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Multi-Session Reading Inservice: A Step In The Right Direction

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Teachers, like members of other professional groups, are expected to learn, to grow, and to renew themselves. Although the need for effective inservice is evident and the qualities of effective inservice appear to be well-documented (Samuels and Pearson, 1988), school administrators seem still to be relying heavily on ineffective inservice formats. As university professors, we are frequently called to present the typical "one-shot" inservice session designed to provide "something for everyone" in less than two hours, with no provision for teacher participation or for follow-up activities and discussion.

Successful staff development programs are characterized by the application of innovations in the classroom setting, local materials development, collaborative planning, observation of the innovative practices in use, and principal participation in training (McLaughlin and Berman, 1977; Meyer, 1988). When staff development activities are closely related to the day-to-day responsibilities of the participants

and involve practice in simulated and classroom settings followed by feedback and coaching, the transfer of skills and strategies to classroom instruction is most likely to occur (Joyce and Showers, 1980; Singer and Bean, 1988). Duckworth (1981) stated that the majority of one-shot inservice formats resulted in a transfer of only 5-10 percent, while in-class coaching and provision for feedback resulted in a 90% transfer to classroom instruction.

Educational change necessitates an ongoing program of staff development with ample provision for teacher-to-teacher and teacher-to-consultant interaction with a continued emphasis on feedback and discussion related to working through the problems of implementation (Fullan and Pomfret, 1977; Carnine, 1988).

Purpose of the study

Despite what we know about inservice effectiveness, many inservice programs provide little opportunity for teachers to participate actively, to practice strategies with classroom materials, and to receive feedback following classroom implementation of the strategies. The study reported here was undertaken to determine whether or not the characteristics of effective inservice could be documented in an experimental study to have an effect on use of process-oriented vocabulary and reading comprehension strategies in the classroom.

This study considers the effect of a number of inservice sessions on understanding, appeal, perceived usefulness, and planned use of the strategies taught. Of major interest were the differences among the traditional one-session inservice (where teacher time for a single session is spent in an audience-receptive role), a three session inservice (where the additional time focuses on

active participation in using the strategies), and a five-session inservice (where the additional sessions emphasize feedback regarding strategy use). This study was a joint effort between three educational agencies that deal directly with inservice: public school districts, a university, and a state Educational Service Center (ESC). Study design, follow-up, and reporting of the results were responsibilities of university personnel while the staff development sessions were conducted by the ESC reading consultant.

Subjects and their districts

The initial subjects of the study were 64 third- through sixth-grade teachers from eight Midwestern rural or small town school districts. Because not all teachers originally participating completed all of the inservice sessions for their assigned group, 58 teachers comprised the final number of subjects.

The eight participating school districts were randomly designated as either one of the two treatment groups, those receiving three sessions or five sessions, or as one of two control groups. To be involved in the study, the school district had to meet three criteria: (1) have at least two sections of grades three through six, either within the same school or by combining two elementary schools in the same district; (2) volunteer to be in the pool of districts from which the random sample of districts would be drawn; and (3) agree to the random assignment of treatment or treated-control groups.

Independent and dependent variables

The controlled independent variable of focus for this study was number of sessions. Other independent variables considered in the analysis of the results were respondents' perceived ability to teach vocabulary and comprehension

as the inservice began, prior knowledge of the strategies taught during the inservice, previous inservice in reading, number of reading inservices attended during the previous three years, and level of interest in attending this inservice.

The dependent variables considered were specifically related to the five strategies taught during the inservice: understanding of each strategy, general theoretical appeal of each strategy, perceived usefulness to students of each strategy, and planned use of each strategy.

Inservice content

The content of the inservice sessions conducted by the Educational Services Center staff member was selected from *Becoming a Nation of Readers: Training Modules for Workshops in Reading Comprehension* (Hiebert, 1986). Five strategies formed the basis of the inservice – the conceptual approach to teaching vocabulary and four comprehension strategies: semantic mapping, idea mapping, reciprocal teaching, and the content DR-TA.

For a conceptual approach to vocabulary, ties are established between the new word and familiar experiences via a number of examples and non-examples of the word and word maps (Schwartz and Raphael, 1985) that show behaviors, causes, effects, and visual descriptions of the word. Additionally, discussion focuses on appropriateness or inappropriateness of the word in a variety of experiential contexts and student-completed semantic feature charts (Johnson and Pearson, 1984) with characteristics listed across the top and the key word and related words listed down the side.

A semantic map (Hanf, 1971; Johnson, Pittelman, and Heimlich, 1986) presents a visual demonstration of an

important concept. Students brainstorm what they know about a particular topic and develop categories of their prior knowledge. The key concept is written in the middle box or circle with lines radiating to key categories.

An idea map (Armbruster and Anderson, 1982) helps students to focus on the organizational patterns of text. Idea maps might be simple lists or compare-contrast charts with similarities and differences highlighted in chart form. The map could also show a time sequence, a cause-effect sequence, or a problem-solution sequence.

Reciprocal teaching (Palincsar, 1984) aims at developing students' abilities to generate questions, summarize, predict, and clarify potentially confusing parts of the text. The teacher models these various strategies encouraging the students to be active participants. Students gradually assume the teacher role, asking their classmates questions, asking various classmates to summarize the text, asking classmates to predict what might happen or come next, and asking classmates to identify and clarify confusing parts.

Like the narrative DR-TA, directed reading-thinking activity (Stauffer, 1969), the Content DR-TA is based upon predicting and reading to discover whether or not predictions were accurate. When using this strategy, teachers have students skim the text (a chapter from a content area text or part of a chapter) for five minutes. Then the teacher and students generate questions that they think the text will answer, attempt to answer the questions, justify their answers based upon what they learned during the skimming period, and read to confirm or reject their answers.

While these were obviously a great number of strategies to present, we felt the need to attempt to simulate the

traditional "one-shot" inservice session where many ideas and/or strategies are typically presented (usually in the hope of "having something for everyone"). Since the major purpose of this study was to compare the typical one-session inservice with a multi-session plan, all groups were provided with the same first session, a typical theory-based lecture session in which the five strategies were presented.

The three-and five-session treatment groups then participated in two sessions that focused on modeling and guided practice of the same five strategies. Teachers experienced the strategies as students with time provided for participants to plan their use of these strategies in their own classrooms with their own teaching materials. Feedback, sharing and peer coaching were the focus of the fourth and fifth sessions that the five-session treatment group received. Participants shared problems and successes they had encountered with using the strategies with their own students. Peer group interaction focused on possible ways to modify the strategies to make them more successful.

Instrumentation

In order to judge teacher receptiveness to the inservice and inservice effectiveness adequately, both a pre-inservice questionnaire and a post-inservice questionnaire were administered. The pre-inservice questionnaire provided data relative to the possible influence of a number of uncontrolled independent variables upon the knowledge, appeal, usefulness, and planned use of the five strategies taught: 1) the degree to which teachers felt effective in teaching vocabulary and comprehension, 2) the degree of knowledge that the teachers had with respect to the specific vocabulary and comprehension strategies to be taught during this inservice, and 3) the degree of interest that the teachers had in attending this inservice.

The mean rating for respondents' ability to teach vocabulary was 2.228, while the mean rating for their ability to teach comprehension was 2.351, on a scale of one to four where 1 = very effectively, 2 = effectively, 3 = somewhat effectively, and 4 = not effectively. Mean ratings for prior knowledge of each strategy to be taught ranged from 4.000 to 4.776 on a five point scale where 1 = have used frequently in the classroom, 2 = have used infrequently in the classroom, 3 = know about in some detail but have never used, 4 = sounds familiar, and 5 = never heard of it.

The mean rating of teacher attitude toward attending the inservice was 2.207 on a four point scale where 1 = looking forward to it, 2 = have some reservations about it being worthwhile but am hoping to gain some new and useful ideas, 3 = have serious doubts about its usefulness but am willing to attend, and 4 = am attending only because it is required/expected. Other data obtained on the pre-inservice questionnaire concerned prior coursework and inservice in the area of reading. On average, teachers had completed 9.2 semester hours of undergraduate study and 3.0 hours of graduate study in reading and had attended 1.6 workshops in reading during the last three years.

A post-inservice questionnaire was administered at the conclusion of the inservice for each group. Participants first rated their understanding of each strategy on a scale of 1 to 4, where 1 = thoroughly understand, 2 = understand well enough to try, 3 = need more information before trying, and 4 = confused. Then they rated the general philosophical appeal of each strategy, where 1 = impressed, 2 = like, 3 = no strong feelings, and 4 = do not like. Next they rated the usefulness of each strategy for their students where 1 = very useful, 2 = generally useful, 3 = somewhat useful, and 4 = of little or no use.

Table 1

Comparison of group means for treated-control and experimental groups with respect to factors that may affect understanding, appeal, perceived usefulness and planned use of the strategies taught

	Total n=58	Treated Control Groups		Experimental Groups	
		#1	#2	#1	#2
Ability to teach vocabulary	2.228	1.867	2.625	2.250	2.100
Ability to teach comprehension	2.351	2.267	2.625	2.313	2.100
Knowledge of concept approach to teaching vocabulary	4.000	4.077	3.833	4.077	4.000
Knowledge of semantic mapping	4.172	4.400	4.312	4.000	3.909
Knowledge of content DR-TA	4.776	5.000	4.750	4.687	4.636
Knowledge of reciprocal teaching	4.259	4.400	4.250	4.375	3.909
Knowledge of idea mapping	4.155	4.333	4.000	4.250	4.000
Years since a course in reading	8.396	6.833	12.000	7.438	6.400
Undergraduate hours in reading	9.200	13.692	8.857	6.067	8.300
Graduate hours in reading	3.019	3.000	1.789	4.750	1.900
Number of reading workshops (last 3 years)	1.600	1.357	2.533	.800	1.727
Attitude toward participation in this workshop	2.207	2.667	2.750	1.688	1.545
Groups 1 & 2:	Received one inservice session				
Group 3:	Received three inservice sessions				
Group 4:	Received five inservice sessions				

Finally they rated their planned use of each strategy, where 1 = frequently, 2 = sometimes, 3 = rarely, and 4 = never. The lower the rating for each dependent variable, the greater the understanding, the more positive the general appeal, the greater the perceived usefulness for

their students, and the more frequent the planned use of the strategy.

Results and discussion

Participants' responses to the pre-inservice questionnaire indicated that these teachers were fairly confident of their ability to teach vocabulary and comprehension even though they had very limited prior knowledge regarding the strategies of focus for the inservice. The teachers were not actively involved in reading inservice and advanced study in reading and had reservations about the usefulness of attending the inservice. Table 1 lists means for the various non-controlled independent variables for the experimental and control groups. For purposes of analysis, perceived ability to teach vocabulary and comprehension were combined to form the independent variable Teaching Ability, and prior knowledge ratings of the five strategies were combined to form the Prior Knowledge Variable.

Several findings of this study are noteworthy. First, with respect to the dependent variable of Strategy Understanding, a step-wise regression analysis (Table 2) indicated that only the number of sessions and the number of undergraduate hours in reading accounted for a significant amount of variance among the groups. Another significant finding involved the significance of teacher attitude toward inservice (Table 2). For the dependent variables of Strategy Appeal, Perceived Usefulness of the Strategies to Students, and Planned Use of the Strategies, the independent variable of Attitude Toward Attending the Inservice was the only factor that accounted for a significant amount of the variance found among the groups. The importance of attitude is certainly not surprising and must

be seriously considered when planning future studies and inservice programs.

Dependent Variables	Independent Variables Affecting the Dependent Variables		
	Number of Sessions	Undergraduate hours	Attitude toward attending inservice
Understanding	p=.0079 (F=7.604)	p=.0001 (F=10.873)	NS
Appeal	NS	NS	p=.0130 (F=6.590)
Perceived Usefulness	NS	NS	p=.0086 (F=7.434)
Planned Use	NS	NS	p=.0002 (F= 15.975)

An analysis of variance of group means (Table 3) indicated that the only areas of significance were in favor of Group 4, the group receiving five inservice sessions. Participants' understanding of both semantic mapping and idea mapping was significantly greater ($p < .05$) when compared to the understanding of these two strategies by the other treated and treated-control groups. Similarly, Group 4's planned use of idea mapping was significantly greater ($p < .05$) than the planned use by the other three groups. Though most differences among means were not statistically significant, inspection of group means indicated that the group receiving five sessions (Group 4) generally rated the five taught strategies more positively in terms of

degree of personal understanding, theoretical appeal, perceived usefulness to students, and planned use, as compared to ratings by the treated and treated-control groups.

Table 3

Comparison of group means for the experimental and treated-control groups with respect to: understanding, appeal, usefulness, and planned use of strategies

	Total (n=58)	Treated - Control Groups		Experimental Groups	
		#1 (n=15)	#2 (n=16)	#3 (n=16)	#4 (n=11)
Understanding of					
Vocabulary	1.875	2.182	1.692	2.000	1.500
Semantic Mapping	1.759	2.000	1.983	1.813	1.091*
Content DR-TA	2.172	2.333	2.250	2.188	1.818
Reciprocal Teaching	2.086	2.133	2.188	1.875	2.182
Idea Mapping	1.776	2.200	1.875	1.688	1.182*
General Appeal of					
Vocabulary	1.902	1.846	1.917	2.100	1.667
Semantic Mapping	2.035	2.286	2.000	2.125	1.636
Content DR-TA	2.293	2.400	2.375	2.438	1.818
Reciprocal Teaching	2.190	2.200	2.438	2.063	2.000
Idea Mapping	2.086	2.333	2.188	1.938	1.818
Usefulness to Students					
Vocabulary	1.550	1.615	1.583	1.700	1.000
Semantic Mapping	1.772	1.929	1.875	1.813	1.364*
Content DR-TA	2.103	1.867	2.375	2.313	1.727
Reciprocal Teaching	1.982	1.867	2.125	1.800	2.182
Idea Mapping	1.776	1.933	2.000	1.688	1.364*
Planned use of					
Vocabulary	1.667	1.667	1.643	1.900	1.333*
Semantic Mapping	1.895	1.929	2.000	2.063	1.455*
Content DR-TA	2.121	1.867	2.250	2.375	1.909
Reciprocal Teaching	2.103	2.067	2.375	1.750	2.273
Idea Mapping	1.897	2.200	2.063	1.750	1.455*

Groups 1 & 2: Received one inservice session
 Group 3: Received three inservice sessions
 Group 4: Received five inservice sessions

* p < .05

The only exceptions to this finding were for planned use of the Content DR-TA and understanding, usefulness, and planned use of Reciprocal Teaching. Negative ratings by the five-session group for Reciprocal Teaching may have been due to recognition that this approach includes four distinct strategies. Although teachers may feel upon introduction that they understand Reciprocal Teaching, continued work with the approach makes its complexity apparent.

Summary and conclusions

The findings of this study confirm initial expectations about the qualities of effective staff development programs. As expected, the five-session treatment group had a significantly greater understanding of the strategies taught as compared to the other treated or treated-control groups even when the effects of influencing factors were removed. Five sessions, where the fourth and fifth sessions focused on additional practice, feedback, and peer coaching, seem to have been needed to produce a significant increase in understanding of the strategies taught during the inservice.

Neither the experimental group receiving three sessions nor either of the treated-control groups receiving one session were significantly more positive in their understanding, theoretical appeal, perceived usefulness, or planned use of any strategies taught. A need for future research studies involving both multi-session designs and verification of the specific contributions of characteristics of effective inservice offerings remains. As teacher educators, we have a responsibility to see, and to *heed* the documented qualities of effective staff development. Multi-session inservice is one small step in the right direction.

References

- Armbruster, B., & Anderson, T. (1982). *Idea mapping: The technique and its use in the classroom or simulating the "ups" and "downs" of reading*

- comprehension* (Reading Ed. Rep. No. 36). Urbana: University of Illinois, Center for the Study of Reading.
- Carnine, D. (1988). How to overcome barriers to student achievement. In S.J. Samuels & P.D. Pearson (Eds.), *Changing school reading programs*. Newark DE: International Reading Association.
- Duckworth, K., Kehoe, E., DeBevoise, W., & Donovan, F. (Eds.) (1981). *Creating conditions for effective teaching*. Proceedings of a conference held at the Center for Education Policy and Management, University of Oregon, Eugene OR.
- Fullan, M., & Pomfret, A. (1977). Research on curriculum and instruction implementation. *Review of Educational Research*, 47, 335-397.
- Hanf, M.B. (1971). Mapping: A technique for translating reading into thinking. *Journal of Reading*, 14, 225-230, 270.
- Hiebert, E. (1986). *Becoming a nation of readers: Training modules for workshops in reading improvement*. Springfield IL: Department of School Improvement Services of the Illinois State Board of Education.
- Johnson, D.D., & Pearson, P.D. (1984). *Teaching reading vocabulary, 2*. New York: Holt, Rinehart & Winston.
- Johnson, D.D., Pittelman, S.D., & Heimlich, J.E. (1986). Semantic mapping. *The Reading Teacher*, 39, 778-783.
- Joyce, B., & Showers, B. (1980). Improving inservice training: The message of research. *Educational Leadership*, 37, 379-385.
- McLaughlin, M.W., & Berman, P. (1977). *The art of retooling educational staff development in a period of retrenchment*. Report No. RAND-P-5985. Santa Monica CA: Rand Corporation. (ERIC Document Reproduction Service No. ED 147 954).
- Meyer, L. (1988). Research on implementation: What seems to work. In S.J. Samuels & P.D. Pearson (Eds.), *Changing School Reading Programs*. Newark DE: International Reading Association.
- Palincsar, A.M. (1984). The quest for meaning from expository text: A teacher-guided journal. In G. Duffy, L. Roehler, & J. Mason (Eds.), *Comprehension instruction: Perspectives and suggestions*. New York: Longman.
- Samuels, S.J., & Pearson, P.D. (Eds.) (1988). *Changing school reading programs*. Newark DE: International Reading Association.
- Schwartz, R.M., & Raphael, T.E. (1985). Concept of definition: A key to improving students' vocabulary. *The Reading Teacher*, 39, 198-205.
- Singer, H., & Bean, T. (1988). Three models for helping teachers to help students learn from text. In S.J. Samuels & P.D. Pearson (Eds.), *Changing school reading programs*. Newark DE: International Reading Association.
- Stauffer, R. (1969). *Directed reading maturity as a cognitive process*. New York: Harper and Row.

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