21**	-.19**	.05	.15*	.18*	-.10
Forms	-.24**	-.18**	.12	.30**	.25**	.03

Note: * Correlation is significant at the 0.05 level (2-tailed).
 ** Correlation is significant at the 0.01 level (2-tailed).

Table 5a: Correlations between theoretical orientations to the teaching of reading (total scores) and statements about teaching activities – control group

Orientations	Teaching Activities					
	Phonic 1	Phonic 2	Skill 1	Skill 2	Whole Language 1	Whole Language 2
Phonic	.21	.16	.25*	.25*	.03	-.26*
Skill	.24*	.36**	.43**	.51**	.14	-.01
Whole Language	.078	.02	-.15	-.28*	.15	.21

Table 5b: Correlations between theoretical orientations to the teaching of writing (total scores) and statements about teaching activities – control group

Orientations	Teaching Activities					
	Presentation 1	Presentation 2	Process 1	Process 2	Forms 1	Forms 2
Presentation	.37**	.34**	-.04	-.16	.15	.24*
Process	-.53	-.05	.05	.16	.07	0.7
Forms	.05	-.26*	.08	.25*	.22	.07

Note: * Correlation is significant at the 0.05 level (2-tailed).
 ** Correlation is significant at the 0.01 level (2-tailed).

As seen in Tables 4a and 4b, of the 12 relevant correlations in the analysis, significant levels of agreement were shown by 10 (8 at the 0.01 level of confidence), which suggests a level of consistency between the reported beliefs of the effective teachers of literacy and their views about particular teaching activities. By contrast, a similar level of agreement could not be established between the reported beliefs of the control group and their views about particular teaching activities, where only 4 of the 12 relevant correlations were significant (see Tables 5a and 5b).

The theoretical orientations of sub-groups of effective teachers

As well as examining effective literacy teachers' responses to the questionnaire items in relation to those of a control group, we also wanted to examine whether there were any differences in responses within the effective teacher sample. For this purpose, we present, in Tables 6, 7 and 8, data related to differences in theoretical orientation to the teaching of reading, and to the teaching of writing, within the effective teacher sample according to three variables: (i) number of years' teaching experience; (ii) type of initial teacher training course experienced; (iii) highest level of professional qualification.

Table 6: Mean scores of effective teachers with different number of years' teaching experience for the three theoretical orientations relating to the teaching of reading

Number of years' teaching experience	n	Phonics orientation	Skills orientation	Whole language orientation
1–5 years	28	n = 25 mean = 2.48	n = 27 mean = 3.07	n = 27 mean = 2.50
6–10 years	36	n = 31 mean = 3.08	n = 34 mean = 2.98	n = 32 mean = 2.25
More than 10 years	159	n = 142 mean = 3.00	n = 146 mean = 2.67	n = 145 mean = 2.17

Table 7: Mean scores of effective teachers with different types of teacher-training course for the three theoretical orientations relating to the teaching of reading

Type of teacher training course	n	Phonics orientation	Skills orientation	Whole language orientation
4 Yr. Bachelors	58	n = 54 mean = 2.89	n = 55 mean = 2.97	n = 54 mean = 2.24
Degree + PGCE	28	n = 21 mean = 2.93	n = 27 mean = 2.96	n = 25 mean = 2.32
2 or 3 Yr. Certificate in Education	133	n = 120 mean = 2.86	n = 122 mean = 2.62	n = 122 mean = 2.22

Table 8: Mean scores of groups of effective teachers with different levels of qualification for the three theoretical orientations relating to the teaching of reading

Highest level qualification	n	Phonics orientation	Skills orientation	Whole language orientation
Certificate in Education	96	n = 86 mean = 2.98	n = 89 mean = 2.58	n = 90 mean = 2.21
Bachelor's degree	114	n = 102 mean = 2.81	n = 106 mean = 2.89	n = 104 mean = 2.27
Master's degree	15	n = 12 mean = 3.83	n = 14 mean = 3.03	n = 12 mean = 2.00

It should be noted that a number of respondents had initially trained as teachers by taking two- or three-year Certificate courses, but had later upgraded their qualifications by taking in-service courses to attain a Bachelor's degree.

Examination of data presented in Table 6, indicates that teachers in the younger age-range appeared to be more in agreement with a phonic orientation to the teaching of reading, whereas the other two groups were neutral towards this orientation. By contrast, all three age ranges appeared to agree with the whole language orientation.

Although no statistically significant difference could be found, a tendency can be detected in Table 7 for participants with a Bachelor's degree, or with a degree plus PGCE, to be more neutral towards the skills orientation, whereas those with a Certificate in Education appeared to be in agreement with it.

Examination of Table 8 indicates that the effective teachers who had acquired the highest level of qualification appeared to be negative towards the phonic orientation, neutral towards the skills orientation and very positive towards the whole language orientation. It is worth stressing here that all the groups of effective teachers can be seen as being very positive towards the whole language orientation.

Discussion

Analysis of responses to these questionnaire items indicated that there were differences in the theoretical beliefs about reading and writing held by the effective teachers according to the number of years' teaching experience they had had; the type of training they had experienced; and the highest level of qualification they held. There were also differences in theoretical orientations between the effective teachers and a control group. The effective teachers of literacy showed a greater degree of consistency between responses relating to a particular theoretical orientation, and the hypothetical teaching activities which would accompany such an orientation.

We have emphasized that theoretical orientations were not mutually exclusive categories. In fact, teachers in both samples probably could be situated along continua of orientations, as suggested by other researchers in this area (e.g. Richardson et al., 1991; Westwood et al., 1997). Overall, the effective teachers of literacy showed a higher level

of consistency between their theoretical beliefs and choice of teaching activities than did the control group. They were more positively oriented to whole language theoretical positions which promoted the creation of meaning in reading and writing in the following ways: a strong emphasis on helping learners to understand text; the use of authentic texts and activities in teaching reading; a focus on process in writing; and developing children's understanding of a range of text forms and structures, and their ability to write for a range of purposes. The effective teachers were negatively oriented to theoretical positions which emphasized presentation features in writing, and teaching strategies which focused on achieving technical accuracy at the expense of meaning. Overall, the theoretical orientation of effective teachers of literacy appeared, in many respects, to be constructivist: prioritizing pupils' ability to make sense of, and produce, written texts in a range of contexts and for authentic purposes.

Although they were more negatively oriented to theoretical positions and teaching activities which emphasized grapho-phonetic decoding, that did not mean they were against the teaching of phonics per se. Apparently contradictory responses to the two items representing a phonic theoretical orientation suggest that they were positive about teaching letter-sound correspondences to help children build-up words; but were rather more negative towards using phonic analysis as the main strategy in decoding unfamiliar words.

Analysis of theoretical orientation within the effective teacher sample according to number of years' teaching experience, type of teacher training course, and highest level of qualification, yielded some interesting results. In relation to number of years' teaching experience, those who had only 1-5 years' experience appeared to be more positive towards a phonic theoretical orientation; more neutral towards whole language theories; and more negative towards a skills approach than more experienced effective teachers. Teachers with more than 6 years' experience were more neutral towards the phonic orientation. However, all three groups of effective teachers were positively orientated towards a whole language theoretical perspective.

The more positive orientation towards phonic theoretical perspectives found among effective teachers with the least experience may be interpreted in two ways. First, it could be argued that greater experience leads to a less positive orientation towards phonic theories: an interpretation which appears to be supported by similar findings in other research (e.g. Pesce, 1990; Troyer and Yopp, 1990). Alternatively, it might be that teachers with 1-5 years' experience had qualified more recently, and had experienced courses which reflected more recent approaches to the use of phonics in learning to read. The latter is plausible in that courses of initial teacher training have probably reflected more recent research developments relating to the teaching and learning of reading. Adams (1990) has highlighted the impact of recent research in cognitive psychology on our understanding of how successful readers process text. Her review of research on the teaching of reading also indicates strong evidence for the success of approaches which combine systematic teaching of phonics with the use of authentic texts in reading instruction, and a focus on text comprehension and structure. Work on phonological awareness and phonic and syllabic analysis of words, such as that of Goswami and Bryant (e.g. 1990) may also have been reflected in teacher-training courses in the last decade.

Further longitudinal study would be necessary to make any firm claims about changes in teachers' theoretical orientation as they gained more experience in the classroom. However, Pajares (1992) suggests that teachers' beliefs tend to remain relatively unchanged over time. Interestingly, our data showed that teachers who had trained by taking a two- or three-year Certificate in Education course - which were phased out in Britain over 20 years ago - were more positively oriented towards word recognition approaches to reading. They were the only group which was positive towards a skills theoretical orientation. Again, it is possible that approaches to reading which emphasized whole word recognition and the development of sight vocabulary were more likely to have been influential in primary school teacher-training courses in the 1960s and early 70s, when those who had taken Certificate courses would have trained.

Differences between the effective teachers in terms of the highest level of qualification held, indicated that those who held Master's level qualifications were more negative towards a phonic orientation and very positively orientated towards whole language theories (although it is worth emphasizing that all three groups were positive towards a whole language orientation to reading). Again, this finding needs to be interpreted cautiously. While a Master's level qualification might indicate greater familiarity with theoretical issues in the teaching and learning of literacy, and more opportunities to construct a robust personal philosophy of the teaching of reading, the Master's level qualifications were not necessarily gained in the area of reading or literacy. However, this finding is generally consistent with other research on teachers' theoretical orientations to literacy, which suggests that those favoring a whole language approach were also likely to have the highest level of training (e.g. Pesce, 1990; Troyer and Yopp, 1990). Interestingly, a study by Ketner et al. (1997) of teachers in the USA, indicated a much higher number who had Master's level qualifications than in England (although this was a smaller sample than ours, and all the teachers came from only one school district).

This exploratory study of teachers' theoretical beliefs about the teaching and learning of literacy raises a number of issues for further investigation; and has some implications for policy relating to professional development. One of the most important is that the differences in theoretical orientation which this exploratory investigation revealed may lead not only to differences in practice, but also to differences in ways of interpreting policy requirements relating to literacy. This is particularly important where ambitious nation or state-wide programs are being implemented, such as the British National Literacy Strategy. Innovations of this nature usually make some provision for professional development of teachers. However, such provision has often been either localized and fragmented, or, conversely, highly centralized with prescribed content and forms of delivery. In Britain, and probably in other parts of the world as well, preparation to implement new programs appears to have taken little account of the historical and socio-cultural contexts in which teachers' theoretical beliefs are formed. Rarely has provision for professional development been differentiated to take account of teachers' levels of expertise, experience, professional qualifications, or theoretical perspective. The

discourses which frame educational reforms tend to construct the new as good, and the old as bad; yet fail to provide ways of helping teachers to accommodate, or adjust to, innovations by relating them to their existing theoretical belief structures. The assumption that teachers can be provided with externally devised curricula, and teaching approaches, in order to free them to be more creative in the classroom, may also be reconsidered in the light of this, and other research on teachers' beliefs.

In conclusion, this exploratory study has revealed interesting differences in teachers' theoretical orientations to literacy, and consistency between theoretical beliefs and choice of teaching activities. As we have already pointed out, we make no claims about the relationship between those beliefs and teachers' actual classroom practice. Research on teachers' thought processes has tended to focus on the extent to which their teaching is consistent with their theoretical beliefs. But, as Fang (1996, p. 58) points out, less attention has been paid to a more important practical concern: how teachers can apply their theoretical beliefs within the constraints imposed by the complexities of classroom life.

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