

The impact of psycholinguistic theories on trainee-teachers' views of the teaching of reading.

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Abstract

Although an important theoretical influence it is by no means certain that psycholinguistic principles have had much effect upon classroom practice in the teaching of reading. Work by Robinson, Goodacre, & McKenna (1978) and Gray (1984) would suggest that psycholinguistics has had little impact on either serving or trainee teachers. The present study attempted, by using a rating scale questionnaire, to ascertain whether students in their final year of teacher-training were more influenced by psycholinguistic theories than before beginning their professional training in the teaching of reading. Results indicated the opposite effect. Three possible explanations for this are examined. It is argued that the most likely cause is the gap between theory and practice. The issue is raised of the relative effects of influences upon trainee - teachers' beliefs and practices.

Background

Although still a relatively recent influence on theoretical views of the reading process, the psycholinguistic approach has been in existence for a long enough period for it to be thought that it might have some effect on teachers' perceptions of the process of teaching reading. It might further be thought that, for trainee - teachers, this effect should be quite marked. They, presumably, should, as well as gaining practice in methods of teaching reading, be introduced to modern insights into the reading process, especially in so far as these insights might influence their subsequent practice. The precise relationship between theoretical knowledge and practice will, perhaps, always be less than direct. It is likely that particular teaching practices will persist for some time even when they are out of congruence with current theoretical developments, for a variety of reasons. It has been suggested (Duffy, 1979) that background theory and research findings are much less powerful an influence on teachers' classroom actions than are habits and information acquired from practice. However, it might be thought that for trainee teachers the effects of background theory would be more influential than for experienced teachers, if only because the former will have had much less time to acquire habits of practice.

The position, however, is not quite as simple as this. It has been argued by Robinson, Goodacre & McKenna (1978) that teaching practices often persist because they seem like common-sense to their practitioners, and that psycholinguistic principles tend to contradict these "common-sense" ideas in several ways. Trainee-teachers do not arrive at their teacher-training colleges with completely open minds about reading. They, like any members of the public, will have pre-formed ideas about the process, stemming from memories of the teaching they received, and also from generally held, lay-person's conceptions. These ideas are likely to be closer to "common-sense" than they

are to current theoretical beliefs.

Yet it might be argued that, after an education course in which a significant amount of time was devoted to the teaching of reading, the views of trainee-teachers on the process of reading should reflect rather more the theoretical principles to which they almost certainly will have been introduced. This study is an attempt to investigate whether this argument can, in fact, be supported. By comparing the views on the reading process expressed by students at the beginning of their professional training with those of the same students near the completion of this training, it was hoped to establish whether these views had changed in any way, and, as a by-product, to investigate the effects on students' views of reading of this course of training.

Work previously reported would suggest that American trainee - teachers are not strongly influenced by psycholinguistic principles in their views on the teaching of reading (Gray,1984). It was hoped in this present study to investigate whether this would be true of English trainee-teachers, and also to extend the investigation to include an assessment of the change in views of these trainees over the period of their training.

Two hypotheses were thus to be investigated: (1) The views of a group of trainee teachers from an English college of higher education concerning the teaching of reading would reflect knowledge of, and sympathy towards, psycholinguistic theories about the reading process; (2) Views favourable towards the psycholinguistic approach would be more marked in a group of trainee teachers nearing the end of their professional training, than in this group at the beginning of their training.

Design of study

The initial problem which presented itself was that of finding a suitable method of assessing the subjects' attitudes to, and knowledge of, psycholinguistic principles in reading teaching. Work by Tovey (1983) would suggest that teachers in general find it difficult to articulate their knowledge and views on the reading process. Consequently it appeared that a method of investigating these things would have to be used which was less direct than simply asking the subjects what they thought reading involved.

The very limited number of studies into this area have used the rating scale approach. This approach has several attendant difficulties but does have the advantage that it allows easy comparison of results from two distinct samples. A rating scale designed by Robinson, Goodacre & McKenna (1978) seemed particularly useful to the aims of this study. This scale was constructed using the statements used by Smith (1973) as "Twelve Easy Ways to Make Learning to Read Difficult" (see Appendix). As Robinson and his colleagues argue, "a population which was both familiar with and committed to the insights for reading instruction available through psycholinguistics could have been expected to disagree with most or all of Smith's statements". The subjects in the study were asked to rate each of the twelve statements according to their perceptions of their importance in reading instruction, being asked whether they would give each a heavy, moderate, slight or no emphasis. A mid-point position of "Uncertain" was also used, giving a five point, Likert-type scale.

The group of subjects used consisted of 40 students chosen at random from the second

year cohort of a Bachelor in Education course at a college of higher education in England. The group had previously begun a general Educational Studies course, but had yet to begin their professional studies courses in which the teaching of reading would play a major part. This group will be referred to as Group 1. 33 of this group responded to the questionnaire. Two years later these subjects were asked to respond again to the questionnaire. By this time, they had completed the compulsory professional studies component of their training, which included the teaching of reading. 27 of the group responded to the questionnaire this time. These respondents will be referred to as Group 2. The mean responses of each group to the twelve statements, and an indication of the statistically significant differences between them are given in Table 1.

Table 1: Mean responses of subject groups to questionnaire items.

	Group 1 (n=33)		Group 2 (n=27)		
	Mean	Std.Dev	Mean	Std.Dev	
1.Aim for an early mastery of the rules of reading.	3.39	0.78	4.00	0.27	**
2.Ensure that phonic skills are learned and used	3.39	0.69	4.19	0.39	**
3.Teach letters or words one at a time,ensuring that each new letter or word is learned before moving on.	2.36	0.78	2.93	0.90	
4.Make word-perfect reading the prime objective.	2.12	0.64	2.07	0.72	
5.Discourage guessing. Be sure the children read carefully	3.73	1.02	3.30	0.81	
6.Encourage the avoidance of errors.	3.82	0.57	3.63	0.78	
7.Provide immediate feedback.	3.97	0.83	4.56	0.50	**
8.Detect and correct inappropriate eye movements.	3.30	0.80	3.85	1.00	
9.Identify and give special attention to problem readers as soon as possible.	4.48	0.60	4.74	0.44	
10.Make sure the children understand the importance of reading and the seriousness of falling behind. in English.	2.88	0.84	3.00	0.27	
11.Take the opportunity during reading instruction to improve spelling and written expression, and also insist on the best possible spoken English.	2.59	0.62	2.64	0.98	
12.If the method you are using is unsatisfactory, try another. Always be alert for new materials and techniques.	4.63	0.48	4.76	0.43	
(Means calculated on the basis of Heavy Emphasis=5 and No Emphasis=1)					
* p<0.05 ** p<0.01			(Using Student's 't' statistic)		

Results

The first point to stand out from these results is that, far from disagreeing with Smith's twelve statements, these students expressed general agreement with them on both occasions. For only three statements did the mean responses of the two groups fall below the level of 3.00, which would have indicated an uncertain or neutral attitude. For only one statement, that claiming word-perfect reading to be the prime objective of reading instruction, did the responses of both groups come close to a mean of 2.00 which would indicate that they would give this claim little emphasis in their teaching.

On the other hand, of the twenty four possible mean responses (twelve for each group), twelve received a higher rating than 3.50 and seven higher than 4.00. This would suggest that, in broad terms, these respondents generally agreed that they would give some emphasis to the approach to reading instruction suggested by these twelve statements. Certainly, for eight out of the twelve statements, at least one of the groups made a positive response (higher than neutral position).

On this evidence it would seem that this study confirms that of Gray (1984) and suggests that psycholinguistic principles did not have much of an influence upon the views of these trainee-teachers. Hypothesis One had thus to be rejected.

A comparison was made of the mean responses of both groups of trainees, using the Student's 't' statistic. As shown in Table 1, significant differences between the groups were found for 5 of the 12 statements. For the other 7 statements the mean responses for each group were very similar. In each of the five cases of significant difference the direction of the difference was the same: the group of students responded more positively to the statement in their fourth year of training than they had in their second year. This is in direct contradiction of Hypothesis Two and suggests that, far from becoming more influenced by psycholinguistic theories during the course of their training, these students had, in fact, become less influenced.

Discussion

The fact that the second year students in this sample appeared to either reject or be ignorant of the psycholinguistic perspective on reading instruction is not, perhaps, very surprising. As explained earlier, these students had not yet begun the part of their professional preparation in which they would be likely to encounter psycholinguistic theories of the reading process. They thus might have been expected to hold 'common-sense' views about the teaching of reading, stemming perhaps from their own experience of being taught to read, or from conventional 'lay' perceptions of the process. If it were possible, it would be extremely interesting to attempt to trace the origins of these 'common-sense' views.

It was, however, somewhat surprising that, on this evidence, the views of trainee teachers during their training seemed to have, if anything, moved more positively towards 'common-sense' notions. Psycholinguistic ideas appeared to have had not just little effect on these views, but, in some cases, negative effects. This is, of course, to attribute a cause and effect relationship where one may not, in fact, exist. The issue warrants further discussion.

Gray (1984), in her discussion of similar findings in her sample of American trainee-teachers, suggests three possible explanations for the lack of impact of psycholinguistic theories on trainees' views on teaching reading. These are: a) The trainees may not have been introduced to psycholinguistic principles during their course of training. b) Their trainers may not accept these principles and hence instructed their students according to traditional beliefs about reading. c) The trainees may have leaned more heavily on their own experience of being taught to read than upon theoretical ideas introduced to them during training.

These three possible explanations, in modified forms, can be discussed in the light of the known situation surrounding the present findings.

a) Gray doubts that students undergoing a course of teacher-training will not at least encounter psycholinguistic principles. This is surely correct. The psycholinguistic view, for all its controversial nature, has developed into a major theoretical standpoint for examination of the reading process, and it would be surprising indeed if students undergoing training in the teaching of reading did not encounter elements of this standpoint. Names such as Frank Smith and Kenneth Goodman will surely figure somewhere in the reading list of any teacher-training course with a teaching of reading element. In the case of the course being taken by the respondents in the present investigation, the writer has personal knowledge of several occasions when the psycholinguistic approach has been explained to these students, and, indeed, recommended in fairly strong terms. Smith's "12 Easy Ways", the very statements used in the questionnaire, were also used as discussion material with these students. Hence student ignorance is an unlikely explanation for the results of this group of students in their fourth year. When in their second year, however, with contact with the methodology and principles of reading instruction yet to come, ignorance was, of course, a very likely explanation.

b) Gray's second point, which she accepts as possible, can be expanded somewhat. The point seems to be that there are a number of factors which might lead to psycholinguistic principles present in a training course, not being taken up by the trainees. These factors could include lack of commitment on the part of the trainers, lack of attempts to relate theoretical principles to the practical realities of teaching reading, or, quite simply, ineffective teaching on the part of the teacher-trainers. It would be invidious to speculate on whether these factors were at work in this study. The point should be made however that to expect a group of trainee-teachers to emerge from their training fully committed to a psycholinguistic approach to reading instruction is surely very naive. Firstly it is very difficult, and this is admitted even by exponents of psycholinguistic principles, to translate these principles into a practical method for teaching reading. This problem will be discussed further below. Secondly it has to be admitted that some of the approaches to teaching suggested by Smith's twelve statements are, in fact, supported, and thus for the students in this study, reinforced, by principles of learning encountered elsewhere in their course of training. This is especially true for statements 7, 9, and 12, which, perhaps significantly, were the three statements which received the most positive mean responses from Group 2. Statement seven relates to the need for feedback. These students will certainly have been introduced to the behaviourist ideas of Skinner and Gagne elsewhere in their course, in which the need for and the nature of effective reinforcement and feedback will have been explained. It is, perhaps, unlikely that they would have rejected this statement, at

least without having read Smith's detailed argument relating to it. Statements 9 and 12, similarly, will probably have been explicitly contradicted by the material these students will have met elsewhere in their course of training. The students' responses to this questionnaire may simply, then, have reflected their choice of allegiance to conflicting theoretical standpoints.

c) Gray's third possible explanation is quite likely to have been operating in the present study. It points to a clash between theoretical perspectives on the nature of reading, and practical experience of reading teaching. For Group 2 in this study, this experience will not have been confined to their memories of being taught to read, as Gray's explanation implies, but will also include what they have learnt from others' and their own attempts to teach reading in classroom situations. These students had undergone two substantial periods of teaching practice, during which they would, almost certainly, have either observed the approach to teaching reading of an experienced teacher, or attempted to teach reading themselves, or, for most of them, done both of these. That, on the basis of this evidence, they would seem to have swung away from a psycholinguistic approach to teaching reading, suggests that their classroom experience had persuaded them that a more traditional approach was either more sensible or more feasible. It is possible to speculate on the reasons for this.

Firstly, it is undoubtedly true, and admitted by many exponents of the psycholinguistic approach, that this approach does not easily translate into a practical classroom method of teaching reading. Psycholinguists would, in fact, argue that there is no such thing as the perfect method of teaching reading. Smith and Goodman (1971) argue that psycholinguistics does not imply a method in the same sense as the 'phonic method' or the 'look-and-say' method, but rather it assumes an attitude of teacher towards reader.

Secondly, it has to be admitted that the implications of the psycholinguistic approach for the teacher in the classroom in terms of actual action are not at all easy to implement. Smith himself recognises this by contrasting his "12 easy ways to make learning to read difficult" with the "One difficult rule for making learning to read easy". For trainee-teachers, for whom most classroom activities will seem difficult (teaching being such a complex and demanding activity), it is scarcely surprising that they attempt to minimise the problems and opt for what might seem 'tried - and - tested' and straightforward methods of teaching.

Thirdly, and finally, it is likely that trainee-teachers pick up a great deal of their approach to teaching from the teachers with whom they work closely during periods of teaching practice. From the results of Robinson, Goodacre & McKenna's (1978) work, it would seem that experienced teachers respond to the rating scale based on Smith's twelve statements in similar ways to the students in the present study. It would seem more likely, then, that trainee-teachers would pick up from their co-operating teachers traditional rather than psycholinguistic approaches to reading instruction.

Conclusion

The major aim of this study was to gain some insight into the ways trainee-teachers' views of the reading process might change over the course of their training. It was assumed that they would have been introduced to psycholinguistic theories of the reading process during the college-based part of their training, and envisaged that these

theories would have had some impact on their attitudes to approaches to teaching reading. From the results of the study, it appeared, however, that these theories had had either no impact upon these students, or even a negative one.

The study opens up the much larger question of what the influences are that cause trainee-teachers to become the kinds of teachers they do become. What, in the training process, are the relative effects of introductions to educational theories, of practical experience in classrooms, of contacts with experienced teachers? The issue urgently needs much more detailed investigation.

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Appendix

Twelve Easy Ways to Make Learning to Read Difficult.

1. Aim for an early mastery of the rules of reading.
2. Ensure that phonic skills are learned and used.
3. Teach letters or words one at a time, ensuring that each new letter or word is learned before moving on.
4. Make word-perfect reading the prime objective.
5. Discourage guessing. Be sure the children read carefully.
6. Encourage the avoidance of errors.
7. Provide immediate feedback.
8. Detect and correct inappropriate eye movements.
9. Identify and give special attention to problem readers as soon as possible.
10. Make sure the children understand the importance of reading and the seriousness of falling behind.
11. Take the opportunity during reading instruction to improve spelling and written expression and always insist on the best possible spoken English.
12. If the method you are using is unsatisfactory, try another. Always be alert for new materials and techniques.

(from Smith, F. (1973))