Collaborative, School-Based Professional Development Settings for Teachers: Implementation and Links to Improving the Quality of Classroom Practice and Student Learning

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Collaborative Professional Development Settings for Teachers: Links to Improving the Quality of **Instruction and Student Learning** Lindsay Clare Matsumura, Project Director, Center for the Study of Evaluation/UCLA Copyright © 2002 The Regents of the University of California The work reported herein was supported by a grant from the Spencer Foundation, PR/Award Number 022911, with support provided by the Stuart Foundation, PR/Award Number 98-85 and the Los Angeles Annenberg Metropolitan Project, PR/Award Number 014143. The findings and opinions expressed in this report do not reflect the positions or policies of the Spencer Foundation, the Stuart Foundation, or the Los Angeles Annenberg Metropolitan Project.

COLLABORATIVE, SCHOOL-BASED PROFESSIONAL DEVELOPMENT SETTINGS FOR TEACHERS: IMPLEMENTATION AND LINKS TO IMPROVE THE QUALITY OF CLASSROOM PRACTICE AND STUDENT LEARNING¹

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Abstract

This study investigated the implementation and influence of an innovative professional development program—Critical Friends Groups (CFG)—in urban elementary, middle, and high schools. The purpose of this program was to create collaborative, school-based professional development settings in schools that would support teacher self-reflection and improvement in instructional practice. Results indicated that coaches and teachers were very positive overall about their participation in Critical Friends Groups. Specifically, teachers reported that the groups had positively influenced their attitudes toward colleagues and their school, and had helped improve their instructional practice and student learning in their classroom. Teachers also were very positive about the quality of the feedback they received in their groups. Observations of groups and analyses of teachers' assignments and student work yielded mixed results, however, with regard to the quality of feedback offered to participants during group meetings, and links to instructional practice. Recommendations for improving the implementation of these types of professional development settings included scheduling meetings more frequently as part of the normal school day for teachers, focusing group activities on looking at student work and conducting regular peer observations, improving the quality of feedback offered to members, and establishing clear and concrete goals that are aligned with larger reform goals for groups and individual members.

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More than two decades ago, policymakers declared us to be a "nation at risk" in terms of the quality of learning and instruction in our country's public schools (National Commission on Excellence in Education, 1983). In response to public concern, numerous reform programs have been developed and launched around the country. The new vision of practice on which most of these reform programs have been built requires teachers to construct new classroom roles and expectations for student outcomes (Darling-Hammond & McLaughlin, 1995). It has become clear, however, that many teachers do not have the knowledge and skills needed to implement new instructional practices and significantly improve the quality of their classroom learning environment (National Commission on Teaching and America's Future, 1996). Even when teachers subscribe to new instructional techniques and standards for instruction, how these practices are implemented in classrooms does not always reflect a reform program's intentions (Cohen & Ball, 1994; Spillane & Zeuli, 1999).

Teachers have been charged with the difficult task of teaching students in ways that teachers themselves likely were not taught in schools and may not have learned in their teacher education programs. Furthermore, in the new climate of school accountability, their success at this task has taken on increasingly higher stakes, especially in urban areas where schools may receive great rewards if students improve on their standardized test scores and are threatened with serious sanctions if test scores do not improve.

At the same time as teachers and schools are held accountable (often publicly) for student success, it is widely acknowledged that traditional models of professional development most available to teachers are inadequate for supporting the improvement of classroom practice (Cohen, McLaughlin, & Talbert, 1993; Lieberman, 1994; Saunders, Goldenberg, & Hamann, 1992). Traditional approaches to professional development expose teachers to new instructional methods and curricula through a limited number of days of in-service workshops that are often unrelated to each other or to the fundamental instructional pedagogical issues teachers face daily (Fuhrman, 1993). Isolated in their classrooms, teachers then are mostly left to interpret programs and new standards for teaching on their own. The end result is that in spite of good intentions, teachers' instructional practices and students' chances for academic success remain essentially unchanged (Cuban, 1990; Tharp & Gallimore, 1988; Tyack & Tobin, 1994). This problem is especially pronounced in urban schools serving poor students because these schools tend to

have fewer numbers of well-qualified teachers and greater numbers of students with special learning needs (National Commission on Teaching and America's Future, 1996).

Effective Professional Development Settings

The need for a different approach to teachers' professional development has inspired a number of research efforts focused on the factors that appear to make these settings more effective. In brief, effective professional development settings for teachers have been found to be sustained, ongoing, and site based, and allow teachers to talk with peers about changes and improvement in their practice (Powell, Goldenberg, & Cano, 1995). These settings inspire collaboration and engage teachers as both learners and as teachers (Darling-Hammond & McLaughlin, 1995; Saunders et al., 1992). Activities in these settings are focused around an explicit set of goals (McLaughlin & Marsh, 1990; Saunders et al., 1992). These goals guide the group's engagement in joint productive work that focuses on student work and products, as well as the concrete tasks of teaching and assessment (Darling-Hammond & McLaughlin, 1995; Powell et al., 1995). To support this work, effective professional development settings have a member (or members) with demonstrated expertise and practical experience in the area under consideration. These "instructional experts" serve as coaches (either formally or informally) providing peers with substantive feedback about their efforts and modeling excellent teaching strategies (Darling-Hammond & McLaughlin, 1995; Gallimore & Goldenberg, 1992; Powell et al., 1995).

Purpose of the Study

This study investigated the implementation and potential effectiveness of a new professional development effort, the Critical Friends Group (CFG) program, in urban elementary, middle, and high schools. The CFG program was developed and initially launched by the Annenberg Institute for School Reform based on research investigating the factors that appear to be associated with effective professional development for teachers. The CFG began when education leaders in Los Angeles were awarded an Annenberg Challenge grant, and the Los Angeles Annenberg Metropolitan Project (LAAMP) was officially launched.

The purpose of these groups is to engage teachers in collaborative, ongoing professional development settings at schools. Each group is facilitated by a coach who is usually (but not always) a classroom teacher at the same school as the other

members. The groups are intended to create collegial communities in which members examine student work, observe each other's classrooms, and discuss relevant texts. These activities are intended to help teachers become more reflective about their teaching practice and to provide them with support to modify their practice in an ongoing effort to improve student learning. To help create a supportive climate for self-reflection and peer feedback, group members also engage in trust-building activities and use protocols for looking at student work and observing classrooms that are designed to help members give nonthreatening feedback to one another. The program affords considerable latitude as to what teachers are to focus on in meetings, a primary tenet of the program being that teachers should have ownership of the meetings and autonomy to run groups as they see fit.

As part of LAAMP's strategy to support reform efforts, teachers were recruited and trained (in 6-day summer institutes) to serve as coaches and to start Critical Friends Groups in their schools. By summer 1999, 147 teachers had participated in LAAMP's summer institutes. This study focused on the implementation of the CFG program in eight schools (three elementary schools, two middle schools, and three high schools) participating in LAAMP's reform effort during the 1999-2000 academic year. Specifically, we investigated the following research questions across the different levels of schooling:

- 1. How were these collaborative professional development groups implemented in schools? Specifically, we investigated the focus and goals of the different groups, membership and attendance at meetings, the type of activities group members engaged in, and how much group time appeared to be focused on student learning.
- 2. What was the nature and quality of the feedback received by teachers in these professional development settings? To address this question we looked at teachers' reports of the quality of the feedback they received in their groups, the quality of the feedback we observed in group meetings, and the personnel giving this feedback, with specific attention to the coaches' role in the group interactions.
- 3. How were teachers' attitudes influenced by their participation in these professional development settings? Here we focused on what teachers considered to be the most positive aspect of their participation in their groups, as well as the influence of these groups on teachers' attitudes toward teaching, their colleagues, and their schools.

- 4. How were teachers' instructional practices and student learning influenced by teachers' participation in these professional development settings? To investigate this question we focused on teachers' reports of how their practice had been influenced by their participation in their professional development groups, as well as their perspectives on how student learning was influenced. We also interviewed teachers about specific assignments they had given to students and how these had been influenced by their group participation.
- 5. What were the factors that appeared to hinder and/or support the effectiveness of the groups for supporting change in teachers' instructional practices? Finally, we asked teachers and coaches about problems their group may have encountered over the year that might have served as a barrier to effectiveness. We also describe the factors that appeared to hinder and support the effectiveness of the groups based on our observations of group meetings, and offer recommendations for improving the effectiveness of these types of professional development settings.

Importance of the Research

It is clear that teachers need higher quality professional development opportunities than those currently available to them in most schools. Critical Friends Groups show promise in theory for improving classroom practice and creating a sense of professional communities in schools. A small study of the effectiveness of CFGs was conducted through the Annenberg Institute for School Reform (Nave, 1998). Outside of this effort, however, very little is known about how the program is being implemented in schools, how meeting time is being used, the quality of coaching, and how teachers are influenced by their participation across the levels of schooling. Learning about the factors that hinder and support effective implementation of this program is important as well for informing similar efforts to implement collaborative professional development settings for teachers in urban schools.

Methods

A mixture of data collection strategies were used in this study to maximize data sources and provide a more multifaceted perspective on teacher participation in these groups. The data sources included surveys, observations of meetings, teachers' assignments and student work, and interviews with coaches and participants.²

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² We observed in a few classrooms as well, but there was not enough overlap between our participant sample and our observed sample to report meaningful findings.

Sample

This study was built on a longitudinal study of the Annenberg Challenge in Los Angeles. Of our sample of 12 schools (4 elementary schools, 4 middle schools, and 4 high schools), 8 had at least one Critical Friends Group (3 elementary schools, 2 middle schools and 3 high schools). The remaining elementary school and 1 of the remaining 2 middle schools had never had a CFG. The other middle school had had a CFG in previous years, but the group was disbanded prior to our study year because teachers reported that they were too busy to continue. The one remaining high school also had had a CFG in previous years that did not continue during our study year. Both coaches at this school were unable to continue, leaving the group leaderless.

Table 1 describes the demographics for the 8 schools in our sample that had at least one Critical Friends Group. These schools serve primarily poor and minority students. As illustrated in Table 1, the percentage of students eligible for free and reduced-price lunches decreases from elementary to high school, but this is probably due more to students being unlikely to apply to this program as they get older than to an actual change in students' financial circumstances.

A total of 12 groups were operating in our sample of 8 schools, and the coaches and participants for 11 of these groups agreed to participate in our study. All but one of the coaches were classroom teachers. The remaining coach was an experienced administrator and former teacher who was active in providing professional development activities for teachers. The average number of years teaching for the coaches was 12 and ranged from 4 to 21 years. The average number of years teaching for the participants was 11 and ranged from 1 to 34 years.

Procedures and Measures

Observations of meetings. Each group (N = 11) was observed one time, during winter and spring 2000. Observations lasted for the duration of the meeting and were conducted by two experienced fieldworkers, both of whom were former teachers. Detailed field notes were taken at the meetings describing the activities in which the group engaged, the length of the activities, the focus of the activities, and the protocols that were used in the meetings (see Appendix A for meeting observation protocol).

Table 1 Selected Student Demographic Characteristics by School Level (N = 8 schools)

	Elementary schools (n = 3) %	Middle schools (n = 2) %	High schools (n = 3) %
Enrollment by ethnicity			
Asian	9.9	2.7	16.2
African American	10.0	21.6	18.4
Hispanic	69.6	55.3	40.7
White	7.0	19.5	19.9
Other	3.6	1.0	4.8
English language learner/LEP	71.6	35.7	17.9
Free/reduced-price lunch	90.9	68.3	46.7

Note. LEP = Limited English proficient.

We also looked at the nature of the discourse during the meeting and the quality of the feedback offered to participants. We used elements of a model for "instructional conversation" developed initially for classroom instruction, but applied as well to the professional development of teachers, to structure our investigation (Gallimore & Goldenberg, 1992; Saunders et al., 1992; Tharp & Gallimore, 1988). Specifically, we focused on the degree to which a thematic focus (or goal) was carried out in the meeting, and whether participants were encouraged to connect this theme to their own experience in a concrete way. We also focused on the opportunity members had to expand on and provide bases for their statements or contributions and to build on and extend each others' contributions, and whether members participated more or less equally in the conversation (Saunders et al., 1992). Additionally, we looked at whether the coach, and/or other members in the group, appeared to serve as instructional experts, providing direct teaching of skills or concepts and "challenging" teachers to reconsider their assumptions, beliefs, and practice (Gallimore & Goldenberg, 1992).

In this vein, we focused on the amount and type of feedback offered to participants during the meetings. Specifically, we considered feedback offered to participants to be of high quality if it was specific and focused on concrete aspects of practice and student learning. We considered feedback that comprised general statements or that was not focused on concrete elements of practice and student learning to be of lower quality. We also examined the contexts in which feedback

was given to teachers and the individuals giving the feedback (i.e., the coach versus other members).

Surveys. During the observations we administered a brief (15-minute) survey (see Appendix B, CFG Survey) to the members present at the meetings (N = 68; 23 elementary school members, and 45 secondary school members). Alternatively, if the group preferred, we left surveys and stamped self-addressed envelopes so as not to take up meeting time. At the meetings we observed, all of the members who were present completed surveys. A 4-point scale (1 = none, 4 = a great deal) was used to assess the influence of teachers' participation in their group on their instructional practices. Survey items included questions about the design of lessons, student assessment techniques, alignment of curricula and assessment strategies with standards, and the feedback teachers provided to students. Teachers also rated the influence of specific group activities (e.g., text-based discussions, analyses of student work, peer observations, etc.) on their classroom practice, as well as the general influence of their participation in terms of enthusiasm for teaching, feeling supported at the workplace, having more positive relationships with colleagues, etc. Participants also responded to four open-ended questions concerning how participation in their group influenced their teaching; how participation in their group may have influenced student learning in their classroom; what they considered to be the most positive aspect of their experience in their group; and what they thought could be improved in the group. Not all respondents answered the four open-ended questions, which accounts for the differences in numbers in the sections of this report where the open-ended responses are discussed.

Classroom assignments and student work. During our observations of the CFG meetings, we also asked teachers to provide us with samples of their classroom assignments and student work. We focused on language arts and social studies because our method for collecting and assessing assignment quality was developed for use with reading comprehension and writing assignments only (see Clare, 2000, for more information about this method). We also chose to focus on reading comprehension and writing assignments because each of the 4 elementary school groups focused on literacy, and because language arts and social studies teachers participated in each of the 8 secondary school groups. This meant that all of the elementary school teachers (n = 23) and approximately half of the secondary school teachers we surveyed (i.e., those who taught either language arts, n = 15, or social studies, n = 7) were eligible to participate in this portion of the study. The remaining

secondary school members taught either math (n = 14) or other subjects, including art, music, and Spanish (n = 6). Three secondary school teachers did not indicate on their surveys what content area they taught.

Interested teachers from the relevant content areas submitted a typical reading comprehension assignment and a typical writing assignment with multiple drafts (n = 24 teachers, 12 elementary and 12 secondary). Approximately half of the elementary school teachers (52.0%) and eligible secondary school teachers (54.5%) participated in this portion of the study. These teachers were similar to the other teachers in our sample with regard to the number of years they had been teaching (10 years versus 11 years for the larger sample, with a range from 2.5 to 26 years). For each assignment, teachers completed a brief cover sheet describing their learning goals, their assessment criteria, how the assignment fit into their instructional unit, and the type of help students received to complete the assignment. Teachers also submitted four samples of student work for each assignment, two considered by them to be of medium quality and two of high quality. Teachers who returned the completed assignment materials were paid \$100 as a token of appreciation for their time and effort (see Appendix C, Teacher Assignment Collection Materials).

Assignment quality was assessed based on a CRESST-developed measure (Clare, 2000; Clare & Aschbacher, 2001). These criteria were developed based on research investigating effective teacher practices with at-risk students. The specific dimensions we examined are described below:

Cognitive challenge of the task. This dimension describes the level of thinking required of students to complete the task. Specifically this dimension describes the degree to which students have the opportunity to apply higher order reasoning and engage with academic content material. For example, an assignment given a high score for cognitive challenge might require students to synthesize ideas, analyze cause and effect, and/or analyze a problem and pose reasonable solutions using content area knowledge (e.g., comparing themes from different books, etc.). An assignment given a low score on this dimension, in contrast, might only require students to recall very basic, factual information.

Clarity of the learning goals. This dimension describes how clearly a teacher articulates the specific skills, concepts, or content knowledge students are to gain from completing the assignment. The primary purpose of this dimension is to describe the degree to which an assignment could be considered a purposeful, goal-driven activity focused on student learning. An assignment given a high score on this dimension would have goals that were very clear, detailed, and specific as to what students are to learn from

completing the assignment. It would also be possible to assess whether or not students had achieved these goals.

Clarity of the grading criteria. The purpose of this dimension is to assess the quality of the grading criteria for the assignment in terms of their specificity and potential for helping students improve their performance. How clearly each aspect of the grading criteria is defined is considered in the rating, as well as how much detail is provided for each of the criteria. An assignment given a high score for this dimension would have grading criteria in which the guidelines for success were clearly detailed and provided a great deal of information to students about what they needed to do to successfully complete the task.

Alignment of goals and task. This dimension focuses on the degree to which a teacher's stated learning goals are reflected in the design of the assignment tasks students are asked to complete. Specifically, this dimension attempts to capture how well the assignment appears to promote the achievement of the teacher's goals for student learning. An assignment given a high score on this dimension would involve tasks and goals that overlapped completely.

Alignment of goals and grading criteria. This dimension is intended to describe the degree to which a teacher's grading criteria support the learning goals, that is, the degree to which a teacher assesses students on the skills and concepts they are intended to learn through the completion of the assignment. Also considered in this rating is whether or not the grading criteria include extraneous dimensions that do not support the learning goals, as well as the appropriateness of the criteria for supporting the learning goals.

Overall quality. This dimension is intended to provide a holistic rating of the quality of the assignment based on its level of cognitive challenge, the specificity and focus of the learning goals, the clarity of the grading criteria, the alignment of the learning goals and the assignment task, and the alignment of the learning goals and the grading criteria.

Assignments and student work were analyzed by two CRESST researchers (one an experienced classroom teacher with expertise in literacy). Because of the small sample size and the range of grades represented in our corpus, the researchers worked together to reach consensus concerning the quality of assignments and student work, and the level of implementation of those strategies teachers reported having learned about from their CFG and that were (or were not) reflected in their assignments (see Appendix D for the scoring rubric).

Teacher interviews. Teachers who returned classroom assignments were interviewed in spring 2000 (n = 24). These interviews focused on the connections

between their participation in a CFG, their instructional practices, and student learning in their classrooms. We also asked questions about the specific links between the assignments they submitted to us and their group participation. Additionally, we asked questions about the most valuable aspect of their membership in their CFG, the quality of the feedback they received in terms of pushing them to reflect on and improve their practice, the desired characteristics of a coach, and how the CFG program could be improved (see Appendix E, CFG Notebook Participant Follow-Up Interview Questions).

Coach interviews. Coaches (n = 11) also were interviewed in spring 2000 about a range of topics including the CFG activities their group engaged in, group membership and attendance over the year, the focus of the group, general influence on practice, the quality of feedback participants gave each other, trust within the group, protocols that were used, problems the group encountered over the year, external support, and how the CFG program could be improved (see Appendix F, CFG Coach Interview).

Analyses

Descriptive statistics were used to analyze the rating scales on the teacher surveys. Open-ended survey responses, interview transcripts, and observation field notes were analyzed for underlying themes and patterns of responses. The analysis involved a cyclical process of data reduction, data display, and verification seeking. To reduce the data, an incrementally reductive process was applied in which more specific levels of coding were aggregated to create larger categories of responses (Miles & Huberman, 1984). The creation of these categories was carried out by two staff researchers who worked together to reach a consensus about the meaning and categorization of responses.

Results

Results are organized around the different research questions and are based on observations of meetings, teacher surveys, coach and teacher interviews, and classroom assignments with student work.

How Were These Collaborative Professional Development Groups Implemented in Schools?

The coaches we interviewed (n = 11) reported that most of the groups had fairly broad goals in terms of what they planned to focus on during the year. This

was true across the levels of schooling. Three of the four coaches in the elementary schools, for example, reported that developing students' literacy skills was the focus of their groups. Of these three groups, one focused consistently on developing students' reading comprehension skills. The second group focused on writing instruction at the beginning of the year and then changed its focus to implementing the district's standards for language arts. The third group reported that it focused generally on "improving literacy." The fourth elementary school group, in contrast, focused on developing "a group dynamic" over the course of the year through team building activities.

Most likely because of the range of subject areas represented by teachers at the secondary level, only one of these groups had an explicit focus on instruction in a content area. The high school teachers in this group, which had been together for 3 years, focused on improving their writing instruction. Another high school group, which had a large number of first-year teachers, focused on helping teachers organize their classrooms and deal with students, in addition to discussing instructional issues such as designing more effective science labs and improving students' reading skills. This group attempted to have additional content area meetings to support the development of specific aspects of teachers' instructional practice, but these additional meetings rarely took place due to lack of time. The other five groups in our sample of high schools and middle schools also focused generally on improving instruction, including looking at student work across a range of content areas. One of these groups focused explicitly on issues concerning educating children from diverse cultural backgrounds. The coach for the last group reported that "supporting one another" was the group's primary goal for the year.

Membership and attendance. Three of the four elementary school groups reported that they met once a month for 2 hours immediately following school. The other elementary school group met once a month for 2.5 hours at a member's house in the late afternoon/evening, scheduling a longer period of time for their meeting so that they could socialize before doing their CFG work. All of the elementary school groups reported that they missed one month of meetings during the year because of scheduling problems. Groups on average had approximately 8 members, but ranged from 5 to 12 members. All but one of the groups reported losing at least one member over the course of the year. Additionally, only about three quarters of the teachers on average attended a given meeting.

Almost all of the middle and high school groups met once a month after school for 2 hours, with two exceptions. One group met for 1.5 hours during morning staff meeting time once a month, and another group met once a month for 2 hours—1 hour of which was part of the regularly scheduled work day. All but one group missed meetings, and some missed as many as three meetings over the course of the school year. Groups at the secondary level had approximately 10 members on average. All but two of the groups reported losing at least 1 member and as many as 3 members over the course of the year. Two of the groups gained a member. As with the elementary school groups, however, only about 70% of the members were present at a given meeting. Additionally, a few coaches reported that some teachers left meetings early or arrived late on a regular basis due to scheduling conflicts.

Participation in specific professional development activities. As illustrated in Table 2, the coaches of the elementary school groups (n = 4) reported that they spent an average of 9% of their meeting time during the year on team building activities, 30% of their meeting time engaged in text-based discussions, 29% of their meeting time looking at student work, 19% of their meeting time discussing peer observations, and 13% on other activities. There was quite a range between groups in terms of how they spent their meeting time, however. For example, one coach of a group that had been together for 2 years reported that her group did not spend any time participating in team building activities, looking at student work together, or engaging in peer observations. Instead, half of the group's time was spent engaging in text-based discussions focused on techniques for improving students' reading skills, and the other half was spent sharing ideas about classroom practice. The coach of another group that had also been together for 2 years, in contrast, reported that her group spent half of its time discussing peer observations, 25% of its time looking at student work, 15% of its time engaging in text-based discussions, and 10% on team building activities.

Coaches of the seven secondary school groups reported that they spent an average of 7% of their meeting time during the year on team building activities, 15% of their time engaging in text-based discussions, 44% of their time looking at student work, 23% of their meeting time discussing peer observations, and 11% of their meeting time engaging in other activities (see Table 2). As with the elementary school groups, there was quite a range between secondary school groups in terms of how they spent their meeting time. For example, one coach of a group that had been together for 3 years reported that 80% of the group's time was spent examining

Table 2
Average Percent of Meeting Time Devoted to Different Professional
Development Activities as Reported by CFG Coaches (*N* = 11 groups)

	Elementary	schools	Secondary schools		
	Average % of time	Range	Average % of time	Range	
Team building	9	0-20	7	0-20	
Text-based discussions	30	15-50	15	0-30	
Student work	29	0-50	44	5-80	
Peer observations	19	0-50	23	0-70	
Other	13	0-50	11	0-30	

student work, 15% of its time engaging in text-based discussions, and 5% doing peer observations. A coach of another group that had been together for 2 years reported a very different use of the group's time, spending 30% of the time looking at critical issues using a "consultancy" protocol developed by the program, 25% of the time examining student work, 25% of the time engaging in text-based discussions, and 20% engaging in team building activities.

In addition to interviewing coaches, we also observed the groups once during the year. Overall, we observed less time being spent in text-based discussions and looking at student work, and somewhat more time discussing and setting up peer observations than what was reported by the coaches for the year as a whole. We also observed a significant amount of meeting time devoted to waiting for other members to arrive.

For example, in the meetings we observed for each of the four elementary school groups, an average of 10% of the meeting time was spent engaging in team building activities, 15% in text-based discussions, 14% looking at student work, 27% discussing peer observations, and 20% engaging in other activities. The other activities in the elementary school CFGs included sharing teaching resources, reviewing protocols, watching a classroom video, and planning the next meeting. We also observed an average of 14% of the elementary school group meeting time spent waiting for members to arrive.

As with the coaches' reports, our observations also revealed that the individual groups varied quite a bit with regard to how meeting time was spent. For example, one group we observed spent 14% of the meeting time engaging in team building activities, 44% engaging in a text-based discussion, 22% on other activities including

sharing teaching resources, and 20% waiting for members to arrive. Another group spent 72% of its time discussing peer observations, 22% on other activities including reviewing program-created protocols, and only 6% of its meeting time waiting for members.

At the secondary level, we observed that an average of 5% of the meeting time was spent engaging in team building activities, an average of 7% in text-based discussions, 17% looking at student work, 8% discussing peer observations, and 45% of the meeting time was spent engaged in other activities. The other activities in the secondary school meetings included planning the next meeting, planning peer observations, reading a text, sharing what was learned at a conference, and developing a grading tool. Our observations also revealed that an average of 18% of the secondary school group meeting time was spent waiting for members to arrive.

We also observed a wide range in how groups in the middle and high schools spent their meeting time. For example, one group spent 53% of its meeting time discussing peer observations and the rest of its time engaged in other activities, including planning peer observations, discussing an upcoming retreat, and meeting in content groups. Another group spent 6% of the meeting time examining student work, 12% of the time on team building activities, 41% of the time engaged in an unplanned discussion about the value of peer observations and the lack of support by the administration, and 41% of the time waiting for members to arrive.

Focus of the meetings on instruction and student learning. From the field notes taken at the meetings we observed, we tallied how many minutes of the total meeting time were spent focused on instruction and student learning. We considered a "focus on instruction and student learning" to include on-topic discussions of texts related to teaching, examinations of student work, and discussions of peer observations. Time spent discussing business and administrative matters, engaging in team building activities, and waiting for other members to arrive was not counted as time focused on instruction and student learning.

We observed that an average of 37% of the meeting time was spent focused on instruction and student learning. This ranged from 58%, the longest time, to 6% for the shortest time. Looking separately at the different levels of schooling, we found that the four elementary school groups spent an average of 49% of their meeting time focused on student learning (range, 42% to 58%). The seven secondary school groups, in contrast, spent an average of 31% of their meeting time focused on student learning (range, 6% to 58%).

What Was the Nature and Quality of the Feedback Received by Teachers in These Professional Development Settings?

As described previously, the purpose of this professional development program is to engage teachers in collaborative activities that lead them to become more reflective about their teaching practice and thus to change their practice to improve student learning. An important component of this approach to improving practice is receiving feedback that supports and challenges members to rethink their instructional approaches and interactions with students.

Survey results indicated that members were satisfied with the feedback they received in their group. On a 4-point scale (1 = poor, 4 = excellent), three quarters of the teachers rated the quality of the feedback they received in their group either a 3 or a 4 (M = 3.31, SD = 0.85). This result was consistent for both elementary and secondary school teachers, and for the individual groups in our sample (range, M = 2.67 to M = 3.80).

We also asked teachers (n = 24) and coaches (n = 10) whether they believed that the members of their group gave feedback to one another that pushed people to reflect on, and potentially change, their classroom practice. All but one of the coaches reported that the members of their group gave each other this type of challenging and constructive feedback. As with the surveys, 28 of the participants we interviewed (83%) responded positively about the quality of the feedback they received in their groups. In the words of one high school teacher, "People do ask questions that are probing and constructively critical. . . . We've never been afraid to ask whatever was concerning us as far as our teaching goes." An elementary school teacher similarly responded,

[We have] two literacy coordinators in the group. [And we] always question [each other]. For example, "You seem to have a lot of stuff going on, what was your focus here?" Because sometimes there's so much to teach in a day, so much to do, you realize, "Why wasn't this successful—Oh, I had four purposes in there." So I think the group is really good at saying, "Okay, this was a great idea but let's streamline it. Let's get down to one thing so that you can go back and re-teach it."

Six participants (17%) reported that their group still had a while to go in terms of being able to give feedback that pushed members to change their practice. As one teacher said,

I think there are still members of the group who are worried about hurting people's feelings and are afraid of being looked at. They are afraid of being vulnerable. As a result they don't give the type of feedback that is constructive.

Another teacher responded in a similar vein.

I think a lot of what gets said at meetings is accepted. I think everyone is really polite. People don't criticize each other very often. I think being politely critical is difficult.

Though there was some variation in participants' assessments of the quality of the feedback that was being given in their groups, the importance of trust and positive support in the group was mentioned by almost all of the members as an important context for giving feedback. As one middle school teacher commented,

It would be nice [to have members give each other this type of feedback], but you have to be delicate because we see [our group] as a safe haven. . . . We have plenty of criticism of each other at our staff meetings so you know the criticism is there. There are some people who are able to [give constructive feedback in the group] but I think that is something that will probably come more into play in another year or so. There's quite a bit of criticism on the campus already.

In addition to investigating teachers' and coaches' perceptions of the feedback they received in their meetings, we also observed the quality of the feedback participants gave each other at the meetings. In contrast to teacher reports, we observed consistently high-quality feedback focused on instruction being given to participants in only 3 of the 11 groups. We observed less high-quality feedback on practice being offered to participants in 4 other groups, and essentially no feedback to participants on their practice in the remaining 4 groups during the time we visited.

The groups we visited in which we observed a great deal of high-quality feedback being given to participants focused on either looking at student work or watching and commenting on a videotaped lesson given by another member. In all of these groups, the coaches also appeared to serve as instructional experts, though other members took on this role as well. For example, in one high school group, the members worked together to apply a new rubric to samples of student writing. Each member was expected to assess a sample of student work and provide specific reasons for having chosen his or her grading designations. The coach provided members with feedback that appeared to challenge the participants' thinking. For example, the coach asked individual teachers questions such as "So which was weak

and which was okay?" and "That would be under mechanics, tell me, where's the run-on [sentence]?" as a way to help members be more specific about how they approached assigning students a score from each of the rubric dimensions.

In an elementary school group where we observed a great deal of high-quality feedback, other members, as well as the coaches, took a very active role in making comments and suggestions. Specifically, teachers observed a videotape of another member and made suggestions for how she could better implement reciprocal teaching techniques. For example, one of the two coaches commented, "I saw a lot of lessons being taught within the lesson, lots of other mini-lessons such as past and present tense. Is your focus on teaching all those mini-lessons or on reciprocal reading?" Other members similarly commented that the mini-lessons appeared to distract from the teacher's primary instructional goal and that the lesson could be broken down into smaller units for the students. Suggestions were made for ways to do this, as well as for ways to more effectively teach vowel/consonant blending.

In the groups where we observed almost no feedback on practice, the coaches did not take an active role as instructional experts, at least during the time that we observed, and the group activities focused on either reading and talking about an assigned reading, or discussing issues relating to the school generally. Some of these meetings also appeared to be somewhat disorganized. For example, in one middle school group, the members did not have an agenda, and it was unclear what was supposed to be accomplished during the meeting time. Other than a period at the beginning of the meeting (termed "Connections") when members shared personal reflections about their life, no other distinct activities were taken up or announced. At one point, the coach passed out samples of student work from her class, but these were not commented on by the other members. The entire meeting seemed to be an opportunity to air ideas and thoughts and just to talk with other teachers. There was very little uptake on contributions, and the topic of conversation continuously shifted.

In another middle school where we observed virtually no feedback being given to members on their practice, the group spent 40 minutes of their observed time reading a portion of an article, and then another 40 minutes discussing the article. A large portion of the meeting time (approximately 30 minutes) also was spent waiting for other members to arrive. For this session at least, the coach appeared to serve more as a group facilitator than as an instructional expert. The coach focused on keeping the topic of the discussion centered on the article, but did not push

members to connect the ideas in the article to their practice, during the time we observed.

We observed some feedback being given to members on their practice in the remaining four groups. In two of these groups, members had engaged in peer observations. In both of these cases, the teachers who were observed had received feedback about their practice individually outside of the group, so it is not possible to comment on the quality of the feedback. Though a portion of the meeting time in all four groups was spent addressing members' concerns and offering ideas to try in the classroom (e.g., classroom management techniques and ways to make filling out charts more interactive), very little feedback was given that was specifically focused on individual practice, or that appeared to follow up on an instructional idea that had been previously tried. A diverse range of topics also were addressed in these groups that were not specifically focused on instruction. For example, one group spent a large portion of the meeting time talking about how teachers felt about being observed and how to set up additional observations. In another group, the discussion and subsequent feedback centered around how best to implement a reading program in the school, mostly in terms of getting other teachers to "buy in" to the program.

How Were Teachers' Attitudes Influenced by Their Participation in These Professional Development Settings?

Results indicated that the overwhelming majority of teachers across the different levels of schooling considered their participation in their group to have had a strong influence on their attitudes toward teaching, their colleagues, and their school. As illustrated in Table 3, 83.9% of the teachers surveyed assigned a rating of either 3 or 4 to describe the influence of their CFG on their enthusiasm for teaching (M = 3.41, SD = 0.77). The majority of teachers (85.9%) also reported that their group had contributed to helping them feel more supported at school (M = 3.59, SD = 0.71), and had helped them create more positive relationships with colleagues (88.2%, M = 3.61, SD = 0.66).

In fact, approximately half of the teachers we surveyed (59%, n = 34) reported that building a supportive professional community was the most positive aspect of their participation in their group. As one secondary school teacher survey respondent wrote, "My most important benefit is in the affective area. It's a real pleasure to attend a meeting that has a positive focus and is intended to build up

Table 3 Influence of Group Participation on Teachers' Attitudes Toward Colleagues and School (N = 68)

	M	SD	% 1	% 2	% 3	% 4
Enthusiasm for teaching	3.41	0.77	2.9	7.4	32.4	51.5
Feeling supported at workplace	3.59	0.71	1.5	7.4	19.1	66.2
More positive relationships with colleagues	3.61	0.66	1.5	4.4	23.5	64.7

Note. 1 = none, 4 = a great deal.

rather than tear down teacher performance and morale." Another secondary school teacher commented,

The opportunity to share with other teachers I've never met [is the most positive aspect of my participation]. This is a huge school and to be able to have quality dialogue with teachers from other departments and buildings is a rare treat. I generally dislike other school meetings, but I always have walked away from CFG meetings feeling glad that I'm a teacher and at a school where other teachers care about students and colleagues.

Findings from interviews with teachers (n = 24) confirmed this general pattern. Ten (41%) of the teachers we interviewed responded again that building a supportive professional community was the most positive aspect of their group membership. As one elementary school teacher remarked,

There is a closeness within the group that I don't see with a lot of the other teachers. But those of us who have been working together, we see each other on campus and we are friendly and smiling.

Three participants remarked that the group had helped them get to know teachers in the different grade levels at their school, and two participants reported that their group participation had reaffirmed for them that teaching was their "calling."

How Were Teachers' Instructional Practices and Student Learning Influenced by Teachers' Participation in These Professional Development Settings?

Most teachers across the levels of schooling reported that participation in their CFG had influenced their instructional practices. Specifically, as described in Table 4, the majority of teachers surveyed reported that participation in their group had influenced their learning and refinement of instructional strategies (85.3%, M = 3.21, SD = 0.72), their assessment of student learning (72.1%, M = 3.03, SD = 0.81), and the

Table 4 Influence of Teachers' Participation in Critical Friends Groups on Classroom Practice (N = 68)

	M	SD	% 1	% 2	% 3	% 4
Designing lessons/instructional units	2.82	0.86	7.4	25.0	45.6	22.1
Learning/refining instructional strategies	3.21	0.72	1.5	13.2	48.5	36.8
Assessing student learning	3.03	0.81	1.5	26.5	39.7	32.4
Increasing depth of content knowledge	2.42	1.02	19.4	38.8	22.4	19.4
Understanding of how to apply learning theory in the classroom	2.78	0.87	8.8	22.1	45.6	19.1
Providing feedback to students	2.94	0.91	7.4	22.1	39.7	30.9
Classroom management strategies	2.65	0.91	11.8	29.4	41.2	17.6
Aligning curricula and assessment strategies with standards	2.78	0.87	5.9	32.4	38.2	22.1
Increasing expectations for students	3.12	0.94	1.5	13.2	48.5	35.3

Note. 1 = none, 4 = a great deal.

ways in which they provided feedback to students (70.6%, M = 2.94, SD = 0.91). A large majority of teachers (83.8%) also reported that participation in their groups had increased their expectations for student learning (M = 3.12, SD = 0.94).

We also asked teachers, in an open-ended survey question, to describe how their group participation had influenced their classroom practice. As illustrated in Table 5, 19 (34%) of the teachers reported that they learned and refined instructional strategies to take back to the classroom. For example, one middle school teacher wrote, "I've learned to look at student work differently. Also I've applied some strategies that enhance the level of work the students do. I've discovered creative ways to do assignments and to deliver instruction in the classroom." Sixteen (27%) teachers reported becoming more self-reflective and analytical from participation in their CFG. For example, one elementary school teacher wrote, "By examining research, student work, and related data, I have been able to reflect on my practice and modify as needed."

Eight teachers reported improving their classroom assessment strategies. As one high school teacher wrote, "It has forced me to rethink how I assess students and what I want them to know about the subject. I am much more aware of the skills I want my students to demonstrate." Finally, six teachers surveyed reported that participation in their CFG helped them improve their classroom management skills.

Table 5 Teachers' Descriptions of How Critical Friends Groups (CFG) Participation Had Influenced Their Instructional Practices (n = 56)

Type of response	Total % (n)	Elementary (n = 17) % (n)	Secondary (n = 39) % (n)
Learning and refining instructional strategies to take back to the classroom	34 (19)	35 (6)	34 (13)
I've learned to look at student work differently. Also I've applied some strategies that enhance the level of work the students do. I've discovered creative ways to do assignments and to deliver instruction in the classroom. (middle school teacher)			
In particular, refocusing teaching style for my specific students' needs. (middle school teacher)			
Becoming more self-reflective and analytical	27 (16)	30 (5)	27 (11)
By examining research, student work, and related data, I have been able to reflect on my practice and modify as needed. (elementary school teacher)			
I've become a more analytical teacher (in a positive way). (elementary school teacher)			
Improving classroom assessment strategies	14 (8)	10 (2)	16 (6)
It has forced me to rethink how I assess students and what I want them to know about the subject. I am much more aware of the skills I want my students to demonstrate. (high school teacher)			
Improving classroom management skills	10 (6)	15 (3)	9 (3)
Feedback from others helps me keep my classroom management skills up. (middle school teacher)			
Gaining support of peers	10 (6)	10 (2)	9 (4)
Moral support has been the greatest influence. Also team building. (elementary school teacher)			
No impact on instruction	3 (2)	0 (0)	4 (2)
Not far enough along in the CFG to make an "educated" comment on its influence regarding my teaching. (high school teacher)			

In addition to administering the survey, we also interviewed teachers and two coaches who were classroom teachers (n = 26) about the specific ways in which their group participation had influenced their instructional practices. Similar to teachers' open-ended survey responses, reports from teachers indicated that participation in their group had given them new teaching ideas, helped them become more self-reflective, helped clarify their expectations of students, given them new strategies for assessing student work, and helped refine classroom management strategies.

Nearly all of these teachers (n = 24) reported learning new teaching strategies and ideas to take back to the classroom from their groups. The strategies included finding ways for teachers to make their expectations and assignment directions clearer to students. As one secondary school teacher responded,

I think the CFG has helped me be clearer when I present a subject. I now make sure the students are clear about my expectations before they do an assignment, rather than their turning in an assignment only to find out they did it wrong.

Five teachers also said they had learned ways to break lessons down into smaller units, and three teachers reported that they had learned how to model more for students during lesson activities.

Many teachers (n = 21) also reported that their group participation had influenced their teaching by helping them reflect more on their practice. Specifically, teachers said that their group had helped them better understand what was or was not working in their classroom, and the degree to which students were learning. As one elementary school teacher commented,

When I started teaching, I followed the textbook regardless of whether students were learning it. Now I see myself directing my practice toward individual needs, towards the big picture rather than isolated skills. . . . Critical Friends adds that piece where we reflect on the things we have learned and how we are delivering those things to our students. We learn where we can improve, and we really look at student work critically. We never did that before.

A majority of teachers (n = 18) also said they had changed the way they assessed students and provided feedback to students as a result of their group participation. Some of these teachers reported that they had learned to write better rubrics and to collaborate with students to design rubrics as a result of their CFG participation. Four teachers reported that they now gave more feedback to students, and another four teachers reported that they were giving students more positive feedback. Six teachers (primarily from secondary schools) also reported that they now had students evaluate each other's writing and/or now conducted student-led conferences as a result of their group participation. As one of these secondary school teachers said,

I not only have them assess themselves and assess each other, but I call them up for oneon-one conferences. We also talk about the grade they are getting and why it was given and if they agree. About half of the teachers (n=15) reported as well that their group participation had helped them clarify their expectations for students at their particular grade levels. As one elementary school teacher said, "The CFG has helped me to design assignments that are appropriate developmentally for the grade I am teaching." In the words of another elementary school teacher, "When we work together and talk, it leads to having higher expectations of our students." Two elementary and three secondary school teachers also reported that they had learned more effective classroom management strategies from the teachers in their group.

Finally, one elementary and three secondary school teachers said that participation in their group had helped them become more positive about their students' learning and about teaching in general. These teachers explained that many teachers at their school were negative about students' abilities and about teaching in general. As one of the secondary school teachers commented,

Many of the staff here are negative because of all of the problems at our school and in our district. I think I would be right with them if not for the Critical Friends Group. The Critical Friends Group has made me look beyond the day-to-day problems and envision something more positive.

Influence of group participation on student learning. Results indicated that a great majority of the teachers surveyed considered their participation in their CFG to have influenced student learning (M = 2.98, SD = 0.75). We interviewed teachers (n = 24) and coaches who also were classroom teachers (n = 6) to investigate the ways in which teachers believed their students had benefited. As illustrated in Table 6, most teachers reported that student learning had increased because they had learned and implemented more effective ways to design and implement lesson activities, had become more self-reflective and more responsive to students' needs, had clarified their expectations for students, and had clarified their assessment criteria for grading student work.

Specifically, a majority of teachers we interviewed (11 of the 13 elementary school teachers, and 10 of the 17 secondary school teachers) reported that they had learned new ideas for lesson activities from other group members and that this had increased student learning in their classrooms. One elementary school teacher, for example, described how she videotaped her class and played it for her group in order to get feedback and new teaching ideas. About this experience she reported,

Table 6 Teachers' Perceptions of How Their Professional Development Group Participation Had Increased Student Learning in Their Classroom (n = 30)

Type of response	Total % (n)	Elementary (n = 13) % (n)	Secondary (n = 17) % (n)
Implementation of new ideas and strategies	70 (21)	85 (11)	59 (10)
More self-reflective teaching as a result of examining student work and/or conducting peer observations	40 (12)	39 (5)	41 (7)
Feedback about what was and was not working in the classroom	33 (10)	31 (4)	35 (6)
Advice and feedback for new teachers from more experienced teachers	13 (4)	31 (4)	0 (0)
Grade level expectations clarified	17 (5)	31 (4)	6 (1)
Assessment criteria for grading student work clarified and shared with students	17 (5)	0 (0)	29 (5)

I was able to get feedback based on ideas that different people had of where to go and what was too advanced for the kids and what they thought they could handle. Then I went back and tried some of those techniques and found [them to be] successful.

In a similar vein, five elementary school teachers in one group focused half of their meeting time over the year discussing a book on reading comprehension and reported that they learned new reading strategies from their group to implement in their classrooms. One of these teachers commented that her students were now more engaged with what they were reading, and that they were making more connections across books and stories. In her words,

[The students] are thinking about other books they have read or that I have read to them. It encourages reading and so in that way, it leads to improved student learning. The students are looking for those connections and increasing their reading skills, vocabulary, and comprehension.

Additionally, 12 teachers reported that looking at student work and/or conducting peer observations had helped them become more reflective and better meet their students' needs. Ten teachers also reported that receiving feedback on what was and was not working in their classrooms had led to increased student learning. As one elementary school teacher commented, she had "altered [her] practice to encourage [her] students rather than be negative towards their work" as a result of feedback from other group members. She went on to describe her approach:

It was the writing piece I had done with them that I was really unhappy with. They were to describe a person. I couldn't get those descriptive words out of them. The CFG members showed me what my students did get. What I did was to redo the lesson in a different form, and now my students understand descriptive words. They just didn't get it the first time.

Teachers also reported that their group participation had helped them clarify their expectations for students, and that this had improved student learning in their classrooms. For example, four elementary school teachers reported that they had learned a great deal about what to expect from students and what to teach at a particular grade level by being in a group with teachers from other grade levels. Five secondary school teachers reported that their CFG experience had led them to be much clearer with their students about their expectations for student work, and how assignments would be assessed. These teachers said that from the feedback they received from other participants, they had learned the importance of modeling and of sharing a rubric and expectations with students ahead of time. As one teacher reported,

I became more aware of grading while looking at student work and looking at my assignments. I needed to give a more clear assignment sheet so that students in turn could really understand what I'm expecting from them and how I'm going to be grading them. When they have their rubrics with them as they are doing the assignment, they know exactly what I'm looking for instead of guessing whether it is right or wrong. So I think this made me a better teacher and in turn made the kids' work more successful.

Another high school teacher, whose group had focused on student-led conferencing techniques, similarly reported,

Examining student work and doing the student-led conferencing has really made students look at what they are doing and what they are not doing. . . . It is making the kids more responsible for themselves.

Finally, a few teachers mentioned that they lacked tangible evidence of increased student achievement, so it was not possible to determine whether student learning had been influenced by their participation in their CFG. For example, one middle school coach reported that it was not clear what type of changes had occurred for students. A high school teacher said he believed the work being done in his professional development group might not influence student achievement immediately, but over the long run, it would improve practice, and, therefore, student learning. In his words,

I'm not sure that it's going to happen overnight, but I think there will be a subtle difference over a long period of time in student achievement. I think teachers become better at what they are doing. A Critical Friends Group helps us become better teachers, and I think that over time in subtle ways, given enough reflection and changing of our practice, that students will learn more.

Influence of CFGs on classroom assignments. As noted above, in the surveys and teacher interviews almost all the teachers reported that their teaching practices had been influenced by their participation in their CFG. In order to more closely investigate the link between teachers' participation in their groups and their teaching practices (and ultimately student learning), we collected assignments and student work from 24 teachers and used these as a basis for an interview.

Specifically, we asked teachers how their CFG may have influenced how they designed their assignments, their goals for student learning, the criteria they used to assess students' work, and the type of feedback they gave to students.

When interviewed, only half of the teachers (7 elementary school teachers and 5 secondary school teachers) reported that their work in their CFG had influenced the assignment(s) they submitted to us. Commensurate with our survey and interview results, most of these teachers reported that they had received specific ideas for lessons or assessment strategies from their group, which they then tried out in their classroom. We took a close look at the assignments and student work of these 12 teachers to investigate how these ideas were implemented and whether they appeared to lead to high-quality assignments and student work.

Each of the seven elementary school teachers reported getting new ideas from their CFG meetings, either from text-based discussions, peer observation feedback, examining their own and others' student work, and/or from the general sharing of teaching ideas. Five of the elementary school teachers said they learned ideas about teaching and/or assessing writing, and the other two teachers said they learned new ideas to help students with reading comprehension.

From our analysis of the assignments, however, it appears that only two of the elementary school teachers created high-quality assignments that appeared to effectively implement the instructional strategies they reported applying from their groups. One of these teachers reported that she had been learning about the process approach to writing instruction in her CFG. The "writing process" stresses a cycle of drafting and revision, in which novice writers receive feedback from the teacher or peers to improve and develop their work (e.g., Clare, Valdés, & Patthey-Chavez,

2000). The teacher's goals for this assignment were to have her third-grade students write a "well-organized" and "effective" five-paragraph autobiographical incident using the steps of the writing process. The teacher had the students respond to a district-developed writing prompt and describe a time they wanted to do something that was important to them, but were told they could not do it. In the teacher's directions, students were reminded to

write about what happened when you asked permission and how you felt when you were told no. Include lots of detail and descriptions about what happened and explain why you remember this time so well.

To help structure their writing, students began by completing a worksheet on which they outlined their story and reflected on their feelings, background, and the importance of the incident. The assignment was assessed using an extremely detailed rubric that was tailored to the writing prompt. For example, students whose work received the highest score had to include "dialogue, movement, gestures, names of people and/or objects, and sensory details that build to a climax."

We considered this to be a high-quality assignment because students were given a great deal of information about how to write an effective autobiographical incident (e.g., the types of details to include in their writing). Students also were required to write a substantive amount about the topic (five paragraphs), and the assessment criteria the teacher used to grade student work were very detailed and explicit. Additionally, we considered this assignment to demonstrate an effective use of the writing process because the teacher provided students with high-quality feedback on their early drafts that focused on the content and organization of their ideas. The final drafts of student work, relative to their early drafts, were much improved as a result.

The other example of a teacher who appeared to have effectively implemented the ideas she learned from her group was an experienced teacher who reported that she had been learning about how to use various reading comprehension questioning techniques to help students gain a deeper understanding of the texts they read. Her goals for the reading comprehension assignment she submitted to us were that students "explain the setting of the story using details from the text to support their ideas, [and] make a connection to another text or place." For this assignment, students answered comprehension questions focused on characterization, setting, theme, connections with other books, author's purpose, and author's style. For

example, when describing the setting, students answered the following questions: "Describe where and when the story takes place. How do you know? Which part of the story best describes the setting? Why? How? Do you know a place like the one in the book? Where is it? Describe it." We considered this to be a high-quality assignment that appeared to effectively carry out what the teacher had been focusing on in her CFG, in part because students were required to answer cognitively challenging questions that required them to go beyond summarizing the surface features of the stories they read in order to gain a deeper understanding of the stories. Students also were required to support their responses and to write expanded answers (i.e., at least a paragraph).

In contrast, the assignments we received from the other five elementary school teachers were not as high in quality, and the ideas gleaned from their groups did not appear to have been as effectively implemented. For example, one relatively new teacher said that the members of her group had discussed ways to assess students' writing and the importance of sharing assessment criteria with students before they began to work on the assignment. She also reported that she had learned what to expect from students' writing at her grade level in her CFG. In the writing assignment she submitted to us, students wrote a story using a story starter. The teacher's assessment criteria, which she shared with the students ahead of time, focused on the degree to which students used description and detail, employed proper sentence structure, and stayed on the subject. In three out of four student work samples she submitted to us, however, the stories the students wrote lacked any kind of description or detail. On early drafts, the teacher provided almost no feedback to the students beyond correcting spelling and mechanical errors. The students copied their first drafts, incorporating the spelling and punctuation corrections the teacher had made, but they added nothing new.

It appeared to us that the teacher had not given enough feedback to students, and had not provided enough support to students to show them how to revise their work and make their stories more descriptive, detailed, and focused. Additional feedback from other group members might have helped this teacher better implement her assessment criteria and translate these criteria into feedback that could help students write higher quality stories.

In another example, a fourth-grade teacher also reported that she had implemented ideas learned in her CFG, but the implementation did not appear to necessarily have led to a high-quality assignment or set of student work. This

teacher reported that she had been learning about various reading comprehension activities in her group, such as story mapping and "quick writes," to help students reflect more deeply on the stories they read. For this reading comprehension assignment, students created a story map identifying the setting, characters, and sequence of events for the book *James and the Giant Peach* (Dahl, 1996), which the teacher had read to them aloud in class. She then had the students do a "quick write" describing what they liked and did not like about the story. Students were assessed based on the accuracy of the story map and their ability to give reasons for why they liked or did not like the story.

We considered this assignment to be of moderate quality since the students were not required to go beyond the surface details of the story they read. For example, the story map only required students to list the characters in the story, the different settings, and some of the main events. Likewise, the writing portion of the assignment only required students to state their opinion of the book. Students again were not required to go beyond the surface features of the book in exploring the characters' behaviors and motivations, comparing characters, or in making connections with other texts. Like the previously described teacher, this teacher appeared to bring away good ideas from her group, such as creating story maps and conducting quick writes. The requirements of the story maps and the writing, however, could have been less focused on the surface features of the story. It is possible that more follow-through in her group might have helped improve the implementation of these instructional strategies, and ultimately the quality of students' work. For example, the group could have addressed such questions as "Did this new idea result in improved student learning and work?" and "Is there a way I can revise what I did with students to further deepen students' reading comprehension?"

As mentioned previously, five secondary school teachers reported getting new ideas for instruction from their CFG meetings. Two of these teachers reported that they learned about the importance of modeling and making expectations clear to students when giving an assignment. Two teachers mentioned learning about different learning styles and the importance of providing students multiple opportunities to show what they had learned. One teacher spoke about looking more critically at her own teaching, and another teacher said that she learned how to provide more "scaffolding" to students during her lessons.

We considered all of the assignments submitted to us by these secondary school teachers to be of moderate quality. For example, one high school teacher reported that in his group he had learned more about modeling and making his expectations clear to students. This teacher asked students to read a book of short stories and then choose one story and write about the theme and the author's purpose. As the teacher stated, the assignment required students to use critical thinking skills such as analysis, evaluation, and synthesis; however, the rubric used for the written part of the assignment focused entirely on the mechanics of writing. The criteria the teacher shared with students did not support a deeper analytical approach by the students. The student work we saw also tended to be superficial. Students identified the theme and included a few supporting details but did not develop the theme to any real extent. Also, there were problems with organization, making some of what was written incomprehensible. It appeared to us that students needed more guidance with the different parts of the analysis and with the organization of their writing. More feedback about the implementation of this assignment from the coach and the other members of the CFG might have helped this teacher further clarify his expectations for students' work and learn additional ways to model deeper thematic analysis.

In the following example, again more follow-through might have improved the implementation of an instructional strategy learned in a CFG. This middle school teacher reported that the members of her group had been discussing the idea of "multiple intelligences" and the attendant importance of using more than one mode of learning in their classrooms. This concept was illustrated by the reading comprehension assignment she submitted to us for which students were required to read a short handout about manors and list the people who worked and lived at the manor and identify their jobs, draw a map of a manor, and write a 150-word fictional news story about a strike at one manor, including "who, why, what, and where." The teacher reported that she modeled how to do the assignment for students and showed them samples of other students' work.

Though this teacher was successful in giving her students the opportunity to express their understanding of the text in different ways (e.g., through drawing, writing, etc.), it appeared to us that the full potential of the assignment for supporting student learning across a range of expressive domains was not borne out. This was most obvious in the teacher's assessment of students' work. For example, the teacher reported that she gave students 50 points for merely

completing the map of the manor, but she did not give students points for the quality or accuracy of their drawing. Additionally, two of the four student papers we read were not news stories about a strike, but rather descriptions of a manor. One of these two papers was given the top number of points with the comment, "nice work" written on the paper. It is possible that more follow-through with a coach or other members of the CFG might have helped this teacher clarify her expectations for student work and criteria for assessing the different types of activities embodied in the task. This in turn might have supported the production of higher quality student work.

What Are the Factors That Appeared to Hinder and/or Support the Effectiveness of the Groups for Supporting Change in Teachers' Instructional Practices?

Most of the teachers (69%) who were surveyed had completed an open-ended question asking them to describe what had not worked well in their group and how it could be improved (see Table 7). The problems most frequently mentioned by teachers included difficulties with scheduling and attendance, issues with meeting content and focus, and lack of support and involvement from administrators and other faculty members. Six teachers surveyed reported that their experience had been so positive that nothing in their group could be improved.

Table 7 Teachers' Perceptions of How Their Group Could Be Improved: Open-Ended Survey Responses (n=47)

$(\mathbf{n} - \mathbf{n})$			
Type of response	Total % (<i>n</i>)	Elementary (<i>n</i> =15) % (<i>n</i>)	Secondary (n = 32) % (n)
Establish more regular meeting times	26 (12)	30 (4)	24 (8)
More meeting time—time to do what we need to do professionally to be more effective teachers. (middle school teacher)			
We need common release time for our meetings. We all have too many responsibilities after school, and lunch is too short. (high school teacher)			
Focus more on doing peer-observations and analyzing student work	19 (9)	35 (5)	12 (4)
Peer observations have been difficult to schedule and do on an on-going basis. Not sure how to improve this in a multi- track year-round school. (elementary school teacher)			
Routine observation of participants in the classroom. I believe this is the most important component of the program that needs to be pursued to the fullest. (high school teacher)			

Table 7 (continued)

Type of response	Total % (<i>n</i>)	Elementary (n =15) % (n)	Secondary (n = 32) % (n)
Support increased attendance on the part of members	14 (7)	5 (1)	19 (6)
Attendance has been sparse. It is always hard to keep up enthusiasm at the end of a long day. (high school teacher)			
Member numbers start high, but midway through the year the numbers drop off. (high school teacher)			
Use meeting time more effectively	14 (7)	10 (2)	15 (5)
Meetings need to be more streamlined. Too much talk about non-CFG business. (high school teacher)			
Having gripes more than [suggestions for] improvement hurts our time being used wisely. No one should be afraid to speak out, but we must stay on the subject. (middle school teacher)			
Provide compensation for members	5 (3)	10 (2)	3 (1)
Having time to meet more often. Getting paid. (elementary school teacher)			
Include a greater percentage of a school's faculty	4 (2)	0 (0)	6 (2)
Getting more people involved. Those who come enjoy and benefit, but those "out there" won't even try. I don't know what to do about it. We put up flyers, announce at faculty meetings, and still we only have 6-7 members. (high school teacher)			
Would like to start making an impact on faculty outside of CFG. (middle school teacher)			
More support from school administration	6 (3)	0 (0)	9 (3)
We don't really get the time. Not really feeling supported by administration. (middle school teacher)			
Nothing could be improved	12 (6)	10 (2)	12 (4)
I am very happy with my group and can't really pinpoint something that needs to be improved. (elementary school teacher)			

About a quarter of the teachers (n = 12) mentioned that their group had needed more time to meet, and many teachers commented that it would be preferable to hold meetings during the school day, possibly during common release time, instead of after school. Nine teachers reported that more group time should have been devoted to doing peer observations and analyzing student work. As one elementary school teacher explained, "Peer observations have been difficult to schedule and do on an ongoing basis. I'm not sure how to improve this in a multi-track year-round school." Another seven teachers similarly said that meeting time needed to be used more effectively.

Additional barriers to effectiveness mentioned by teachers and coaches included a lack of regular attendance at CFG meetings, a lack of support from the school administration, and a lack of faculty involvement in these types of groups at their school. Three teachers also stated that CFG members should be compensated for their time at meetings.

We also interviewed teachers (n = 24) and coaches (n = 10) and asked them to describe the factors (if any) that may have hindered the effectiveness of their groups (see Table 8). The results of the interviews confirmed the findings from the survey. Approximately three quarters of the teachers and coaches (n = 25) discussed problems relating to the logistics of setting up meetings. Specifically, 11 teachers and coaches described a lack of consistent attendance at meetings due to conflicting professional and personal obligations, and described activities as being a significant problem for their groups. These problems seemed to be exacerbated for groups at schools with year-round schedules. Another problem that was mentioned by 6 coaches and teachers was that there was no official school time set aside to meet. At most schools, teachers met after school at the end of a long teaching day. Four teachers and coaches also mentioned a lack of time to meet, and 4 mentioned a lack of interested faculty at their schools as significant problems.

The majority of teachers and coaches (n = 20) also described problems having to do with relationships (or lack thereof) within their group. For example, five teachers and coaches mentioned weak leadership as a problem and three described divisions between faculty members at their school (e.g., between senior and junior teachers). Other problems mentioned by a few teachers included conflicts between coaches, overburdened coaches, lack of commitment or initiative on the part of members and coaches, and personality conflicts or interpersonal communication problems within the group.

About half of the teachers and coaches we interviewed also described problems with the content and focus of their group's activities. Specifically, six teachers mentioned that there was a lack of focus during the meeting, including a lack of preparedness on the part of members and coaches. Four teachers and coaches also mentioned that their group had lacked the resources (e.g., release time) to conduct as many peer observations as desired. Isolated teachers also mentioned that the feedback members gave each other was too surface-level and not critical enough, that topics were not followed up on in subsequent meetings, that their group had

not set clear goals, that the pace of their group was too slow, and that they had not felt comfortable bringing student work in to share with other members.

Finally, a few teachers and coaches described a lack of support from the administration, lack of compensation for CFG participants, and the difficulty of trying to keep in step with the district's changing goals and reform agenda as problems for their group.

Table 8 Teachers' and Coaches' Reports of Problems That Hindered the Effectiveness of Their Groups (n = 34)

Type of response	Total % (n)	Elementary (n = 17) % (n)	Secondary (n = 17) % (n)
Logistics			
Scheduling conflicts	32 (11)	29 (5)	35 (6)
Meeting time after school rather than during school day	18 (6)	6 (1)	29 (5)
Lack of interested teachers to join	12 (4)	12 (2)	12 (2)
Not enough meeting time	12 (4)	6 (1)	18 (3)
Relationships			
Weak leadership	15 (5)	18 (3)	12 (2)
Divisions within the school between faculty	9 (3)	0 (0)	18 (3)
Conflicts between coaches	9 (3)	6 (1)	12 (2)
Overburdened coaches	9 (3)	0 (0)	18 (3)
Lack of commitment and initiative on the part of members and coaches	9 (3)	12 (2)	6 (1)
Personality conflicts between members	6 (2)	6 (1)	6 (1)
Not enough time for co-coaches to meet	3 (1)	0 (0)	6 (1)
Content			
Lack of focus during meetings	18 (6)	18 (3)	18 (3)
Lack of time and resources to conduct peer observations	12 (4)	18 (3)	6 (1)
Feedback too surface-level, not critical enough	6 (2)	6 (1)	6 (1)
Lack of follow-up on topics	3 (1)	0 (0)	6 (1)
Pace of meetings too slow	3 (1)	6 (1)	0 (0)
Group is too rule-conscious	3 (1)	0 (0)	6 (1)
Goals are not set	3 (1)	0 (0)	6 (1)
Uncomfortable bringing student work to share with group	3 (1)	0 (0)	6 (1)
Other			
Lack of support from the administration	12 (4)	0 (0)	24 (4)
Lack of compensation for members	6 (2)	6 (1)	6 (1)
Difficulty of trying to keep up with changing reform goals	3 (1)	6 (1)	0 (0)

Summary, Conclusions, and Recommendations

In this section we summarize our key findings and conclusions and provide recommendations for how this professional development program, and programs like it, could be improved. We hope that these recommendations will be useful to administrators, practitioners, and program reform personnel attempting to implement collaborative professional development settings for teachers in schools.

Summary

Before we summarize our results, it is important to reiterate some of the limitations of our data collection. First, we observed only one meeting during the year for each group, and (because of the measures we were using to assess assignments and student work) we looked at only language arts and social studies. Additionally, we were not able to observe some of the peer observation debriefing sessions (the ones that were conducted privately), and we feel this might have given us further insight into the quality of feedback available to participants in a few more groups at least. Finally, our data collection was limited by not having the means to collect baseline data for student work or work of a matched comparison sample. We therefore were not able to concretely assess whether or not student learning had increased, but instead focused on what appeared to be the potential of these Critical Friends Groups for improving instruction and student learning. With these limitations, we summarize our findings below.

Focus of meetings and goals. In looking at how the program was implemented in schools, we found that groups generally focused on a very broad set of goals. Though most of the groups were primarily concerned with improving instruction, the specific ways in which this was to be accomplished were generally not articulated or elaborated. This seemed to be especially true at the secondary level, where a range of content areas was represented in the groups. An exception to this general pattern was found in one high school, where a group of English teachers met throughout the year with the specific focus of improving their writing instruction. Additionally, two groups, one elementary and one secondary, claimed to focus primarily on team building and providing support for teachers as opposed to having an explicit goal for the improvement of instruction.

Scheduling meetings. Lack of consistent attendance at meetings and not having enough time to meet were two problems reported by a majority of the coaches at both levels of schooling. All but three of the groups met after school for 2

hours, which included socializing and waiting for members to arrive. Only one group built in extra time for eating and socializing. The one group whose entire meeting was held during the school day met for only 1.5 hours a month. Because of conflicting personal and school schedules, groups met during the year an average of eight times, and the secondary school groups reported missing more meetings than the elementary school groups. The secondary school groups also tended to be slightly larger, with an average of 10 members compared with an average of 8 members in the elementary school groups. Eight of the 11 groups we followed lost at least one member during the year, and approximately three fourths of the members of all the groups were present at any given meeting.

Meeting time activities. Results indicated a lot of variation in how the different groups spent their meeting time. According to coach interviews, the elementary school groups spent about the same proportion of their time engaged in team building activities as the secondary school groups and twice as much time engaged in text-based discussions. The secondary school groups spent about 50% more time examining student work compared with the elementary school groups. The elementary and secondary school groups spent about the same proportion of their time discussing peer observations.

Our observations of meetings revealed a somewhat different picture of how groups spent their meeting time than what was reported to us by the coaches. This is not surprising given the fact that we observed only one meeting during the year, whereas the coaches were describing a year's worth of activities. Still, according to our observations, the elementary school groups spent twice as much time engaged in team building activities as what was reported by the coaches. In addition, we observed the elementary school groups engaged for twice as much time on average in text-based discussions as the secondary school groups. We observed both the elementary and secondary school groups examining student work about the same proportion of time. The elementary school groups spent much more time engaged in discussions about peer observations, compared to the secondary school groups. According to our observations, the secondary school groups also spent about half of their meeting time on average engaged in other non-core CFG activities, though coaches at this level of schooling reported that only 11% of the meeting time tended to be spent engaging in other activities.

Finally, our observations revealed that the groups spent a significant amount of time (an average of 12% of the meeting time for the elementary school groups, and

18% of the meeting time for the secondary school groups) waiting for other members to arrive. We also observed that most of the groups did not spend a majority of their meeting time focused on student learning and instruction. A great deal of the meeting time tended to be spent waiting for other members, attending to business, and engaging in discussions that were not related to instruction and student learning.

Quality of feedback. In addition to looking at how the program was implemented in schools, we also investigated the nature and quality of the feedback received by teachers in these professional development settings. In summary, most of the teachers we surveyed and interviewed were very satisfied with the quality of the feedback they received in their groups. Our observation of group meetings, in contrast, yielded a mixed picture in terms of the quality of feedback participants gave each other. We observed high-quality feedback being given on a consistent basis in only three of the groups we observed. We observed less feedback or mixedquality feedback in four other groups and almost no feedback that was specific and focused on instruction in the remaining four groups. Looking at student work or observing a (videotaped) lesson together as a group were activities that appeared to support the giving and receiving of higher quality feedback. These groups also had coaches (or other members) who served as instructional experts, though most members tended to be actively engaged in the discussions. We observed less highquality feedback in groups that focused the majority of their time on discussing instructional ideas generally, or reading and talking about a text.

It is possible that some of the groups at least were discussing more substantive issues during peer observation debriefing sessions. This would have been possible only in the four groups that were engaged in regular peer observations, however, and not for most of our sample groups. It is more likely that the discrepancy between what we observed and what teachers reported with regard to feedback quality was at least in part due to a difference between what we considered to be high-quality feedback and what the participants considered to be high-quality feedback. We considered high-quality feedback to be specific, to challenge teachers to think more deeply and critically about their practice, and to be focused on instruction and student learning. It appeared that many of the group participants were at least as concerned that feedback be offered in a supportive and non-judgmental manner. We also observed that, in addition to specific feedback about teaching practice given during activities such as examining student work and peer

observation, members exchanged teaching suggestions during group discussions resulting from other activities such as text-based discussions or the general sharing of experiences. Feedback was also given on process (e.g., feedback on how comfortable it was to use a certain protocol) and on larger school issues. It is possible that teachers considered more generalized types of comments and suggestions to constitute high-quality feedback as well.

Influence on teachers' attitudes. Commensurate with their positive view of the feedback they received in their groups, most teachers were very enthusiastic about their group participation. Specifically, most teachers considered their participation in their group to have had a very strong influence on their enthusiasm for teaching, and that their groups had helped them have more positive relationships with colleagues, and a sense of being supported at their school. In fact, about half of the teachers we surveyed and interviewed considered the opportunity to create and be part of a supportive, professional community at their school to be the most positive aspect of their group participation.

Influence on classroom practice and student learning. The vast majority of teachers in our sample reported that their participation in their professional development group had influenced their instructional practices. Specifically, many teachers reported learning new ideas for designing and assessing assignments and lesson activities from the other members in their groups. Many teachers also reported becoming more self-reflective as a result of their group participation, which in turn made them better teachers, and a few teachers reported improving their classroom management skills.

Most of the teachers we interviewed also reported that participation in their professional development group had positively influenced student learning in their classroom. Specifically, teachers reported that student learning in their classrooms had increased as a result of their improved instruction, resulting from new ideas for lessons and ways to approach learning activities, more reflective teaching, feedback from peers, clarified grade-level expectations, and new approaches to assessment.

We also interviewed teachers about the assignments they submitted to us and whether these assignments might have been influenced by their CFG participation. The purpose of this was to investigate the specific links between what teachers had been focusing on in their professional development groups and instructional practices that potentially affect student learning. Half of the teachers we interviewed (n = 12) reported that their assignments were not influenced by their work in their

CFG. Out of the remaining 12 teachers, 2 teachers provided assignments and student work that were of high quality. It appeared to us that though many teachers spoke highly about the ideas they had gotten for new instructional approaches, the implementation of these ideas was not always effective in that it did not necessarily result in high-quality assignments and student work.

Factors that hinder effectiveness. To investigate our final research question, we asked teachers and coaches to describe the factors that might have hindered the effectiveness of their groups for supporting change in teachers' instructional practices. In brief, teachers and coaches mentioned a number of different types of barriers to the effectiveness of their groups. These problems included finding times to meet and maintaining consistent membership, focusing on classroom practice, and focusing meetings and using time effectively. Lack of administrative support was also mentioned as a problem.

From our meeting observations, we also identified factors that appeared to influence the effectiveness of groups. Specifically, we found that the length of time available for meeting and the use of time during the meeting were factors that appeared to influence the effectiveness of CFGs. Almost all the groups met for approximately 2 hours after school. One secondary group met during staff meeting time one morning a month for 66 minutes. Two of the groups met for approximately 2.5 hours to build in time for socializing and eating. Some groups, by the time the participants arrived, had less than 90 minutes for their meetings. Three of the groups waited approximately 30 minutes for people to arrive. In almost every group, some of the participants had to leave early because of other commitments or a long commute home.

We also found that the types of activities members engaged in appeared to influence the effectiveness of these settings. Two of the groups had members do a substantial amount of reading during the meeting time, reading that could have been done ahead of time to allow for a more lengthy and in-depth discussion. We also observed that certain activities, such as examining student work and discussing peer observations, tended to keep the focus on improving teaching and student learning. A substantive focus on these activities seemed to engender more in-depth discussions and higher quality, substantive feedback focused on student learning and classroom practice.

Conclusions

Teachers generally were extremely positive about their participation in these professional development settings, in terms of helping them feel more supported at their schools and helping them improve the quality of their practice. It appeared, however, that many teachers assumed that implementing new instructional strategies and lesson ideas would result automatically in better instruction and higher quality assignments, which then would increase student learning. Our own investigation of classroom assignments and student work suggested, however, that this assumption may not be true. This is not surprising given the research indicating that teachers often do not implement instructional reforms as intended (Cohen & Ball, 1994; Spillane & Zeuli, 1999). Left alone in their classrooms to implement changes, teachers often interpret reforms through the lens of their own professional experience and training. New practice, therefore, can often end up looking very similar to prior practice with little influence on student achievement.

While collaborative professional development settings such as these groups certainly show a great deal of potential in terms of improving classroom practice, it appeared to us that this potential was not entirely borne out when it came to following up on ideas gleaned from other teachers during meetings. In other words, we believe that instructional ideas and strategies might have been more effectively implemented if there had been a follow-through mechanism in place in the groups. By this we mean a structure that allowed teachers to take their assignments and student work back to their groups and receive feedback from coaches and other members regarding whether the new ideas resulted in improved student work, and receive feedback on what other changes could be made to further improve student learning.

It takes time and concentrated effort for teachers to work together to craft and refine lessons and assignments (Stigler & Hiebert, 1999). For this process to be successful, collaborative professional development settings for teachers must be supported by the surrounding infrastructure of the school (Lieberman, 1995). Most of the groups described in this study were not integrated into the regular structure of the school day and so were generally plagued with problems related to scheduling and attendance. Changing practice is an extremely difficult endeavor, and it would seem that limited meeting time, in addition to poorly defined goals at the group and individual levels, could severely limit the potential of these groups to clearly influence practice and student learning.

Despite these limitations, teachers over and over again made it very clear that their experience in these groups contributed greatly to the quality of their professional life at their school. This is no small thing in an era when teachers and schools are being threatened with serious sanctions and are subject to intense criticism from politicians, the media, and their districts. Feeling supported, both instrumentally and emotionally, is important for promoting job satisfaction and effective teaching (Hargreaves, 1998; Ma & MacMillan, 1999). It is difficult to find experienced teachers who will commit to staying a number of years in low-income urban schools. These schools tend to have very high teacher turnover and a greater proportion of new and emergency credentialed teachers. At the same time, these schools tend to serve the neediest students and, therefore, require the finest teachers. It behooves us to endeavor to find ways to raise the quality of teachers' professional lives. Other research has indicated that school cultures with characteristics expressed in terms of collegiality and collaboration generally are those types that promote satisfaction and feelings of professional involvement of teachers (cited in Ma & MacMillan, 1999). Cultures that create, maintain, and reinforce isolation, in contrast, do little to help teachers resolve issues or to learn new techniques to help them teach. These "cultures of isolation," typical of most large schools (and urban schools often are quite large), can actually contribute to teachers' dissatisfaction and to a loss of certainty about their professional competence. CFGs seem to be doing their part to ameliorate teacher alienation and dissatisfaction and have the potential at least to break down the culture of professional isolation that is a hallmark of K-12 education in the United States (Stigler & Hiebert, 1999).

Recommendations

Based on our findings from teacher surveys, interviews with teachers and coaches, and our own observations of meetings, teachers' assignments, and student work, we make the following recommendations for how CFGs, and school-based collaborative professional development groups in general, potentially could improve their effectiveness.

- Meet more frequently. As described above, it is likely that meeting once a
 month for a few hours is not enough time to actively change practice. We
 recommend that groups meet more frequently, for example, once a week or
 at least twice a month.
- Take time out of the regular school day to hold meetings. Group
 participation needs to be seen as an important part of teachers' professional
 responsibilities, not just one more meeting to attend that competes with

other committees and meetings. Scheduling meetings during the regular school day, however, likely would require a high level of administrative support. For example, secondary school teachers could perhaps be allowed to have common conference periods that could be used for meeting time, or interested teachers could be placed on the same track in year-round schools. Alternatively, group participation could be used in place of department meetings or regular staff meetings, or in place of other mandated professional development activities. This might also help groups maintain consistent membership and ameliorate the problem of members arriving late and leaving early.

- Focus group activities on looking at student work and conducting regular peer observations. Here again, administrative and district support are needed to allow teachers the release time to observe their peers and a substitute to watch their classes. Additionally, we suggest that groups start looking at student work and start observing each other early in the year. As described by Nave (1998), trust can also be built by working with others toward a common goal, so it may not in fact be necessary to spend so much of the year engaged in team building activities.
- Improve quality of feedback. While it is important to give feedback in a supportive way so that groups continue to feel emotionally safe for teachers, it also is important that feedback is clear, specific, and focused on instruction and student learning, and that this feedback challenges participants to reflect deeply on their practice. It is possible that to accomplish this, coaches and participants may need to receive additional training in this area and should also be prepared to serve as (or procure) instructional experts in given areas.
- Establish clear and concrete goals that are aligned with larger reform goals. We suggest that groups set clear short-term and long-term goals, for both the whole group and the members in the group, for what is to be accomplished over the year and at individual meetings. A plan should also be in place for how these goals are to be accomplished. Goals should be reasonable and attainable and, ideally, linked with standards or larger reform goals for the school and district. Additionally, goals should be linked to concrete outcomes so that it is possible to assess progress. In this vein, groups may also want to consider collecting student work at the beginning of the school year to serve as a baseline measure within and across academic years and grades.
- Follow through with activities. In addition to setting clear goals, we also recommend that members approach problems systematically by devising concrete tasks and assignments for themselves (e.g., trying a new approach to teaching reading comprehension or implementing a new way to set up a science worksheet) and then bringing those assignments (ideally with student work) back to the group to discuss their implementation. We believe that further reflection on the implementation of new teaching

strategies and ideas in tandem with clear goals for student work likely would lead to improved practice and student learning.

• Foster the social and emotional support function of these groups. Finally, we believe that it is important that groups continue to serve as safe havens for teachers. Two of the groups in our sample built in time (an extra half hour) to socialize and share with other members. We recommend that other groups also consider allowing time for members to air their concerns and socialize, though this should not necessarily take up the majority of meeting time.

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APPENDIX A CFG MEETING OBSERVATION PROTOCOL

CFG Meeting Observation Protocol

School		Observer	
Coach			
Date	Time of m	eeting	
Where meeting held			
Number of members	present	<u> </u>	
Make-up of members pre	sent:		
Coach	Teachers	Administrator(s)	
Gender of members prese	ent:		
Male	Female		
Ethnicity of members pre	sent:		
-			
	1		
Total meeting time			
1. Summarize how the me	eeting time was spent (in minu	ites):	
Waiting at beginning	for members to show:		
Going over business:			
Team building activit	ties (e.g., Connections):		
Text-based discussion	n:		
Reading:			
Looking at student w	ork:		
Discussing peer obse	rvations:		
Feedback on process:			
Student work notebo	ok/survey (our part):		
Other (describe):			

FIELDNOTES: Note: In this section, please describe the amount of time spent in each activity, as well as the content of that activity. Please include a title for each activity as well.

- 2. Describe how much time in the meeting was spent focused on student learning. Note: In this section, please distinguish between theoretical discussions/activities focused on student learning (e.g., the role of culture in student learning), versus discussions of specific instructional strategies (e.g., learning how to apply the writing process), versus hands-on, concrete discussions/activities focused on student learning (e.g., looking at student work and discussing what a student did or did not appear to learn, or planning a lesson).
- **3. Describe the goals or focus of the activities.** Note: In this section, please describe what was intended to be accomplished during the meeting, and whether or not there appeared to be a clear purpose for these activities (e.g., did activities build on one another).
- **4. Describe the protocol(s) that were used during the meeting.** Note: Please remember to describe the protocol and include a copy of the protocol with a hard copy of your notes. If no protocols were used, please note this as well.
- 5. Describe the feedback that was given during the meeting with special attention to the amount, type, specificity, quality, personnel giving the feedback, and focus/topic of feedback (remember to include concrete examples). Note: In this section, please comment separately on the quality of the feedback the coach gave to the participants, and the quality of the feedback the participants gave each other. Please also describe the context in which feedback was given (e.g., was it informally given throughout the meeting, was it given only by the coach or the "process observer," etc.).
- **6. Describe the qualities of the coach with special attention to leadership skills and instructional leadership provided to participants.** Note: For this section, please describe the coach's apparent ability to keep the group focused and on-task, whether or not the coach appeared to be respected and trusted by the participants, the affective qualities of the coach, etc. (e.g., positive, negative toward participants, etc.), the degree to which the coach appeared to challenge the participants' thinking and push them to a higher level, and how much the coach commented on practice and was able to make concrete suggestions for how to improve practice.
- 7. Describe the quality of the discussion (e.g., the degree to which people questioned each other, level of challenge of the discussion, etc.). Note: In this section, please describe the social structure of the conversation (e.g., coach-directed versus participant-directed), the degree to which there was "up-take" on participant contributions either from the coach or from other participants, the degree to which participants appeared to have their thinking pushed to new levels (please give examples), the level of challenge of the discussion, etc.
- **8. Describe the factors that appeared to hinder or support the effectiveness of the CFG.** Note: In this section, please consider all of the areas described before (e.g., qualities of the coach, quality of feedback, structure of the discussion, etc.) as well as other factors.

APPENDIX B CFG SURVEY

Critical Friends Group Survey for Teachers

What grade(s) do you teach?
[If a secondary teacher] What is your subject area?
Sex: O female O male
Including this year, for how long:
have you been a teacher? years
have you been a teacher at your current grade level? years
have you worked at this school? years
have you been participating in Critical Friends Groups? years/ months

Influence on Your Teaching

How much influence, if any, has participation in your Critical Friends Group had on you in terms of the following (please circle one number for each item):

None		Α	great deal
1	2	3	4
1	2	3	4
1	2	3	4
1	2	3	4
1	2	3	4
1	2	3	4
1	2	3	4
1	2	3	4
1	2	3	4
1	2	3	4
	1 1 1 1 1	1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2	1 2 3 1 2 3 1 2 3 1 2 3 1 2 3 1 2 3 1 2 3 1 2 3 1 2 3 1 2 3 1 2 3 1 2 3

Please rate the **overall** degree to which participation in your Critical Friends Group has influenced your teaching (please circle one number for each item).

None			A great deal
1	2	3	4

Please describe *how* participation in your CFG has influenced your teaching (e.g., your instructional strategies, assessment, curricula, management skills, etc.).

Please rate the degree to which the following Critical Friends Group activities have influenced your teaching (please circle one number for each item):

	None		A	A great deal
Text-based discussions	1	2	3	4
Analyzing student work	1	2	3	4
Peer observations	1	2	3	4
Creating professional portfolios	1	2	3	4
Team building	1	2	3	4
Other	1	2	3	4

Please rate the quality of the feedback you have received regarding your instructional practice from your Critical Friends Group (please circle one number for each item).

Poor			Excellent
1	2	3	4

Influence on Your Students Learning

Please rate the overall degree to which participation in your Critical Friends Group has influenced **student learning** in your classroom (please circle one number for each item).

None			A great deal	
1	2	3	4	

Please describe *how* participation in your CFG has or has not influenced student learning in your classroom.

Overall Influence

How much influence, if any, has participation in your Critical Friends Group had on you in terms of the following (please circle one number for each item):

g (F)	None			A great deal
Enthusiasm for teaching	1	2	3	4
Feeling supported at work place	1	2	3	4
Self-reflection about your work	1	2	3	4
Exchange of ideas with colleagues	1	2	3	4
More positive relationships with colleagues	1	2	3	4
Other	_ 1	2	3	4
_	_			

What has been the most positive aspect of your experience in your CFG?

What has not worked well in your Critical Friends Group, and how could it be improved?

APPENDIX C TEACHER ASSIGNMENT COLLECTION MATERIALS

Directions for Collecting Assignments and Student Work Step-By-Step Process

Due: Spring 2000

Please collect 2 assignments with 4 samples of student work for each assignment. For secondary teachers, please collect the 2 assignments and student work from the same class. You will be asked to fill out a cover sheet for each assignment. Detailed instructions are given below.

We want to describe the nature of the writing tasks that students do, what is expected of them, what feedback they are given, and how grades are assigned. Our descriptions depend on what you tell us, so please be explicit and detailed so we can be as accurate as possible. If you have any questions about any of the following instructions, please call Joan Steinberg at 310-206-1532 x71262. Thank you.

1. COLLECT THE FOLLOWING 2 ASSIGNMENTS.

Collect **2** of the assignments you give your students, with selected examples of student work. Use assignments which ask students to do some individual written work. Do not create new assignments specifically for this study. Please collect the following types of assignments:

- 1 reading comprehension assignment
- 1 writing assignment that includes a rough draft and final draft, with any written feedback given by peers or teachers (writers' workshop activities are fine)

(over)

2. FOR <u>EACH</u> OF THE 2 ASSIGNMENTS COPY 4 SAMPLES OF STUDENT WORK.

• Choose two middle-quality and two high-quality pieces of student work from the same class.

It is fine to choose different students' papers for the different assignments. We just need two middle and two high for each assignment. If there were no students who did high-quality work on an assignment, attach a note explaining why you are not including any "High" pieces of student work. In that case, please just give us 4 pieces of medium-quality work.

- Copy the four pieces of student work for each assignment.
- Place an ID sticker over each student's name. (We prefer to receive student work without their names so as to protect their privacy). Please do not cover up any part of the student's work, your feedback, or grade. It is important for us to see the feedback comments or grades. If there is no clear area for the label, put it on the back of the work and cross out/white out the student's name.
 - Note: The student ID labels for Assignment #1 are stapled to the pocket for Assignment #1, and so forth.
- Place an **M** (**Middle**) or **H** (**High**) sticker on each student paper accordingly. These stickers are stapled to each pocket.

3. FILL OUT A COVER SHEET FOR EACH OF THE 2 ASSIGNMENTS.

Fill out the enclosed Cover Sheets for Teacher Assignments in the pockets in this binder.

- Please attach whatever will help us understand the assignment and accompanying student work, such as the following:
 - copy of the directions given to students (**please be as explicit as possible**),
 - grading rubric or guidelines, and
 - outline of the unit.
- Place the cover sheet with attached papers and the 4 pieces of student work in the appropriate pockets in this binder.

	Cover Sheet for Typical Reading Comprehension Assignment you need more room to answer the questions, please use the back of this form or attach sheets as cessary.
1.	Describe the assignment below in detail or attach a copy of the assignment directions to this sheet. Be sure to tell us exactly what directions were given to students. Specify the title and type (e.g., poem, novel, textbook, etc.) and grade level of the reading material. If students are working in reading groups, specify which group was given this assignment.
2.	What were your learning goals for the students for <u>this assignment</u> ? I.e., what skills, concepts, or facts did you want students to learn as a result of completing this assignment?
3.	In preparing students for this assignment, how did you accommodate for the range of student needs/skill levels in your classroom?
4.	How does the assignment fit in with your unit or what you are teaching in your language arts class this month or this year? Is this an end-of-unit assessment? [] Yes [] No
5.	How long did students take to complete the assignment?
6.	What type of help, if any, did students receive to complete the assignment? (Check all that apply.) Students received help or formative feedback from [] teacher [] teacher's aide [] other students [] parents (e.g., help = substantive revision feedback from teacher or peers). Please explain:

Date assigned: _____

7.	How was this assignment assesse If you are not attaching a rubric, p Did you share these criteria with s	lease explain your criteria for grad	
8.	What criteria did you use to decide (especially if work was not graded	le which papers are "M" middle p originally or if different from #7 a	
9.	Approximately what percent of se	udents performed at the followin	g levels on this assignment:
	% = good - excellent	% = adequate	% = not vet adequate

Cover Sheet for Typical Writing Assignment: Final and Rough Drafts
If you need more room to answer the questions, please use the back of this form or attach sheets as necessary.

1.	Describe the assignment below in detail or attach a copy of the assignment directions to this sheet. Be sure to tell us exactly what directions were given to students. Specify the title and type (e.g., poem, novel, textbook, etc.) and grade level of the reading material. If students are working in reading groups, specify which group was given this assignment.
2.	What were your learning goals for the students for <u>this assignment</u> ? I.e., what skills, concepts, or facts did you want students to learn as a result of completing this assignment?
3.	In preparing students for this assignment, how did you accommodate for the range of student needs/skill levels in your classroom?
4.	How does the assignment fit in with your unit or what you are teaching in your language arts class this month or this year? Is this an end-of-unit assessment? [] Yes [] No
5.	How long did students take to complete the assignment?
6.	What type of help, if any, did students receive to complete the assignment? (Check all that apply.) Students received help or formative feedback from [] teacher [] teacher's aide [] other students [] parents (e.g., help = substantive revision feedback from teacher or peers). Please explain:

7.	How was this assignment assessed? If you are not attaching a rubric, please Did you share these criteria with stud	se explain your criteria for grad	
8.	What criteria did you use to decide v (especially if work was not graded or		
9.	Approximately what percent of stude	ents performed at the followi	ng levels on this assignment:
	% - good - excellent	% – adaguata	% – not vet adequate

APPENDIX D TEACHER ASSIGNMENT SCORING RUBRIC

Language Arts Assignment Rubric

Language A	rts Assignment Rubric			
COGNITIVE CHALLENGE (In judging this dimension, refer to assignment cover sheet item #1, assignment directions that teacher attaches, and student work.)	Task requires strongly complex thinking as an extensive, major focus of task. Student also engages with substantive content material. E.g., student may be asked to synthesize ideas; analyze cause and effect; identify a problem and pose reasonable solutions; hypothesize; speculate with details or justification; defend opinions or argue a position with evidence; evaluate; analyze (distinguishing important or relevant from unimportant or irrelevant); determine bias, values, intent.	Task requires complex thinking. Student may also engage with substantive content material. E.g., student may be asked to synthesize ideas; analyze cause and effect; identify a problem and pose reasonable solutions; hypothesize; speculate with details or justification; defend opinions or argue a position with evidence; evaluate; analyze (distinguishing important or relevant from unimportant or irrelevant); determine bias, values, intent.	Task requires some moderately complex thinking. Some substantive content area material may be covered. E.g., student may be asked to summarize straightforward information, infer simple main idea, or simply apply the appropriate format for a given genre.	Task does not require any degree of complex thinking and/or does not engage students with substantive content material. E.g., student may be required to recall basic information, or recall definitions. Or student may be asked to answer simple reading comprehension questions or write on a topic with little focus or structure.
FOCUS OF THE GOALS ON STUDENT LEARNING (Refer to assignment cover sheet item 2 and assignment directions.)	4 Goals are very focused on student learning. Goals are very clear and explicit in terms of what students are to learn from the assignment. Additionally, all the goals are elaborated.	3 Goals are mostly focused on student learning. Goals are mostly clear and explicit in terms of what students are to learn from the assignment.	Osals are somewhat focused on student learning. Goals are somewhat clear and explicit in terms of what students are to learn from the assignment. Goals may be very broadly stated (e.g., reading comprehension). Or there may be a combination of learning goals and activities.	1 Goals are not focused on student learning, goals are not clear and explicit in terms of what students are to learn from the assignment, OR all goals may be stated as activities with no definable objective (activity for activity s sake).
CLARITY OF THE GRADING CRITERIA (Refer to assignment cover sheet items 5 & 6 and rubric that teacher attaches.)	Teacher's grading criteria are very clear, explicit, and elaborated. E.g., teachers rubric or guidelines are detailed and elaborated. Additionally a model of good work may be provided to the students.	Teacher s grading criteria are mostly clear and explicit with regard to what is expected with little or no question. E.g., teacher may use a rubric or a very elaborated and specific list of dimensions.	Teacher's grading criteria are somewhat clear and explicit. Teacher provides some general directions or a rudimentary rubric. E.g., a list of dimensions such as style, creativity, and organization, but some dimensions are undefined or vague.	Teacher does not specify grading criteria, OR it is not possible to determine the grading criteria from the teacher s documents.

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ALIGNMENT OF LEARNING GOALS AND TASK (Refer to assignment cover sheet items 1 & 2 and attached assignment directions.)	4 There is exact alignment between teacher s stated learning goals for students on that assignment and what the task asks students to do, AND task fully supports instructional goals. E.g., goal is being able to summarize several points and activity entails summarizing; tasks and goals overlap completely neither one calls for something not included in the other. Note: This dimension cannot be rated a 4 if the goals are unclear, broadly stated, or stated as activities.	3 There is good alignment between teacher s stated learning goals and what the task asks students to do, —AND the task supports instructional goals.	2 There is only some alignment between teacher s stated goals and what the task asks students to do. The task only somewhat supports the instructional goals. E.g., goal is to be able to write an essay, but task calls for completing a concept map and making an outline for an essay (but NOT actually writing an essay). —OR the goal may be so broadly stated that the task and goal are aligned at a very general level.	There is very little or no alignment between teacher s stated goals and what the task asks students to do. The task does not support the instructional goals. E.g., goal calls for writing an essay, but task calls for giving an oral report.
ALIGNMENT OF LEARNING GOALS AND GRADING CRITERIA (Refer to assignment cover sheet items 5 & 6 and rubric that teacher attaches.)	4 There is exact alignment between teacher s stated learning goals for students on that assignment and teacher s stated grading criteria. E.g., goal is to write a persuasive essay, and criteria include appropriate dimensions such as stating a point of view and providing relevant supporting evidence and do not include dimensions not mentioned in goals (e.g., creativity). Note: This dimension cannot be rated a 4 if the goals are unclear, broadly stated, or stated as activities.	3 There is good alignment between teacher s stated learning goals and the stated criteria for grading. E.g., goal is to write a persuasive essay, and criteria include appropriate dimensions but also extraneous ones. Or, fail to include critical dimension (e.g., support for assertions or point of view).	2 There is only some alignment between teacher s stated learning goals and the stated grading criteria. E.g., goal is to write a business letter, but criteria include mostly extraneous dimensions; e.g., participation in class discussion is given more weight than letter format. Or, criteria given are not very appropriate, e.g., slang is acceptable in a business letter.	There is very little or no alignment between teacher s stated learning goals and the stated grading criteria.
OVERALL TASK QUALITY (Consider all previous dimensions.)	4 Excellent quality in terms of level of cognitive challenge, clarity and application of learning goals, and grading criteria.	3 Good quality in terms of level of cognitive challenge, clarity and application of learning goals, and grading criteria.	2 Limited quality in terms of level of cognitive challenge, clarity and application of learning goals, and grading criteria.	Poor quality in terms of level of cognitive challenge, clarity and application of learning goals, and grading criteria.

APPENDIX E CFG NOTEBOOK PARTICIPANT FOLLOW-UP INTERVIEW QUESTIONS

CFG Notebook Participant Follow-Up Interview Questions Spring 2000

- 1. Basic background questions:
 - a. How long have you been teaching?
 - b. How long have you been in a CFG?
 - c. What did you hope to get out of joining your CFG?
- 2. What do you view as the most valuable/positive aspect of your membership in a CFG? (clarify or probe if need be) Ask for a specific example.
- 3. How does being in a CFG compare with other types of professional development in which you have participated? (clarify or probe if need be)

Instruction Questions

- 4. Has participation in a CFG influenced your teaching? If "yes," how? If "no," why not? (clarify or probe if need be)
- 5. In which of the following activities does your group engage?

	a. team building activities
	b. text-based discussions
	c. looking at student work
	d. discussing peer observations
	e. other
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If you reflect on these different activities that your CFG did this year, which were the most valuable in terms of getting you to think about your practice? Or in the way that they influenced your work?

IF APPLICABLE, How were these activities helpful? (*clarify or probe if need be*) <u>Ask for specific example</u>.

6. Do you think that the work you are doing in your CFG will lead to improved student learning or achievement for your students? If yes, how or in what ways? Please provide a concrete example.

If no, why not? (clarify or probe if need be)

Group Dynamic Questions

7. Do you feel that the group members give feedback to one another that pushes people to reflect on and potentially change classroom practice? If yes, can you

- expand on that? Please provide a concrete example if possible. If no, why do you think this is the case? (clarify)
- 8. We're trying to understand what makes an effective CFG coach. What do you feel are the most important qualities in a coach? How would you describe your coach's leadership style? (clarify)
- 9. Some CFGs have a coach or particular member who acts as an expert on instructional issues. Some CFGs do not have someone who acts as instructional expert. Is there someone in your group (it could be yourself, the coach, or another member) who serves as an instructional expert? How does this work? (clarify or probe if need be)
- 10. Protocols:
 - a. Did your group use protocols?
 - b. Which protocols and for what?
 - c. Did you find them helpful or effective?

***For Middle Schools and High Schools Only

11. Does your group include members across disciplines? (e.g. English, Science, Math, Foreign Language, etc.)

How does your group handle having teachers across disciplines? For example, do the science teachers get feedback on the content of what they are teaching as well as how they teach?

What have been the advantages and disadvantages of having members from different subject areas involved in your CFG?

- 12. Is there anything that presents obstacles/hinders the goals of your CFG?
- 13. How do you feel your CFG could be better?

Group-Specific Questions

Not included to preserve confidentiality.

Assi	g	nment	Q	uestions
	J	,	_	

***Note: Interviewer, make sure the person is relating the following back to the work done in the CFG.

I've been looking through the Classroom Assignment notebook that you gave	us.	l see
that you included a reading comprehension assignment on	and	a
writing assignment on		

- 14. Was there anything discussed in your CFG that influenced how you **designed** the **writing** assignment samples you included in the Classroom Assignment notebook? If so, what?
- 15. Was there anything discussed in your CFG that influenced how you **assessed** the **writing** assignment samples you included in the Classroom Assignment notebook? If so, what?
 - 1. (If rubric) Is the rubric you used taken from or based on work done in your CFG? What criteria did you use to assess whether an assignment was Middle or High level work?
 - 2. (If no rubric) What criteria did you use to assess whether an assignment was Middle or High level work?
- 16. Was there anything discussed in your CFG that influenced how you **designed** the **reading comprehension** assignment samples you included in the Classroom Assignment notebook? If so, what?
- 17. Was there anything discussed in your CFG that influenced how you **assessed** the **reading comprehension** assignment samples you included in the Classroom Assignment notebook? If so, what?
 - (If rubric) Is the rubric you used taken from or based on work done in your CFG? What criteria did you use to assess whether an assignment was Middle or High level work?
 - (If no rubric) What criteria did you use to assess whether an assignment was Middle or High level work?
- 18. Has work in your CFG influenced how you design or assess assignments in general? Please give an example if possible.
- 19. Has work in your CFG influenced the **amount or kind** of feedback you give your students on assignments? <u>Please give an example.</u>
- 20. Is there anything else you would like to tell us about your experience in your Critical Friends Group that we haven't talked about today?

APPENDIX F CFG COACH INTERVIEW

CFG Coach Interview Spring 2000

Personal Background

How long have you been teaching?

How long have you been teaching at your school?

How long have you been in a CFG?

How long have you been coaching your CFG?

What do you view as the most valuable/positive aspect of your membership in a CFG? Clarify or probe. Ask for a specific example.

Has participation in a CFG influenced YOUR teaching?

How does being in a CFG compare with other types of professional development in which you have participated? How is it different? Better or worse?

Group Background

How many years has your group been meeting?

How many times this year will your group end up meeting? Every month?

(If the group was not able to meet monthly)

What were the barriers to your group meeting every month?

How many members are in your group?

How many are teachers, administrators, specialists?

Did anyone leave the group or enter the group during the year? If yes, why did they leave the group?

How many teachers on average were generally present at the meetings?

If not all, what were the barriers to (some) teachers meeting on a consistent basis?

What was the focus of your group this year?

Did the focus change over the course of the year?

Did your group have specific goals for what they wanted to accomplish this year? (e.g., for student learning, etc.).

*For Middle Schools and High Schools Only

Does your group include members across disciplines? (e.g., English, Science, Math, Foreign Language, etc.).

How does your group handle having teachers across disciplines? For example, do the science teachers get feedback on the content of what they are teaching as well as how they teach?

External Support

How supportive is your principal? Does he/she attend meetings? Was this helpful or not?

Did you and the teachers in the group receive any external support for <u>attending CFG meetings?</u>

Stipends this year? Release time from other meetings/responsibilities (i.e., staff development time)? Salary points? Professional development credit?

Other?

In order <u>to do peer observations</u>, did the teachers get release time or were substitutes hired?

General Group Dynamics

How would you say things went this year in terms of the group developing trust with each other?

Did you feel that the group members gave feedback to one another that pushed people to reflect on, and potentially change, classroom practice?

If yes, please provide a concrete example of this type of feedback.

If no, why do you think this was the case?

Group Activities and Influence on Practice

In your best recollection, what percentage of CFG <u>meeting time</u> over the course of the year was spent in doing the following activities:

Team building/trust-building activities	
Text-based discussions	
Reflecting on student work	
Peer observation debriefing/discussion	
Other	

If teachers participated in text-based discussions:

What texts were used? (or subjects) How were these texts chosen?

Were these discussions helpful to teachers in terms of changing their practice? (<u>Please describe</u> how it was or was not helpful with specific examples.)

If teachers looked at student work together:

How did this work?

How many teachers shared samples of their students' work?

What kinds of things did you look for when you examined student work?

Was looking at student work together helpful to teachers in terms of changing their practice? (<u>Please describe</u> how it was or was not helpful with specific examples.)

Did the teachers in your group observe each other's classrooms this year?

IF SO. how often?

How many CFG members have done peer observations?

How did this work (e.g., did teachers talk over what they wanted the other teacher to comment on? Was this shared with the group, etc.)?

How do you debrief after an observation?

(Probe: Do the observers and the teacher being observed meet separately? Does the whole group meet to go over the observation?)

Were these observations helpful to teachers in terms of changing their practice? (<u>Please describe</u> how it was or was not helpful with specific examples.)

IF NOT:

Why didn't the teachers in your group observe each other's classrooms? Is this something you are planning to do in the future?

If members participated in other kinds of activities or discussions:

Please describe any other activities of your group this year.

Protocols

Did your group use protocols? If so, which protocols and for what? (e.g., looking at student work, text-based discussions, peer observations, trust-building, etc.)

Did you find these protocols helpful or effective? Please be specific.

Were there any problems/limitations/issues with using protocols?

Alignment With Standards

Did your group discuss aligning lessons and assignments with district or state standards?

Was this helpful to you? Why or why not?

If turned in notebook: Assignment Questions

Now I will ask you some questions about the assignments you give students.

Has work in your CFG influenced how you design or assess assignments **in general**? <u>Please give an example if possible.</u>

Has work in your CFG influenced the **amount or kind** of feedback you give your students on assignments? <u>Please give an example.</u>

I've asked you questions about how your CFG might have influenced the assignments you give in general. Now let's focus on the two assignments you turned in for the notebook, the reading comprehension assignment and the writing assignment.

Was there anything discussed in your CFG that influenced how you **designed** the **writing** assignment samples you included in the Classroom Assignment notebook? If so, what?

Was there anything discussed in your CFG that influenced how you **assessed** the **writing** assignment samples you included in the Classroom Assignment notebook. If so, what?

(If rubric) Is the rubric you used taken from or based on work done in your CFG?

Was there anything discussed in your CFG that influenced how you **designed** the **reading comprehension** assignment samples you included in the Classroom Assignment notebook? If so, what?

Was there anything discussed in your CFG that influenced how you **assessed** the **reading comprehension** assignment samples you included in the Classroom Assignment notebook? If so, what?

(If rubric) Is the rubric you used taken from or based on work done in your CFG?

How CFG Could Be Better

In general, do you think that the work all of you are doing in your CFG will lead to improved student learning or achievement?

If yes, how or in what way? Please provide a concrete example.

If no, why not?

Is there anything that presents obstacles/hinders the goals of your CFG?

How could your CFG be better?