

**Teachers' awareness of morphemes & its
relationship with teaching and children's
learning**

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Starting points

- ❖ Explicit understanding of key concepts will promote children's learning
- ❖ As adults, much of our conceptual knowledge is implicit
- ❖ Explicit knowledge has obvious advantages when it comes to teaching.
- ❖ We propose that especially for the primary phase of education much of teacher knowledge is implicit
- ❖ To what extent is this true for morphology?
- ❖ If so, can we transform teacher's knowledge ?

National Curriculum

- ❖ The National Curriculum mentions morphemes in the context of spelling
- ❖ Of ten named areas that “pupils should be taught”, three relate to morphology and the term morpheme is explicitly headlined.

National Literacy Strategy

- ❖ Morphemes are identified as one of the principles underpinning spelling
- ❖ For example, one exemplification document concerned with spelling, 2 activities out of 13 involve morphemic strategies.
- ❖ However, children are only advised to try three strategies to spell an unknown word; phonic, analogy & looking it up
- ❖ Finding root words or thinking about morphemes are not mentioned.

Method

Sample

Fifty-one teachers were recruited from 13 inner-London state primary schools. Their pupils were aged between 7 and 11 years old (Key Stage 2).

Interviews

Teachers were presented with the following words :

White, Opened, Pavement, Baseball, Richness, Motion, Combination, Slept, Prepare, Smoke, Dark, Uncovered.

For each word, they were asked what sort of errors their pupils would make, what they thought were the underlying reasons for these errors and how they would teach the children to help them correct their mistakes.

Observation

Each teacher was observed for one literacy hour, normally recorded on video-tape (46 teachers).

Observations were then analysed on a number of dimensions, including a description of the main teaching events covered during the lesson, the teacher's objectives and the key concepts addressed.

What teachers' said

- ❖ Most commonly mentioned explanation of children's errors was phonetic (45%, 878 out of the 1,930 statements coded)
- ❖ Next most common category, morphological (20%, 386 statements)
- ❖ Not one teacher used the word 'morpheme'
- ❖ They did refer to morphemes in other ways
 - ❖ 82% talked about prefixes and suffixes
 - ❖ 62% talked about past tense verbs

Links with meaning

- ❖ ‘ed’ endings were linked with meaning (past tense)
- ❖ When teachers referred to prefixes or suffixes other than “ed”, they were much less likely to make a link with meaning (only 36% of teachers did this)
- ❖ If they did talk about meaning, it was more likely to be in the context of prefixes (“un”, “pre”) and inflectional suffixes (“ed”) rather than derivational morphemes (“ness”, “ion”).

Teaching meaning (in the context of “un” & “pre”)

“I always like to have the prefixes change the meaning of the word and then to identify the common ones so you know for “un” you could say it makes the word opposite and looking at how it changes the word.” (Teacher 36)

Teaching letter strings or patterns

The majority talked about morphemes in terms of letter strings or letter patterns

“I simply pulled out a whole heap of words ending in like, we had “-ness” and “-less” and what sorts of patterns could they see? And they all went “Hey, they all end in “-ness” or they all end in “-less””.
(Teacher 13)

Observations

- ❖ Of the 88 literacy events coded, 9 dealt with spelling.
- ❖ The emphasis was on phonic and visual strategies
- ❖ Three events had some relationship to morphology, but only two mentioned meaning and no connection was made with other examples of adding morphemes
- ❖ The term morpheme was not used.

Conclusion

- ❖ It seems that teachers have explicit knowledge of some aspects of morphology but not others.
- ❖ Explicit knowledge reflects both the context in which they teach (in this case under the mantle of the NLS) and aspects of morphology that are most transparent.
- ❖ Teaching about morphology was rare.

Conceptual explicitness

- ❖ Interviews with teachers were coded for the level of explicitness of conceptual knowledge which was demonstrated in the individual teacher's responses.
- ❖ The same teachers were also coded for the level of conceptual explicitness demonstrated in their teaching
- ❖ There is a moderate significant correlation between these measures for literacy (Spearman .48), and also for numeracy (Spearman .39)

Transforming research, changing teacher practice

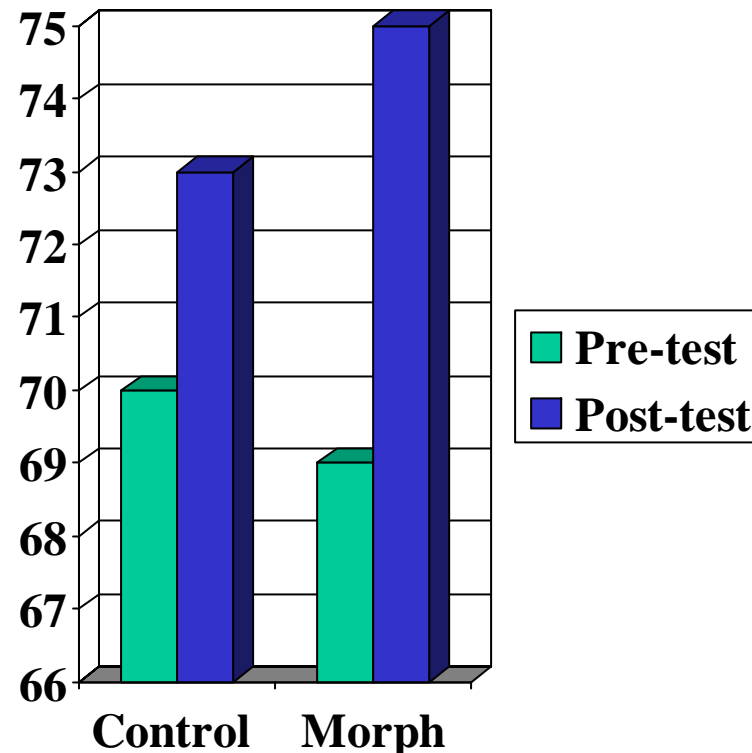
- ❖ We carried out a quasi-experiment
- ❖ We offered a 10-session literacy course covering comprehension and morphology
- ❖ 22 teachers and three Literacy Advisors from inner-London attended the course
- ❖ 17 of the teachers attending the course assessed their children's spelling at the beginning and end of the course.
- ❖ Comparison group from 15 classes where the teacher had not attended the course.

Teacher change

- ❖ 3 out of 17 teachers knew what a morpheme was at the beginning of the course
- ❖ 16 out of 17 at the end of the course
- ❖ All but one teacher reported that the course had changed their approach to teaching spelling
 - teach more explicit morphology, making connections between spelling, grammar and meaning
 - take spelling more seriously
 - they also saw spelling as having more creative possibilities such as class investigations
 - introduction of spelling journals

Pupil change (es = .50)

- ❖ 17 teachers attended our literacy course
- ❖ Tested their pupil's spelling at the beginning and end of the course
- ❖ Compared with the pupils in 15 control classes, their pupils made twice the progress, which was highly statistically significant



Follow up

In the following school year, 3 parallel Year 4 classes:

- All had no special spelling tuition in the first term
- In the second term, 3 conditions
 - Morphology (extra sessions)
 - National Literacy Strategy (extra sessions)
 - Control group
- Morphology and NLS group made significant spelling gains in the second term, Morphology group did significantly better than NLS and control groups

Conclusions

- ❖ In the areas of morphology and explicit teacher knowledge is sparse and patchy
- ❖ A practical course for teachers can increase both explicit knowledge and explicit teaching practice
- ❖ This produces significant gains in children's spelling