More is known about the effective teaching of reading than is reflected in classroom practice. The critical link in the chain from research findings to classroom practices is staff development. A staff development model was designed, based upon the notions that change is a gradual and difficult process for teachers; that teachers vary widely in the competencies and readiness to learn; that a relationship should exist between staff development and school goals; that teachers are involved in identifying, planning, and providing staff development; and that effective staff development uses the best of what we know about effective teaching. The model used a direct instructional approach involving six steps: (1) theory presentation; (2) demonstration; (3) guided practice; (4) classroom practice; (5) feedback; and (6) coaching. A reading strategy, Semantic Feature Analysis, is used to demonstrate application of the staff development model. (One table of data is included.) (SR)
THE ROLE OF STAFF DEVELOPMENT IN

THE IMPROVEMENT OF READING INSTRUCTION

Deanna D. Winn
Assistant Professor
Department of Elementary Ed
Utah State University
Logan, Utah 84322-2805

Judith P. Mitchell
Associate Professor
Department of Teacher Ed
Weber State College
Ogden, Utah 84408-1304
THE ROLE OF STAFF DEVELOPMENT IN
THE IMPROVEMENT OF READING INSTRUCTION

More is known about the effective teaching of reading than is reflected in classroom practice. Researchers have provided educators with information on how children learn, how teaching can be more effective and how reading can be taught. However, if teachers are not users of effective research-based teaching practices, then research makes negligible differences in the lives of students learning to read.

This article will explore procedures for bringing classroom teachers together with current teaching practices to improve the teaching of reading.

The critical link in the chain from research findings to classroom practices is staff development. Staff development includes all things done in an effort to help the teaching staff improve teaching. Inservice specifically refers to skill-teaching sessions. For the purpose of this article the term staff development will be used to include both the broader understanding as well as the specific application.

The purpose of staff development programs is to bring about change—change in the classroom practices of teachers, change in their beliefs and attitudes, and change in the learning outcomes of students (Guskey, 1986). With increased knowledge regarding effective teaching practices, staff development becomes the major
vehicle for informing teachers of new and improved practices.

Staff development's history is not exemplary. In a testimony before the Senate Subcommittee on Education Davies concluded, "Inservice education is the slum of American education—disadvantaged, poverty stricken, neglected, psychologically isolated, riddled with exploitation, broken promises and conflict" (cited in Rubin, 1971, p.38). And this is the primary means educators rely upon for the improvement of education! This testimony was given over twenty years ago, but more current reports by Howey and Joyce (1978), McLaughlin and Marsh (1978), Rubin (1978) and Wood and Thompson (1980) indicate the continued shortcomings of staff development efforts. Even with the increased attention extended to staff development due to the advances in the knowledge base of teaching, staff development efforts, though improving, are still in an infant stage (Joyce & Showers, 1988).

There is no single recipe for successful staff development. Many strategies have been identified that tend to increase the likelihood that teaching behaviors will be changed, but they become contextually specific. That is, their success depends upon the situation, content and goals. Because there is not a single best approach, staff developers must adjust staff development to the needs of their specific group. They need to select from a list of strategies with proven track records those they believe will work in their specific situation. Human resource development should be the ultimate goal.

PRINCIPLES OF STAFF DEVELOPMENT
A great deal has been learned about adult learning, the change process and effective teaching; and these areas have implications for working with classroom teachers. Five principles have been identified from a long list of important findings. If these five principles are applied to staff development, the potential for strengthening the link between research and practice is improved.

The five principles are:

1. **Recognize that change is a gradual and difficult process for teachers.** Staff developers must acknowledge the additional stress that change adds to a teacher's life and limit the number of changes to just two or three per year. Teachers should be expected to be involved in continuous change (Doll, 1983) but would reduce the number of changes to a manageable number. Change should be viewed as a continual process not an event.

2. **Teachers vary widely in the competencies and readiness to learn.** Just as classroom teachers work in different ways with their various students, staff developers need to recognize the differences among the teachers with whom they work. Some teachers simply require a suggestion and they are implementing new practices while the majority require extensive practice and some motivation to incorporate new teaching methods in their classrooms.

3. **A relationship should exist between staff development and school goals.** School faculties need a clearly-defined philosophy of the school goals and what the faculty hopes to accomplish. This would be derived from what is currently happening at the school and what areas need attention. Faculty would develop the goals as well
as the specific areas in need of staff development. Several goals would be the maximum, as too great an expectation of change can result in no change. The staff developer would use this plan as a basis for the staff development that would occur in the school. Goodlad (1984) supports the idea that the school is the ideal unit of change and therefore the planning for change and the development of the change process should have its basis in the school.

4. **Teachers are involved in identifying, planning, and providing staff development.** When the goals of the school have been determined, teachers need to be involved in the identification of ways to reach those goals. Involving teachers in the decision-making processes affords both ownership and empowerment for teachers. When it comes to providing the actual training, if a cadre of teachers at the school can be involved in providing the training and implementation process, a support group will be provided for teachers as they engage in the change process. This cadre of teachers can provide role modeling, training, feedback to other teachers, and demonstrate that the new ideas work.

5. **Effective staff development uses the best of what we know about effective teaching.** We know that to simply mention to students that they need to interact with the text as they read, doesn't teach the concept. So it is with staff development. If teachers are to apply the newly taught principles in their teaching they require an understanding of the concept, time to learn the concept, practice, and feedback. These components are useful in teaching when the content is new and sequential.
When the actual strategies that are needed in the classroom have been identified, the process of staff development should incorporate the components of effective teaching. This would mean that we have many approaches to present the content and the selection of that choice is governed by our knowledge of the learners, the content and the environment. If the content to be learned is relatively new to the learners, a direct instruction approach is appropriate. This method presents the new information in small steps allowing for adequate feedback with practice following the presentation of information. The format would look something like this.

1. Theory Presentation
2. Demonstration
3. Guided Practice
4. Classroom practice
5. Feedback.
6. Coaching

It should be remembered that direct instruction was deliberately selected upon reflection of content, learners, and environment. After the initial presentation, follow-up sessions might utilize another model of presentation, such as cooperative learning, review, demonstration, etc.

APPLICATION TO SEMANTIC FEATURE ANALYSIS

To recognize how application of this staff development model looks in promoting the teaching of reading, Semantic Feature Analysis (SFA) has been selected. This strategy, like semantic
mapping, is a strategy that draws on readers' prior knowledge and stresses the relationship of concepts within categories. It differs from semantic mapping in one major way: instead of exploring how words are alike, it helps students understand how related words differ from one another. In addition to being an effective way of developing vocabulary, it also allows for the development of understanding and relationships of concepts, thus making the procedure useful in a number of curriculum areas.

As Johnson and Pearson (1974, 1982) noted in their book on teaching vocabulary, the English language is remarkably precise, and synonyms are not identical in their nuances of meaning. Until children realize that the term synonym refers to "something like," not "the same as," a great deal of semantic precision goes unrecognized as they read and write. Semantic Feature Analysis can "demonstrate clearly the uniqueness of each individual word or concept, and secondly it is useful...to add 'something like' synonyms to one's vocabulary." (Johnson & Pearson, 1984, p. 42)

The procedure is a categorization strategy based on the way individuals organize knowledge. As we process information, categories are established in the cognitive structure (schema) based largely on cultural and experiential patterns. Rules (features) are formulated to organize words or concepts into these categories. The following steps outline the procedures for designing Semantic Feature matrices and then using them with students.

1. Select a category and design the matrix. Any category of
words may be used, but the key is to start with a category that is concrete and within the experience base of the students. For example, a social studies unit on Australia could include a SFA on "Animals in Australia." Once the category topic has been introduced, the teacher develops a matrix of words that name concepts or objects related to the category. The teacher also decides what features (traits, characteristics) are to be explored. As students become familiar with the strategy, they can provide the features.

Animals of Australia

2. Complete the matrix. To complete the matrix the teacher and students work together in a discussion format. Each object is marked based on the presence or absence of features (traits, characteristics). A variety of marking methods can be used depending on the age of the students and the sophistication of their knowledge. "Smiley faces" can be used with young children. In elementary grades plus or minus (+, -) marks can be used; with older students a numerical scale denoting strength is often used.

Additional objects and features can be added if the discussion warrants it.

3. Discuss the completed matrix. Student can be directed to recognize patterns as they discover the similarities and differences in the various objects listed in the matrix. For older students, subtle shades of difference can be investigated and
# Animals of Australia

## Semantic Feature Analysis

### Features

<table>
<thead>
<tr>
<th>Animal</th>
<th>Natural Inhabitor</th>
<th>Found on Other Continents</th>
<th>Lays Eggs</th>
<th>Neonatal Offspring or Skin in Pouch</th>
<th>Suckles Young</th>
<th>Body Covered with Hair</th>
<th>Herbivore</th>
<th>Carnivore</th>
<th>Warm Blooded</th>
<th>Backbone</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kangaroo</td>
<td>+</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>+</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>+</td>
<td>-</td>
</tr>
<tr>
<td>Wallaby</td>
<td>+</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>+</td>
<td>-</td>
<td>-</td>
<td>+</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Koala</td>
<td>+</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>+</td>
<td>+</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Platypus</td>
<td>+</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>+</td>
<td>+</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Cockatoo</td>
<td>+</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Dingo</td>
<td>-</td>
<td>+</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>+</td>
<td>+</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Emu</td>
<td>+</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

---

109
further expanded with additional matrices. The value of using SFA comes with the quality of discussion that follows completion of the matrix. Vocabulary and concept growth, oral expression, to name only a few, are results obtained by using the SFA process. Teachers can also gain insights into students' thinking strategies and their growing skill in seeing relationships.

4. **Integrate the new knowledge into existing knowledge structures.** The matrix was designed to clarify and expand knowledge of specific segments of the curriculum, in this case the animals of Australia. It is important that the knowledge and insights gained by using SFA are integrated into the broader curriculum. For example, in analyzing the finished matrix, we found that all marsupials have backbones, hair, and feed their young. The matrix has helped us determine the defining features of marsupials. The matrix has allowed us to generalize across the objects by comparing and contrasting features that appear in the grid. The matrix is a visual representation that functions as a springboard for discussion. The example provided could lead to a further discussion on such topics as the uniqueness of Australian animals, the characteristics of mammals, as well as the various types of mammals.

In addition to being a useful device for the development of vocabulary and concepts, SFA can also be used in a variety of curriculum areas. For example, it can be used to examine personality traits and motives of characters in stories. It could also be used in identifying characteristics of geographical areas
or characteristics of countries.

CONCLUSION

SFA as outlined above lends itself to presentation in a staff development session using:

1. Theory Presentation
2. Demonstration
3. Guided Practice

Once teachers are familiar with the above three steps, they can be encouraged to further practice SFA in their classrooms by forming small support teams to assist each other as they transfer the learning into lesson application. These support teams also provide the feedback and more intensive coaching to assist in changing teaching behaviors. The teachers have now been exposed to the final three steps:

4. Classroom practice
5. Feedback
6. Coaching

Joyce and Showers (1988) have synthesized the staff development research in an attempt to identify the efficacy of the various training components and, particularly, combinations of them. Table 1 provides an overview of their work. The outcomes are expressed in effect size, which describes the magnitude of gains from any given change in educational practice and thus eventually used to predict what can be accomplished by using that practice. Effect size permits an assessment of how practices affect the outcomes to which they are directed. It is expressed
in standard deviation units.

Table 1 also breaks down the outcomes into the areas of knowledge, skill, and transfer of training. To provide the greatest probability of change in teacher behavior it is necessary to employ all components of theory, demonstration, practice, feedback, and coaching.

This staff development model and its use in teaching SFA addresses what we know about adult learners, change processes, and effective teaching strategies. If growth of teaching skills is our goal, then staff development needs to address the above components that research has repeatedly shown to be effective. Omission of the last three steps will not provide the results that can be achieved when all six are in place. Too often, teachers are simply told how to change their instruction, but never provided with the support network necessary to bring about the desired change.
<table>
<thead>
<tr>
<th>Training Components and Combinations</th>
<th>Training Outcomes</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Knowledge</td>
</tr>
<tr>
<td>-------------------------------------</td>
<td>-----------</td>
</tr>
<tr>
<td>Information</td>
<td>.63</td>
</tr>
<tr>
<td>Theory</td>
<td>.15</td>
</tr>
<tr>
<td>Demonstration</td>
<td>1.65</td>
</tr>
<tr>
<td>Theory Demo.</td>
<td>.65</td>
</tr>
<tr>
<td>Theory Practice</td>
<td>1.15</td>
</tr>
<tr>
<td>Theory Demo. Prac.</td>
<td></td>
</tr>
<tr>
<td>Theory Demo. Practice Feedback</td>
<td>1.31</td>
</tr>
<tr>
<td>Theory Demo. Practice Feedback Coaching</td>
<td>2.71</td>
</tr>
</tbody>
</table>

Table 1. Joyce and Showers (1988) discussion on effect sizes for training outcomes by training components.
LITERATURE CITED


