An Analysis of the Habitual Routines and Effectiveness of Collaborative Teacher Grade Level Teams in an Elementary School

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"The meetings are a structured process that give teachers a sense of empowerment ...teachers will stay in the profession as it gives us the collegial support we need."

--Second Grade Bilingual teacher

Introduction

Considerable research points out that teachers are more likely to change their teaching when they are consistently involved in the processes of collaborative inquiry, decision-making, planning and implementation, and connected to external expertise that also respects teachers' direction and creativity (Darling-Hammond & McLaughlin, 1996; Fullan, 1993; Hargreaves, 1994; Lieberman, 1995; Little, 1993; Rosenholtz, 1989; Talbert & McLaughlin, 1994). Teacher group work is an important approach to professional development. Moreover, teachers working in groups/teams have been considered a significant link between individual (teacher) and organizational (school community) learning (Chrispeels, 2002; Knapp, Copland & Talbert, 2003). Although arranging teachers into small groups (by department, grade level, program or subject) to promote collegial interchange and action is widely accepted, there is limited empirical data documenting teacher-group development that helps us understand how teachers work in small groups within schools. The extant research generally focuses on interdisciplinary teacher teams in middle school (Crow and Pounder, 2000; Pounder, 1998; Clark & Clark, 1994). Few studies have investigated teacher teams in elementary schools. As Pounder (1998) asserts "The adaptability of a team work design to other school level is untested. Group work may hold greater potential for meaningful change

in secondary school than in the elementary school..." (p. 83). Our study provide an opportunity to test this assertion.

The purpose of this study is to examine the effectiveness and capacity for learning of two elementary grade level teams. To examine teacher teamwork more specifically, we apply the concepts of team effectiveness in task-performing groups (Hackman, 1990 & 1991, Hackman and Oldham, 1980), habitual routines (Gersick and Hackman, 1990), and the framework of team learning (Liethwood, 1998).

The origin of group work can be traced to business/industrial research early in this century (Cartwright & Zander, 1968). Groups and teams functioned as a major organizing structure to accomplish tasks, especially in the business world. Research on group work has shown they exhibit persistent patterns for handling their tasks, their internal processes, and their interactions with outside stakeholders throughout the group's development (Gersick, 1988). It appears that habitual routines are a fact of life in groups. The idea of habitual routines and their impact on group effectiveness, however, is yet to be fully explored, especially in schools where teaming is a newer phenomenon. Nor have studies examined the relationship between team learning and effectiveness. This study adds to the limited literature and empirical data about teacher work group development in elementary schools.

Based on a partnership between a university school reform program and an urban school district in Southern California, leadership and curriculum redesign training are provided to 10 participating elementary schools. Participating schools also set up regular grade level team meeting with external facilitators who guide weekly or bimonthly grade level meetings. This study uses ethnographic methods to investigate two grade level

teams (Team A and B) in one of the participating schools. Through a micro- analysis of the discourse and texts from two teams as well as the products produced from their deliberations, the following research questions will be addressed:

1) How were habitual routines established and evolve in the grade level team A and team B?
2) In what ways did habitual routines support and constrain team effectiveness and learning?
3) In what ways were the teams similar and different in creating conditions for team learning?

Theoretical Framework

Two frameworks guided this study. First, the study draws from the group effectiveness literature (Hackman, 1990 & 1991, Hackman and Oldham, 1980) and their concept of habitual routine (Gersick and Hackman, 1990) to examine team functioning and productivity. Second it applies the concept of team learning (Leithwood, 1998; Neck and Manz, 1994; Senge, 1990) to explore the capacity of the teams to learn as well as the process of learning and its influence on the team's work.

Effective Groups and Habitual Routines

Hackman and Oldham (1980) identified effective work groups as those: 1) whose input "meets or exceeds organizational standards of quality and quantity," 2) whose "members" needs are more satisfied than frustrated," and 3) " whose social process maintains or enhances the capability of members to work together on subsequent tasks"—that is, the group does not burn itself up" (pp. 168-170). In more recent work, Gersick and Hackman (1990) examine the functions of habitual routines in groups to understand how a group

becomes functional or dysfunctional and the relationships between a group and the larger organization. According to their definition, habitual routines "exists when a group repeatedly exhibits a functionally similar pattern of behavior in a given stimulus situation without explicitly selecting it over alternative ways of behaving." This lens provides the framework to identify team functions and dysfunctions as well as team habitual routines and the reasons that may cause a team to maintain or break them.

Although it is important to look at the effectiveness of teams and the routines that may be supporting or hindering that effectiveness, it is also important to understand how the team learns and modifies its work to address new circumstances. A team, for example, may be effective — producing higher quality products — but has failed to realize (learn) that the product is no longer appropriate or relevant. Therefore, a second conceptual framework guiding this study is that of team learning and its relationship to team effectiveness and habitual routines.

A Theory of Team Learning

Leithwood (1998) pointed out that teams are primary unit of collective learning. He believed that teams are more likely to accurately represent the range of interests in an organization than an individual. Teams often produce more creative solutions than individuals, and their members as well as associates of these members are more likely to understand and support shared decisions as a result of participating in the decision-making process. Thus, team learning is greater than individual learning.

In Senge's (1990) terms, "the discipline of team learning starts with 'dialogue,' the capacity of members of a team to suspend assumptions and enter into a genuine "thinking together" (p. 10). The Greeks dia-logos meant a free flowing of meaning

through the group, allowing the group to discover insights not attainable individually" (p.10). Senge emphasized that learning through dialogue is not a technique, but a discipline that has to be mastered and consistently reinforced. To sustain such dialogue and initiate serious learning opportunities, the creation and development of an effective team is crucial.

According to Neck & Manz's (1994) framework, the outcome of a team's learning is a conscious decision by members, following dialogue and debate, to maintain or change a pattern of action. They conceptualize team learning as mutual adaptation that results in patterns of action (or the team's collective mind). Part of this team learning is directly influenced by the nature of the team's leadership and a set of conditions for learning that grows out of the team's collective culture. They argue that the conditions for effective and productive team learning include: (a) encouragement of divergent views; (b) open expression of concerns and ideas; (c) awareness of limitations and threats to the work of the team; (d) recognition of members uniqueness; and (e) discussion of collective doubts.

Method

This study used ethnographic methods as tools to access the research setting and to collect and analyze the data, which were collected from August 2001 - June 2002. The researchers observed and videotaped weekly, hour-long, elementary school grade level meetings.

Context and Background of Setting

This study is a based on a three-year partnership between a university and an urban school district in Southern California, which began in August 2000. Data for this study is

drawn from one of ten participating elementary schools, which serve large numbers of low-income, second language learners with low achievement. As part of the reform process, all ten schools are engaged in aligning their teaching to California Curriculum Standards. The grade levels meet weekly with an external facilitator to review student work, explore research based instructional strategies, develop integrated or cross-curricular units aligned to standards and develop common assessments. They are guided in this process by a leadership team that receives six days of training throughout the year.

Participants. The participants included 10 female teachers (four Team A teachers and six team B teachers). Each grade level team had a grade level chair assigned by the principal. Three Team A teachers and one Team B teacher also served in other teacher leadership roles on the Effective Schools Leadership Team.

Data sources. The following data sources were used in this study:

- Videotapes: The weekly grade level meetings of Team A and Team B were videotaped from October 2001 to June 2002.
- Fieldnotes: About 100 hours of meetings were observed.
- Documents: unit plans developed by teachers during the grade level meetings and the minutes of meetings prepared by the facilitator were reviewed.

Data analysis. An open-coding review (Strauss & Corbin, 1990) of field notes, minutes, and discussions among the researchers about their observations of similarities and differences between grade level teams, indicated the need to review the literature on team effectiveness and team learning. A second round of data analysis proceeded following the theoretical propositions found in the literature about team effectiveness, which help to identify "rich points" (Green, Dixon & Zaharlick, 1999) in the videotapes

that were then transcribed. the unit plans generated by each team were reviewed and analyzed using a rubric designed by Clare, et al. (2000). This rubric was used to guide assessments of the units in six dimensions, using a four point descriptive scale. A constant comparative method was used to identify emergent themes as well as to contrast the data with the theoretical constructs. The comparisons between data units from transcripts, field notes, meeting minutes and instructional units provide a variety of sources for triangulation. Discourse analysis was applied to analyze the video transcripts to make team learning visible.

Findings

Based on an initial analysis of the group structural elements (Hackman & Oldham, 1980) of the teams, the video data portrays two different team compositions that led to different team functioning and accomplishments. Team A consisted of four teachers; three were *teacher leaders* on the leadership team, the fourth was a newcomer. As a result of this composition, the team gradually developed a shared leadership culture. As the team worked together, they displayed increasing mutual respect for each other (Video data analysis).

Team B had six teachers: one teacher leader, two remaining members, and three who were new to this group. With a strong leader and three newcomers, the video data revealed that a leader-dominated culture emerged from the beginning. In the seventh month, the newcomers assumed a leadership role when the designated leader was absent for two sessions; however, the group quickly reverted to their habitual pattern of "leader control" when she returned and reasserted her authority to direct the group's work. These leadership patterns influenced the nature of the weekly meetings and the evolution of

habitual routines in which most members of Team B were passive. In contrast, in Team A, all members were more actively engaged in discussion and group's work.

Team Effectiveness and Habitual Routines

Video and observational data revealed that both groups developed habitual routines that were similar in their overall structure of activities, but varied in the ways the activities were carried out. For example, both groups focused most of their meeting time on developing instructional units around a topic or theme. Other common routines included:

- Started each meeting by reviewing agenda
- Designed integrated curriculum units
- Reviewed and selected performance indicators/standards across curricular areas (e.g. language arts, Math and social science).
- Developed rubrics
- Searched for resources, activities and ideas
- Set the agenda for next week
- Used a computer during meetings to record units

These common routines helped both teams to focus on their task and pace the work. As Gersick and Hackman (1990) point out:

> The most obvious overall advantage of habitual routines is that they save time and energy, precisely because they need not be actively managed. For any group to take concerted action, members must have at least rudimentary agreement on their definition of the situation, they must have some kind of shared plan for how they will proceed, and they must exhibit at least of modicum of coordination in

executing their plan (p. 71).

These teams developed some common functional consequences of habitual routines. The routines helped them know what materials to bring and to know what was to happen at each meeting. However, an analysis of the dialogue and the actual units produced showed significant differences between the two groups. Team A's discourse involved much more exchange and debate of ideas before reaching a decision, and such dialogue can initiate serious learning opportunities (Senge, 1990). In contrast, most decisions in Team B were made by the leader. For example, the leader used to design her individual unit starting with stories and asked the group to follow her way in creating the group's unit. When one teacher started by looking at the state's content standards, the leader asked the teacher to think about the stories they would use in the unit.

Teacher Leader:	*okay, well first I want to know what story we're doing*
Teacher W:	*well, according to this, on five (standards), it's either this, uh, this is only the English stuff*
Teacher Leader:	*no, no , no, remember the stories that we talked about because we're doing autobiographies, now, remember these stories*
Teacher W:	*right*
Teacher Leader:	*the one of Betsy?*
Teacher W:	*Betsy Ross?*

From the above dialogue, we found that the group did not question the leader's directing, but followed her way of doing the unit. This dialogue pattern was repeated frequently in the team B's meeting transcripts. The consequence of this interactional pattern led to less engagement and greater frustration among the members of Team B. For example, one new teacher said to the facilitator that her opinions were often ignored or attacked by the leader, and she felt it was hard to contribute to the group's discussion and work. (Fieldnotes, September, 25, 2001).

Both teams developed units that were guided by the district's themes to reflect history and science content standards. The units from both teams also contained stories to be used, standards to be taught and assessments. However, the units differed substantially, in part, because of the process used to develop them and the degree of detail provided about the activities and assessments to be used in teaching the unit. In Team A, the teachers decided the theme for the unit after extensive discussion of the big concept they wanted to communicate to their students. For example, rather than just using the district theme "Our parents, grandparents and ancestors from long ago", Team A decided to use the term "Family", which they saw as a more inclusive concept. In contrast Team B simply adopted the district theme, e.g. agriculture, without discussion of the ideas and concepts embedded in the theme. Based on their big concept, Team A then selected appropriate language arts, math and social studies or science standards to be taught in the unit, and then identified the literature and other resources for the unit. Team B, in contrast, looked first for stories related to the theme and then slotted in standards. Team A continued the unit development process by designing enabling activities, assessments for each activity, noting other cross-curricular standards, and listing other related resource activities and ideas. In contrast, Team B did not identify any enabling activities; nor did they develop a series of assessments. Appendix A and B illustrate typical units created by the two teams.

We also examined the units using a rubric to assess their quality, based on a *Framework for Examining the Quality of Classroom Assignments* (Clare et al., 2000). This rubric assesses work based on six dimensions, which include 1) cognitive demands, 2) focus of the goals on student learning, 3) clarity of grading criteria, 4) alignment of

learning goals and task, 5) alignment of learning goals and grading criteria, 6) overall task quality. This analysis showed that Team A's units required higher cognitive demands as reflected in the enabling activities and assessments. Although both teams identified standards, the goal focus is more easily apparent in Team A's units because of the specificity of the enabling activities. Team A's units also show greater clarity in grading criteria because they use a variety of assessment strategies matched to activities. Both teams, however, indicate the use of rubrics to assess student written work. Overall, compared to Team B, the quality of the units of Team A were judged to be of higher quality because they encompassed cognitive challenge, clarity and application of learning goals, and grading criteria.

The data suggest Team A developed a deeper level of team thinking and learning as reflected in their dialogue as well as the development of better quality units. For example, in one meeting, Teacher T explained the need to design a culmination activity in the units and the need to evaluate the units they had developed. However, Teacher P thought that they did not have enough time to teach all the things currently in the units. Then, Teacher T pointed out that this was exactly the reason that she wanted to evaluate the units. She wanted to ensure the units they had developed were realistic and could be completed in the specified timeframe. She also wanted her colleagues to set higher expectations for their students by developing culminating activities that would ask students to use their creativity and imagination. Initially her colleagues were reluctant. Teacher P shared several examples of how their students could not imagine things out of their daily life and was unwilling to put Teacher T's idea in the unit. Instead of arguing with her colleagues, Teacher T agreed to their observations. She understood that

teaching activities had to relate to students' lives. Further, Teacher T pointed out that students' creativity was also important. Teacher L agreed with Teacher T's perspective, she warned the other teachers that they needed to give their students the chance to develop their imagination in the lower grade level or it would be too late when they go to the upper grades.

Teacher L: *...and if you don't give them the chance, they will never get it. They will get to fifth grade and then, oh we can't do this.*

Teacher P argued that her students' ability were lower than Teacher T's students and they had different needs. Teacher T acknowledged there might be difference, but reinterated that all students still needed creativity in their lives, even those students who had lower ability.

Teacher T asked her colleagues to think about the whole life of their students, not be limited to what they could do now. Her argument helped her colleagues to have higher expectations for their students. Following this discussion, the group reached an agreement of teaching abstract relations and creating a culminating activity in the unit that allowed students greater learning opportunities to use their imaginations and creativity.

Teacher L: *how 'bout if we give them a choice* [of undertaking a more complex learning task].
Teacher P: *good, I, I was just about to say that, okay*
.....
Chair: *and they have the capacity and the ability, so why not? So maybe we can give them a choice*

Through this discussion Teacher P and the Chair changed their perception about the need to give students the opportunity to at least attempt more complex learning tasks, and they indicated a shift in their expectations for students.

A review of all instructional units produced by these two teams suggest that both teams were equally productive. Guided by their habitual routines, they both were able to design 10 units that provided an outline of thematic classroom instruction by month and week. Team members brought rich resource materials to each grade level meeting to use in planning the units. The units followed a similar format in suggesting stories to use for the theme and linked the activities to standards. However, Team A's units contained more detailed and specified instructional activities and a culminating assessment activity that required high order thinking skills. Team A also implemented the units in their classroom and as a result decided to revise their units.

The difference in outcomes for the two teams are also reflected in the differences in habitual routines. The data showed that these were critical differences in habitual routines between the two teams and led to different outcomes. In Table 1, we summarize some of the observed differences between the two teams.

Table 1 Differences in the habitual routines between second and third grade team

Team A	**Team B**
• Design units starting with curriculum content standards • Units implemented • Units reviewed and revised • Facilitator occasionally checked on team's work and supported teachers' needs; relationship with	• Design units starting with stories • Units used as resources only • Units not reviewed or revised • Facilitator attended every meeting, took minutes and facilitated meetings, but occasional tensions between the

the group more relaxed • Shared leadership and responsibility for work	facilitator and leader caused further retreat of some members • Leader dominated group work

For example, only Team A revised and refined its units after they implemented them, whereas in Team B the units were used only as a resource, and therefore the team members felt no need for revision. These variations in habitual routines affected the team effectiveness in terms of the quality of its work.

In addition, the differences in routine seem to affect team members' satisfaction with the work, another key component of team effectiveness. Based on interview data and observations of team interaction, Team A members felt more support from other members and greater satisfaction from their work. In subsequent individual interviews, the team members also indicated receiving more support from their team members and more satisfaction from their work. As one teacher pointed out,

> I have a lot of more respects for my colleagues now. Because I sat with them for an hour every week, discuss with them, the roles have changed from, like, the leader is now more willing to share some responsibilities as opposed just doing all her way. She understands that we need to what we want to do and sometimes her ideas have to be postponed, it has to be table, because that's not majority… this is the way it is, the way she said, what do you guy think about this, here is my idea. Her role has changed a lot. It's changed a lot, for the better.

This satisfaction in part derives from the strong norm for sharing responsibilities, guiding the work, and rotating meeting roles such as recorder or typing units on the computer during the meeting. In contrast, in Team B, the designated leader did the majority of the

work, both conceptual and logistical. As a consequence, Team B leader and members felt frustration with their interactional patterns.

Team learning

This study also involved exploring the similarities and differences in the patterns of team learning. Team learning requires dialogue and thinking together among members and learning occurs when the team makes a conscious decision to maintain or change a pattern of action (Liethwood, 1998). In other words, one could argue that when Team A decided to revise their units based on what they had learned while implementing them, they were engaged in team learning. Again we found important differences between Team A and Team B in the levels of team learning.

Team A videos and work showed:

- Dialogue involved much more exchange and debate of ideas before reaching a decision, and such dialogue can initiate serious learning opportunities (Senge, 1990).
- They developed a higher level of team thinking and learning along with better quality products.
- Illustrated a conscious decision to change a pattern of action of their units after implementing the units.
- Demonstrated an ability to resolve differences.

Team B videos and work showed:

- Less two-way conversations;
- Team learning limited by leader's actions in truncating input and dialogue;
- Limited implementation of units led to no awareness of need to revise their work.

The data show that the capacity to sustain a space for mutual engagement and dialogue are significant for team learning. Without dialogue, a team is not able to build its collective thinking and team learning.

Discussion and Conclusions

This study shows the importance of using more than one conceptual framework in exploring a complex phenomenon such as teams and their work while adding to the existing limited literature and empirical data about teacher work group development. Team effectiveness is an important concept derived from the study of industrial or managerial teams (Hackman & Oldham, 1980) and embodies the organizational literatures concerned with productivity and quality outcomes. It recognizes that members must be sufficiently satisfied to stay engaged with the teamwork. In this study we also found useful Gersick and Hackman's (1990) concept of habitual routines, a more recent addition to their work on team effectiveness. Habitual routines proved a useful construct for analyzing the effectiveness and productivity of these two grade-level teams and confirms the potential value of habitual routines as an analytical tool to investigate teacher group work. Although the habitual routines can lead to functional consequences, we also observed, similar to Gersick and Hackman, that they can contribute to group dysfunction, too. In this study, the two teams became very focused on their tasks of creating units. The routines established early on in their formation supported the unit development work. This strong routine, however, limited their exploration of other opportunities for learning and ways of working. The study highlights the importance of examining habitual routines as a first level of analysis of team effectiveness.

The concepts of team effectiveness and habitual routines are important but not sufficient to fully understand teamwork. Our findings suggest that team productivity in traditional organizational terms is not sufficient to lead to significant changes in instructional practice. The concept of team learning is essential to understand why one team performed better than other. The greater presence of the conditions for learning (e.g., encouragement of divergent views, open expression of concerns and ideas) offers one explanation of why Team A was able to produce higher quality units. Without these conditions operating in their team, Team B found itself unable to engage in open dialogue or consider alternate ways of designing the units. The data suggest that more attention may need to be given to developing strategies for teams to expand their capacity to engage in continuous learning as well as be productive (Leithwood, 1998; Neck and Manz, 1994, Senge, 1990).

Finally, this study shows that teamwork has great potential in elementary schools and may be an untapped resource for improving teacher practice. Pounder (1998) argues that teamwork may not be needed in elementary schools, in contrast to middle schools where teaming is used more commonly, because elementary teachers have the advantage of knowing and teaching "the whole child". This study illustrates the power of elementary grade level meetings as sites for situated learning and professional development. Many elementary teachers feel overwhelmed by the need to focus most of their teaching on the basics of reading and mathematics in order to meet challenging state standards. Data from these two teams of elementary teachers showed the value of teamwork. Through collaboration the teachers found ways to better integrate different curricular areas into coherent units of instruction. It is unlikely that this interaction

would have occurred without the establishment and regular meeting of these grade level teams. This study suggests that teamwork in elementary schools should be encouraged and studied to understand how it can contribute to both teacher and student learning.

Implications for Practice

We draw several implications for practice from this study. First, there is value in helping teams establish habitual routines that focus and structure their work. It is clear that such routines can enhance team effectiveness. Second, however, it is important to recognize that habitual routines can constrain team learning. To prevent habitual routines from inhibiting learning, teams need to explicitly develop routines that support "conditions for team learning" such as a time for review and reflection about their work or procedures for asking critical questions and discussing controversial topics.

Third the findings from this study suggest that leaders of teams may need coaching and support to be able to foster conditions for team effectiveness and learning. In this particular case, the facilitator's role needed to be more active in helping the teacher leader and the members of the team develop the norms and conditions needed for team learning. Leaders must be comfortable with and know how to share leadership and responsibilities so that all members become active participants.

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