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A Survey of Levels of Supervisory Support and Maintenance of Effects Reported by Educators Involved in Direct Instruction Implementations

Abstract: One hundred and fifty educators across five school Direct Instruction implementations were provided with a seven-question survey and asked to identify the level of supervisory support found most effective in the acquisition of new teaching behaviors. In addition, these educators were asked if these newly acquired behaviors had maintained over time. Of the 150 educators, 113 (75.3%) completed the survey in its entirety. Results showed that the majority of teachers identified the team-teach method of coaching wherein the coach and/or supervisor directly intervenes during the lesson, provides a short demonstration of a particular strategy or method, gives a rationale, and then has the educator immediately replicate the intervention as the most effective when acquiring new teaching techniques. In addition, all respondents noted that teaching behaviors acquired during the coaching experience were implemented over time.

There are four key principles that determine high quality professional development for teachers [American Federation of Teachers (AFT), 1999]. First, teachers require training that includes recent research findings relevant to the field of education. Second, consultation and demonstration of validated instructional programs should be accessible to every teacher. Third, teachers should receive continuous professional development that has "topical continuity, practical application, and opportunities for collaboration with peers" (AFT, p. 25). Finally, such professional development should be linked to frequent in-class supervision.

In order for continued professional development to be most effective, the focus should be on changing both teacher and student behavior (National Reading Panel, 2000). This means that teachers must adopt new ways of teaching, and corresponding changes in student behavior should take place as a function of this teaching. In addition, the preparation of teachers requires extended training and ongoing support.

While in-service workshops and scheduled classroom observations conducted by school principals have been the traditional means of providing instruction and support to teachers, Joyce and Showers (1995) propose that these approaches are not always the most effective in causing lasting change in teaching practices. This is in large part because teachers are often isolated and do not receive regular supervision when they return to their classrooms and attempt to use the new strategies, practices, and methods they learned in the workshop set-

ting. In fact, the absence of follow-up is the single most profound challenge in the professional development of teachers (Fullan, 1993). "Inadequate and insufficient professional support helps explain why so many attempts to improve student learning have failed" (Worrall & Carnine, 1995, p. 15).

When teachers are taught to implement teaching practices accurately and effectively, the academic outcomes of students can improve (Carnine, Grossen, & Silbert, 1995). Coaching within a supervision model is a method to aid in the accurate and effective acquisition of teaching practices and behaviors.

> Coaching has been defined as:
> a confidential arrangement between peers that includes a focused classroom observation and feedback on that observation. It is not evaluation; it does not certify a teacher's effectiveness. Instead, coaching provides teachers a means of examining and reflecting on what they do in a psychologically safe environment where it is all right to experiment, fail, revise, and try again. (Raney & Robbins, 1989, p. 37)

Joyce and Showers (1995) described the importance of coaching to mastery of the knowledge presented in workshop settings as well as to skill acquisition and behavior change in the classroom.

Several investigations have noted the efficacy of coaching within a supervision model. Snippe (1992) and Fuchs, Fuchs, Hamlett, and Ferguson (1992) noted the comparative value of coaching within classrooms compared to workshop models of professional development. A workshop format does not include supervisory follow-up in the classroom. Snippe and Fuchs et al. found that coaching is a vital component in the professional development of teachers and can be very effective in altering both teacher practices and student achievement. Interestingly, Snippe reported that as few as

two supervisory sessions with a teacher, either with or without the teacher having attended a previous workshop, can enhance the effectiveness of the teacher in the classroom.

During coaching the coach/consultant helps teachers provide effective instruction so that both they and the students can be more successful. This means that the ultimate focus of the observation is on student learning. In order to improve student learning teachers must be provided feedback on their performance in the classroom. McLaughlin and Pfeifer (1988) defined feedback as the process of giving back information for the purpose of bringing about a change in the behavior of the person receiving it. The characteristics of effective feedback include: timeliness, specificity, clarity of purpose, and credibility of the source of feedback (McLaughlin & Pfeifer).

Further, French (1997) noted that feedback should be descriptive rather than judgmental and should be directed toward performance not toward the personal characteristics of the receiver. "Teachers must communicate the findings of their observations to classroom personnel in a way that establishes their credibility, focuses on quality ideas, provides depth of information, encourages changes in performance, and offers suggestions useful in improving instruction" (Morgan, 1997, p. 8). Moreover, the methods of feedback should reflect and promote dialogue about classroom events and should begin with the idea that information is the basis for all instructional decisions (Karant, 1989).

Along these lines, Gleason and Hall (1991) found the use of in-class feedback on the acquisition of teaching behaviors was more efficient and effective than after-class feedback. In-class feedback provides teachers an opportunity to practice the recommended changes and/or alterations immediately with their own students. In addition, when in-class feedback is provided, teachers are not required to wait until the next

day to execute the changes, thus the amount of time that elapses between the feedback and the implementation of the changes is minimal. Coulter and Grossen (1997) reported that "in-class feedback resulted in faster acquisition of target behaviors than after-class feedback or no feedback" for all participants (p. 27). In addition, the in-class feedback method resulted in a higher level of performance for these participants. This in-class feedback involved comments and prompts provided to the teacher *during* the lesson. For example, the team-teach method of coaching was employed wherein the supervisor directly intervened during the lesson (modeled aspects of the lesson) and had the teacher replicate the procedure with the students. Additionally, this study explored teachers' responses to the in-class feedback method. Teachers reported that in-class supervision did not threaten or undermine the teachers' authority or credibility with the students; teachers found the in-class feedback to be of great value.

Maintenance of effects after coaching should also be examined. In a study conducted by O'Reilly et al. (1992), in-class feedback versus after-class feedback was compared to determine whether teaching behaviors were retained over time. Three student teachers placed in elementary, middle, and high school classrooms participated in the study. The participants were taught one or two teaching techniques. The in-class feedback consisted of the supervisor immediately identifying the error made by the student teachers during instruction. If they did not know how to correct the teaching error, the supervisor verbalized and modeled the procedure. The student teachers were then instructed to continue teaching and to implement the targeted teaching behavior(s). In addition, the supervisor and the student teachers met after class where additional feedback was provided. In the after-class only model of feedback, the student teachers were provided feedback only in a conference-like setting after school. The results from this study indicated that with in-class feedback, two of the three participants exhibited enhanced performance on the targeted teaching behaviors. In fact, O'Reilly et al. noted that on observations conducted several weeks later, the student teachers correctly implemented the requisite teaching behaviors. In contrast, the after-class only feedback method resulted in only 62% of the occasions when the student teachers were able to implement the targeted behaviors in a correct fashion.

Staff development plans need to support teachers in their quest to apply effective teaching strategies in their classrooms. However, much of the training conducted on the implementation of Direct Instruction programs consists of workshops wherein teachers are provided with a theoretical framework, a demonstration, guided practice, and feedback. Then staff return to their classrooms and are not typically provided with a source of on-going support. In the cases where continuing support is provided, there are significant differences in the types of support they receive (more workshops, observations with interventions, observations without interventions, etc.).

Therefore, the purpose of this investigation was to survey educators involved in Direct Instruction implementations on (a) which type of supervisory support was most effective in the acquisition of new teaching behaviors, and (b) which level of support had the most impact on the retention of these acquired teaching behaviors.

Method

Survey

To assess both the degree and level of supervisory support that was most effective in improving teacher behaviors when working with educators in a classroom setting and the retention of these behaviors over time, a seven-question survey was developed by the author. This survey was developed based on a review of the research

Table 1

Survey

Grade Level Taught: _____Your Age: _____

Position: _____Sex: ❑ Male   ❑ Female

# of Years in the Profession: _____

Please circle one answer for each question.

1. On average, in the past school year how many times have you received an observation from a consultant and/or a peer coach?

   a) 1–3   b) 4–6   c) 7–9   d) more than 10

2. Of the following, which do you feel is most effective in helping you acquire new teaching techniques?

   a) A demonstration lesson conducted by the coach/consultant and observed by the teacher.

   b) Following an observation, in which no intervention occurs, the coach/consultant and the teacher meet after school to discuss possible changes/adaptations.

   c) Various verbal prompts, hints, or reminders from the coach/consultant while the teacher is providing instruction to his/her students.

   d) A side-by-side/team-teach strategy in which the coach/consultant intervenes during the lesson, provides a model and a rationale for the change/adaptation, etc. and then the teacher teaches the same format/material again.

   e) Attending after-school workshops/training sessions that focus on various teaching strategies that can be utilized in the classroom.

   f) None of the above.

3. Please describe your reason(s) for the answer to question *#2*.

(Table 1 continues)

Survey

4. What level of intervention do you think has the most significant impact on retention of these teacher behaviors over time?

    a) A demonstration lesson conducted by the coach/consultant and observed by the teacher.

    b) Following an observation, in which no intervention occurs, the coach/consultant and the teacher meet after school to discuss possible changes/adaptations.

    c) Various verbal prompts, hints, or reminders from the coach/consultant while the teacher is providing instruction to his/her students.

    d) A side-by-side/team-teach strategy in which the coach/consultant intervenes during the lesson, provides a model and a rationale for the change/adaptation, etc. and then the teacher teaches the same format/material again.

    e) Attending after-school workshops/training sessions that focus on various teaching strategies that can be utilized in the classroom.

    f) None of the above.

5. Please describe your answer to question #4.

6. If changes/adaptations, etc. were provided by the coach/consultant, do you implement these over time?

❏ Yes   ❏ No

7. Why or why not?

literature on Direct Instruction, supervision, and feedback models in teacher training as well as discussions with administrators, consultants, university faculty, and teachers who used Direct Instruction programs. Four of the questions required the respondents to circle the response that best answered a question. The remaining three questions required them to write a descriptive answer. Table 1 shows the survey used in this investigation.

Schools

Five school sites were selected by the author to participate in the study based on their school-wide implementation of Direct Instruction programs and use of at least three different outside (not within district) consultants in their training regime. These sites also had received various levels of coaching intervention (see Table 1 for the levels of intervention).

One site was a small rural school of 365 students in the western United States. It included a pre-kindergarten through fifth grade school population; the minority population of this school was 14%, and the percentage of students on free and reduced lunch was 62%. This school had implemented Direct Instruction programs for 6 years. Two sites in the same district in the southern United States also participated. One was an elementary school and one was a middle school located in a mid-sized rural school district (student body = 5,804) serving students in kindergarten through twelfth grade. The percentage of students who received free and reduced lunch was 37%, and the percentage of students from minority populations was 3%. They were in their first year of implementation. The fourth site was a charter school located in a large urban school district in the west that served a total population of 3,797 students. The school had an enrollment of 291 students and served those in grades kindergarten through eighth grade. The percentage of students on free and reduced lunch was 27%

and the minority population was 6%. This site had implemented Direct Instruction programs for 3 years. Finally, the fifth site (located in the southern United States) had an enrollment of 5,100 students and served students in grades kindergarten through twelfth grade. The percentage of students who received free and reduced lunch was 51%, and the minority population was 60.7%, of which 18% were students who had English as a second language. This urban site had used Direct Instruction programs for 6 years.

Respondents

A letter describing the purpose and the confidentiality of the study was developed and attached to the survey. For three sites, the author presented the survey and letter to those individuals who were present at a school-wide training session and had received coaching some time in the past. These individuals were told to complete the survey and return it in 1 week to the principal. For two sites, the principal presented the survey in a staff meeting and requested its completion within 1 week.

Out of the 150 surveys distributed across sites, 113 (75.3%) were returned. Six of the 113 surveys were received 2 to 3 weeks after the 1-week deadline and were included in the analysis. Eight (5.3%) of the surveys were not complete (e.g., all questions were not responded to or multiple responses were provided on questions that involved one answer) and were discarded. Of the 113 surveys returned, 104 teachers, 7 instructional assistants, and 2 counselors were involved. Of these, 77 respondents (68%) taught at the elementary level, 26 (23%) taught at the middle school level, and 10 (9%) taught at the high school level. Approximately 43% of the respondents had over 15 years of teaching experience. All respondents were involved in a Direct Instruction implementation that included a consultation and in-class coaching model.

However, all five sites received consultation/coaching services at various frequency levels and from various coaches.

Results

Recall that Table 1 provides the survey questions used in this investigation. On Question 1, respondents addressed "on average, in the past year how many times have you received an observation from a consultant and/or peer coach?" The majority of respondents (43.4%) noted they had received 7–9 observations, 26.5% noted they had received 1–3 observations, and 22.1% reported 4–6 observations conducted in the past. Less than 1% received more than 10 observations.

On Question 2, respondents identified which level of support was most effective in helping them acquire new teaching behaviors. The majority of respondents (61.1%) preferred a side-by-side/team-teach strategy where the coach/consultant intervenes during the lesson, provides a model and a rationale for the change/adaptation, and then has the educator teach the same format/material again (Choice D). Approximately *22%* of respondents identified a demonstration lesson (Choice A) as the most helpful technique in acquiring new teaching techniques. An after-school meeting with the coach/consultant (Choice B) was identified as the most effective technique for 10.6% of respondents. Finally, verbal prompts, hints, and reminders from the coach/consultant during the lesson (Choice C) *and* after-school workshops and training sessions (Choice E) were identified by .04% and .02% of respondents, respectively.

On Question 3, respondents were asked to complete a written response describing why the particular level of support was chosen. These responses were categorized according to the similarity of their responses. When Choice A ("A demonstration lesson conducted by the coach/consultant and observed by the teacher")

was selected, the most common response (95.8% of the respondents) was that they felt at ease watching and observing a model provided by an "expert" and that the visual example allowed them to understand the strategy/technique better. Similarity across the other responses was not found.

When Choice B ("Following an observation, in which no intervention occurs, the coach/consultant and the teacher meet after school to discuss possible changes and adaptations") was selected, 78.5% of the respondents indicated that this level of intervention was preferred, as it allowed time for discussion with the coach without any distractions. Only one teacher reported that it was the preferred level of intervention because feedback should always be given in private. Similarity across the other responses was not found.

When Choice C ("Various verbal prompts, hints, or reminders from the coach/consultant while the teacher is providing instruction to his/her students") was selected, three out of the four respondents (75%) reported that they were comfortable with this type of partnership because it was the minimal amount of intervention.

For those respondents who selected Choice D ("A side-by-side/team-teach strategy in which the coach/consultant intervenes during the lesson, provides a model and a rationale for the change/adaptation, etc. and then the teacher teaches the same format/material again"), 57% noted that immediate feedback provided a "hands-on" way to learn, therefore providing powerful shifts in the learning process; it was experiential rather than theoretical; and it limited the long-term effects of errors. The second most common response, reported by 32.8 % of the respondents, was that the side-by-side/team-teach strategy provided an opportunity to see what works with students as well as allowed them to practice the technique to mastery. Interestingly, three educators (.04%) reported

that although they thought this level of intervention was the most effective, it was not the most comfortable. Recall that most respondents (61.1%) selected a side-by-side/team-teach strategy as the most effective coaching technique.

On Choice E ("Attending after-school workshops/training sessions that focus on various teaching strategies that can be utilized in the classroom"), only one response was noted (i.e., "after-school workshops provide an opportunity to refine teaching techniques and engage in open discussion").

On Question 4, respondents were asked to identify which level of support had the most significant impact on retention of teacher behaviors over time. The levels of support were the same as the choices for Question 2 (see Table 1). Overall, the majority of educators (62%) preferred a side-by-side/team-teach strategy in which the coach/consultant intervenes during the lesson, provides a model and a rationale for the change/adaptation, etc., and then has the educator teach the same format/material again (Choice D). For Choice B, 17% identified that following an observation, in which no intervention occurs, the coach/consultant meets after school to discuss possible changes/adaptations. A demonstration lesson conducted by the coach/consultant and observed by the teacher (Choice A) was identified by 10% of respondents. Finally, verbal prompts, hints, and reminders from the coach/consultant during the lesson (Choice C) *and* after-school workshops and training sessions (Choice E) were identified by .08% and .03% of respondents, respectively.

On Question 5, respondents were asked to complete a written response describing why the particular level of support on Question 4 was chosen. These responses were categorized according to the similarity of the response. On Choice A ("A demonstration lesson conducted by the coach/consultant and observed by the teacher"), 44.4% of the respondents who selected this

response indicated that a demonstration provided a helpful model. Eight educators claimed that they preferred a demonstration because an intervention used during teaching can be confusing. Similarity across the other responses was not found.

On Choice B ("Following an observation, in which no intervention occurs, the coach/consultant and the teacher meet after school to discuss possible changes and adaptations"), 76.4% of those who selected this response stated that an after-school meeting allowed time for discussion, clarification, reflection, and input from the teacher and that they preferred privacy for constructive criticism. Similarity across the other responses was not found.

On Choice C ("Various verbal prompts, hints, or reminders from the coach/consultant while the teacher is providing instruction to his/her students"), 77.8% of the respondents who selected this answer stated that verbal prompts were helpful because they were an immediate reminder of what was to be done during the lesson. In addition, 22.2% of the respondents claimed that they thought this type of intervention was helpful because it provided the students an opportunity to hear what changes should be made, thus being involved in the entire learning process.

For Choice D ("A side-by-side/team-teach strategy in which the coach/consultant intervenes during the lesson, provides a model and a rationale for the change/adaptation, etc. and then the teacher teaches the same format/material again"), 80% of the respondents who selected this choice (again, the most common response made by 62% of respondents on the previous question) indicated that the side-by-side/team-teach strategy was the most powerful level of intervention because the model provides immediate feedback and correct modeling of behaviors; confirms understanding; and provides the teacher with an opportunity to prac-

tice, receive guided practice, and make the strategy/technique permanent. In addition, 12.8% claimed that the team-teach model allowed for individualization because the coach was a team player in the classroom, providing teachers with much needed support. Similarity across the other responses was not found.

Finally, for Choice E ("Attending after-school workshops/training sessions that focus on various teaching strategies that can be utilized in the classroom"), 60% of the respondents who selected this choice noted that an after-school setting allowed for time to discuss the rationale for various teaching strategies; 40% noted that after-school sessions allow for active involvement and note taking.

On Question 6, respondents were asked to identify whether the changes/adaptations were implemented over time. All respondents identified that if changes/adaptations were provided by the coach/consultant, they were implemented over time. Finally on Question 7, respondents were asked to identify the reasons why the changes/adaptations provided by the coach/consultant were or were not implemented over time. The most common response, reported by 70.8% of the respondents, was that the changes and adaptations provided by the coach were implemented over time because the changes were productive and beneficial for the students and that the suggestions helped the teacher be more efficient and effective. In addition, 19% of the respondents indicated that the coach was the "expert" and they had faith in suggestions offered by the coach. Similarity across the other responses was not found.

Discussion

This study examined the level of supervisory support that was most effective in improving teacher behaviors and practices when working with educators in a supervisory manner in a classroom setting. In particular, this study explored the specific levels of supervisory intervention that were most effective in helping improve teacher behaviors and examined whether these behaviors were retained over time. The results from this study support the conclusion that teachers prefer a side-by-side/team-teach strategy in which the coach/consultant intervenes during the lesson, provides a model and a rationale for the change/adaptation, and then has the educator teach the same format/material again. Furthermore, the results support the proposition that immediate in-class feedback is more effective than the traditional after-school meetings in which teachers receive feedback about the lesson that was observed. These findings are consistent with those of Gleason and Hall (1991), Morgan (1997), and O'Reilly et al. (1992).

In particular, this study supported the findings of Coulter and Grossen (1997) where in-class feedback was found to be more effective than after-class or no feedback—the team-teach method of coaching was also employed wherein the supervisor directly intervened during the lesson (modeled aspects of the lesson) and had the teacher replicate the procedure with the students. Coulter and Grossen noted that the teachers did not feel threatened or undermined and found the in-class feedback to be of great value. Thus, this study speaks to the importance of the team-teach model of coaching when educators are actively engaged in lesson presentations.

In-class coaching and immediate feedback is not a model of supervision and coaching that is commonly practiced. Due to the intrusive nature of the coach being in the teachers' classroom working side-by-side with them, there are often concerns about the possibility of this type of method being intimidating and undermining the authority of the teacher. However, the written responses from the respondents clearly indicate that the team-teach coaching method does

not threaten or undermine teachers nor does it dismantle the credibility that they have established with their students. Rather, an overwhelming number of educators expressed that the team-teach model was powerful due to its experiential nature and that the immediate feedback allowed for a positive "hands-on" approach to learning.

Even though teacher-training programs typically do not utilize the side-by-side/team-teach model nor do teachers experience this type of professional development once they enter the classroom, the results of the study suggest that educators could acquire new, specific teaching behaviors and practices if they experienced this type of coaching model. This does not imply that after-school workshops and traditional means of observation are not an important training method. Rather, the implication for practice is that the team-teach model improves both teacher and student performance and is perceived as helpful and effective for educators. The team-teach model can provide an immediate demonstration of a particular technique or strategy while students are present, providing an opportunity for educators to link the teaching behavior to the students' behavior. In contrast, the out-of-classroom model can provide the opportunity for further self-analysis on the part of educators and can allow for discussion about application of theory. Both models appear to be necessary for the professional development of educators. Thus, an ideal teacher-training model should incorporate both models of supervision and coaching.

The team-teach model of coaching can provide both frequent feedback to teachers as well as promote long-term changes in teacher behavior; in turn improving instruction in the classroom. In addition, offering assistance in the classroom environment in a consultative and participatory manner allows both the teacher and the coach/supervisor to work through problems and challenges in a meaningful, concrete way. As

teachers if we are to stimulate students to be continuous learners, then we as a profession must pursue lifelong learning as an essential professional goal. If our learning consists of one-day workshops and trainings that occur in an environment where we are disconnected from our students then it is not surprising that what we are taught does not generalize to the classroom, nor are the practices maintained over time. Yet, if we as a profession engage in active learning activities such as coaching, we can continuously seek, assess, learn, apply, and communicate knowledge throughout our teaching careers.

Despite the interesting findings noted in this investigation, several limitations exist. First, as with other research conducted using survey methodology, it is not clear if the results represent what teachers actually did in the classroom. Future studies should include direct observations of teacher performance on such variables as use of teaching behaviors over time. Second, only five schools across four districts in two areas of the country (south and west) were involved in this study. Future studies should extend this survey by including more schools across all geographic regions. Third, schools were not randomly selected from all possible Direct Instruction implementations. Future studies should include random selection of schools. Finally, although the author was not the primary consultant in these sites, she had provided consultation to each site in the past. Future studies should examine Direct Instruction implementations across consultants.

It would also be interesting to determine the effects of the various levels of intervention on the academic outcomes of students. As many teachers identified that the suggestions and strategies offered and demonstrated by the coach had a positive impact on students, it would be important to identify if the students' academic behaviors improved. In addition, due to the fact that the respondents had various individuals who conducted the observations, it would be useful to have educators determine what specific behaviors

and personality characteristics the consultants/coaches had to determine if some of the same characteristics are consistent across individuals. This information could then be utilized when training others to serve in this role.

In summary, this study is an initial step in the direction of determining teacher preferences with regard to levels of support and coaching provided in schools. Findings should help direct future investigations in this important, albeit under-studied, research area.

References

American Federation of Teachers. (1999). *Teaching reading is rocket science: What experienced teachers of reading should know and be able to do.* Washington DC: Author.

Carnine, D. W., Grossen, B., & Silbert, J. (1995). Direct Instruction to accelerate cognitive growth. In J. Block, S. Everson, & T. Guskey, (Eds.), *School improvement program* (pp. 129–152). New York: Scholastic Leadership Policy Research.

Coulter, G. A., & Grossen, B. (1997). The effectiveness of in-class instructive feedback versus after-class instructive feedback for teachers learning Direct Instruction teaching behaviors. *Effective School Practices, 16*(4), 21–35.

French, N. K. (1997). Management of paraeducators. In A. L. Pickett & K. Gerlach (Eds.), *Supervising paraeducators in school settings: A team approach* (pp. 91–169). Austin, TX: Pro-Ed.

Fuchs, L. S., Fuchs, D., Hamlett, C. L., & Ferguson, C. (1992). Effects of expert system consultation within curriculum-based measurement, using a reading maze task. *Exceptional Children, 58*(5), 436–450.

Fullan, M. (1993). Why teachers must become change agents. *Educational Leadership, 24*(3), 12–17.

Gleason, M., & Hall, T. E., (1991). Focusing on instructional design to implement a performance-based teacher training program. *Education and Treatment of Children, 14(*4), 316–332.

Joyce, B., & Showers, B. (1995). *Student achievement through staff development: Fundamentals of school renewal.* New York: Longman.

Karant, V. (1989). Supervision in the age of teacher empowerment. *Educational Leadership, 35*(6), 27–29.

McLaughlin, M. W., & Pfeifer, R. S. (1988). *Teacher evaluation: Improvement, accountability, and effective learning.* New York: Teachers College Press.

Morgan, R. L. (1997). Delivering feedback on teaching performance to improve student instruction: Looking for methods in hopes of avoiding madness. *Effective School Practices, 16*(4), 6–11.

National Reading Panel: Teaching Children To Read. (2000). *Teaching children to read: An evidence-based assessment of the scientific research literature on reading and its implications for reading instruction* [Online]. Available: http://www.nationalreadingpanel.org/Documents/pr_finalreport.htm

O'Reilly, M. G., Renzaglia, A., Hutchins, M., Koterba-Buss, L., Clayton, M., Halle, J. W., & Izen, C. (1992). Teaching systematic instruction competencies to special education student teachers: An applied behavioral supervision model. *Journal of the Association for the Severely Handicapped, 17*(2), 104–111.

Raney, P., & Robbins, P. (1989). Professional growth and support through peer coaching. *Educational Leadership, 35*(6), 35–38.

Snippe, J. (1992). *Effects of instructional supervision on pupils' achievement.* Paper presented at the annual meeting of the American Educational Research Association, San Francisco.

Worrall, R. S., & Carnine, D. (1995). Lack of professional support and control undermines education: A contrasting perspective from health and engineering. *Effective School Practices, 14*(1), 3–16.