A GRID AND GROUP EXPLANATION OF TEACHERS' PERCEPTIONS OF PROFESSIONAL DEVELOPMENT

By

JULIA REAM WHITE SMITH

Bachelor of Arts in Mathematics
Oklahoma State University
Stillwater, Oklahoma
1973

Master of Education Administration
University of Oklahoma
Norman, Oklahoma
2001

Submitted to the Faculty of the
Graduate College of the
Oklahoma State University
in partial fulfillment of
the requirements for
the Degree of
DOCTOR OF EDUCATION
July, 2009

A GRID AND GROUP EXPLANATION OF

TEACHERS' PERCEPTIONS OF PROFESSIONAL

DEVELOPMENT

Dissertation Approved:

Dr. Ed Harris

Dissertation Adviser

Dr. Ken Stern

Dr. Susan Stansberry

Dr. Bernita Krumm

Dr. A. Gordon Emslie

Dean of the Graduate College

ACKNOWLEDGMENTS

I would like to thank my husband, Dan Smith, for his great patience and support during these past years. His love and encouragement have been invaluable. I appreciate the support and pride my children, Jenny and Ryan, have returned to me. I would also like to thank my mother for always believing in me and my father for his love and support, and for encouraging me to keep working like the termite: “Little by little, but always.” Most of all, I thank my heavenly Father for His love and guidance.

I would also like to express deep gratitude to my committee members. Dr. Ed Harris’ work was foundational to my study and was the basis for my analysis of the schools. I am indebted to him for his guidance, patience, encouragement, and expertise throughout this long process. Dr. Susan Stansberry’s dissertation was invaluable as a guide for the organization of my dissertation and for insight into the grid and group typology and its application in schools. I have tried to give her credit for portions of my work that were directly influenced by her dissertation; I apologize for any unintentional omissions. I would also like to thank Dr. Ken Stern and Dr. Judith Mathers for their guidance, advice, and support both in and outside of class. In addition, I would like to express my appreciation to Dr. Bernita Krumm, for taking on an additional doctoral student late in the process. You have all made a great difference in my life.

TABLE OF CONTENTS

Chapter Page

Chapter Page

Chapter Page

Chapter Page

LIST OF TABLES

LIST OF FIGURES

CHAPTER I

INTRODUCTION

Say the words, "professional development" to teachers, and one may get a wide variety of responses ranging from eye-rolling to an animated description of a new technique that was learned. The differences in these responses may be explained by Scherer's (2002) description of professional development activities for teachers:

> The day everybody was made to do the Macarena in between writing their school's mission statement or the afternoon spent coloring in a diagram of a brain to illustrate their personal characteristics are the kinds of silly activities that make teachers beg for less time mandated for 'development' and more time for their 'real' work of educating students….A lot of good things are done in the name of professional development. But so are a lot of rotten things. (p. 5)

Since most public school teachers are required to spend a portion of the school year in such training, attendance at professional development in-service sessions is seldom an option for teachers. These sessions potentially provide an excellent opportunity for increasing teachers' effectiveness. School administrators, under pressure for their schools to show evidence of improvement to meet the standards set by the *No Child Left Behind Act* (NCLB) (107th Congress, 2002), also rely on professional development as a tool to help teachers meet demands for effective instruction (Abdal- Haqq, 1996; Cotton,

2003). Unfortunately, professional development may or may not be satisfactory and beneficial to teachers (Huffman, Thomas, & Lawrenz, 2003; O'Connor & Ertmer, 2003; Heller, 2004)

> Debevoise (1982) described the importance of professional development:
>
> Researchers have referred to it as 'education's neglected stepchild', [*sic*] teachers have labeled it a waste of time, and many administrators give it lip service but are not sure what to do with it. Still, in-service education does not go away, and for good reason. In-service programs potentially offer effective means for both professional growth and school improvement. (p. 2)

Professional development is increasingly seen as an important potential tool for classroom and overall school improvement (Abdal-Haqq, 1996).

As part of the government's earlier educational reform efforts, in 1994, Secretary Richard W. Riley established the U.S. Department of Education's Professional Development Team to examine the best available research and practice related to professional development and to summarize the findings into a set of guiding principles (U.S. Department of Education, 2001). According to their report, "The mission of professional development is to prepare and support educators to help all students achieve to high standards of learning and development" (p. 2).

According to Alvarado (1998), schools face pressure to increase student achievement based on standards, which in turn affects the professional development of teachers held responsible for student learning. Teachers need to improve their subject-matter knowledge and pedagogical skills; understand cultural and psychological factors that affect student learning; and assume greater responsibilities for curriculum,

assessment, outreach, governance, and interagency collaboration. Meeting student learning standards will require a new model of professional development for teachers that is much more powerful, involving problem solving and collaboration to a much greater extent than is currently the norm (Abdal-Haqq, 1996).

Professional development programs follow three basic models. The first model, the Traditional model, is typified by traditional workshops and speakers and tends to rely on direct instruction with limited audience participation (Heller, 2004; Robb, 2000). Teachers may or may not have a choice in the content of the professional development they attend; however, attendance is usually required. The second model of professional development, the Reform model, is much more collaborative and encourages teachers to participate for their own growth and that of their training groups. Professional development programs in this category are ongoing throughout the school year and are embedded in the daily work of the teachers. Participants have a great deal of control in the specific topics of their development, although there may be an overall focus for the school. The third model of professional development, described as Virtual in this study, allows teachers to participate in some type of online course through the use of technology. A variety of programs for all three models of professional development can be found, and educators must choose not only the model, but also the specific program or strategy for professional development that will meet their overall goals for teachers' practice and student learning.

Professional development plays a crucial role in meeting the current educational standards for accountability and student learning. *Goals 2000* (U.S. Department of Education, 2001) viewed professional development as the bridge between where

prospective and experienced educators are now and where they will need to be to meet new challenges of guiding all students to meet higher standards of learning. This type of professional development is not only supported, but mandated. NCLB (107th Congress, 2002) requires schools to provide professional development that helps teachers meet educational goals outlined in the legislation. Thus, there is a need for educators to examine current practices in professional development to determine whether they are meeting their teachers' needs and the government's requirements for effective and high-quality professional development for teachers.

Problem Statement

Professional development plays a crucial role in meeting current educational standards for accountability and student learning (Abdal-Haqq, 1996; Cotton, 2003; U. S. Department of Education, 2001), and professional development is now a mandated aspect of in-service teacher education (107th Congress, 2002). Consequently, there are more professional workshops, teacher resources, and development opportunities than at any time in educational history (Harris, 2005).

However, the professional development strategies schools choose do not always have the desired effects on teachers' practice (Center for Development and Learning, 2000; Knight, 2000). Teachers often find this required training to be beneficial and satisfactory in varying degrees (O'Connor & Ertmer, 2003; Porter, Garet, Desimone, Yoon, & Birman, 2000), and some studies indicate that professional development does not always lead to academic improvement (Center for Development and Learning, 2000; Guskey & Sparks, 1996; Huffman, Thomas, & Lawrenz, 2003; Willis, 2002). Scherer (2002) stated that while relevant professional development has never been more

important, “derisive stories about the worst professional development encountered are easy to come by in education….That traditional professional development has not always been meaningful is an understatement” (p. 5).

Suggestions and programs for improving professional development abound. Some educators continue to use traditional models, such as before or after school workshops, guest speakers, and prepackaged programs. Others see a need to move from a traditional in-service training model to a reform, or renewal, model, which is more collaborative and relevant. Harris (2005) described the renewal model as “the new paradigm for professional development because its goal is to build a committed and caring community” (p. 15).

One reason for the variety of professional development programs in schools and their degree of effectiveness may be explained through cultural theory. For instance, Douglas’ (1982) Typology of Grid and Group provides a lens through which professional development and school culture can be explained. Her framework has previously been used to understand the organizational cultures of schools (Balenseifen, 2004; Chitapong, 2005; Harris, 1995; Kanaly, 2000; Murer, 2002), and roles of teachers and learners (Lingenfelter & Lingenfelter, 2003).

The grid and group framework describes organizations in terms of two dimensions: 1) grid – roles, rules, and procedures, and 2) group – collective relationships and corporate membership. The degree to which grid and group operate within an organization can be placed along a two-way continuum, from high to low. These continua, in turn, define four distinct prototypes of cultures: Individualist, Bureaucratic, Corporate, and Collectivist (Douglas, 1982; Harris, 2005).

For this study, the Typology of Grid and Group provided the framework through which professional development programs in four secondary schools was analyzed and explained. Each of the four chosen schools' professional development strategies was analyzed according to Harris' (2005) descriptions of successful professional development strategies for the four cultures. This study posited that participating teachers' satisfaction with professional development may be affected by the school's culture and type of professional development strategy chosen by the school.

Purpose of the Study

The purpose of this study was to determine the interrelationships, if any, between school culture, and teachers' satisfaction with professional development. This included an exploration of school culture by conducting a qualitative pre-ethnography to narrow the population and determine the context of four purposefully selected secondary schools. Information gathered was used to determine the school culture and the type of professional development each of these schools offered in terms of a grid and group framework. Participating teachers from the four secondary schools were surveyed to determine their preferred types of school culture and their degrees of satisfaction with professional development received within their schools. This information was used to examine the effect of school culture and professional development strategies on teacher satisfaction with professional development.

Research Questions and Hypotheses

The following research questions were addressed:

1. What is the cultural environment of each of the schools studied?
2. How is professional development characterized in the schools under study?

3. What are the teachers' preferences for organizational culture in their schools?

4. To what extent are teachers satisfied with professional development in their schools?

5. What difference, if any, does school context make on teacher satisfaction with professional development? The null hypotheses are:

- H_{o1}: A match between school context and professional development strategies makes no difference on teacher satisfaction with professional development.
- H_{o2}: A match between teacher preferred school culture and school professional development strategies makes no difference on teacher satisfaction with professional development.

Table 1 summarizes the methods for data collection and the subsequent data analysis for each question.

Table 1

Research Questions, Data Collection Methods, and Data Analyses

Research Question	Data Collection	Data Analysis
• What is the school's cultural environment?	1. *Grid and Group Cultural Awareness Tool* (Harris, 2005)	1. Scores from teachers' responses plotted on vertical and diagonal axes to determine type of Cultural Environment, using Douglas' (1982) theory of grid and group
	2. Observation	2. Study of field notes made post-observation

	3. Document, artifact, and web page information regarding school cultural environment	3. Study of documents, web pages, and artifacts that provide insight into school culture
• How is professional development characterized in each school?	1. Taped interviews with administrators 2. Observation 3. Document, artifact, and web page information regarding professional development	1. Uncover themes in verbatim transcript 2. Field notes written immediately after observation 3. Study of documents, web pages, and artifacts for insight into the school's professional development
• What are the teachers' preferences for organizational culture?	*Grid and Group Cultural Preference Tool* (Harris, 2005)	1. Scores from teachers' responses plotted on vertical and diagonal axes to determine preference for cultural environment, using Douglas' (1982) theory of grid and group

• To what extent are teachers satisfied with their professional development?	question added to *Grid and Group Cultural Preference Tool* (Harris, 2005)	Scale from 1 to 8 (Very Dissatisfied to Very Satisfied)
• What is the effect of school culture on teachers' satisfaction with professional development?	1. Independent variable 1: match or no-match between school context and professional development strategies 2. Independent variable 2: match or no-match between teacher preferred school culture and school professional development strategies 3. Dependent variable: degree of teacher satisfaction with professional development	Multiple regression analysis to determine degree of effect, if any, these matches have on teacher satisfaction with professional development

Theoretical Framework

Because of NCLB (107th Congress, 2002), school administrators are required to maintain staffs of highly qualified teachers and to provide them with professional development that will lead to increased student achievement (Scherer, 2002). It is, therefore, important for educators to understand the unique culture of their school to maximize the effectiveness of teaching and learning (Harris, 2005). Similarly, Lingenfelter & Lingenfelter (2003) explained that there is a cultural context for each educational situation, and that teachers will be more effective if they recognize the influence of culture within their specific contexts.

Mary Douglas' Typology of Grid and Group (1982) provides a useful framework for analyzing the organizational cultures of schools, both for classifying the context of the school and for interpreting teachers' "values, beliefs, and behaviors" (Harris, 2005, p. 33). The use of the two-dimensional grid and group framework as a conceptual basis for this study provided a useful tool for analyzing the organizational culture of each school studied, the cultural preferences of participating teachers, and the appropriateness of professional development strategies used at each school.

On a continuum from low to high, the grid dimension measures the degree of importance assigned to institutional role expectations, rules, and procedures within a social context. High or strong grid cultures are dominated by roles and rules; personal interactions are regulated according to explicit internal classifications that restrain personal autonomy (Douglas, 1982; Harris, 2005). Douglas used four criteria to determine placement on a grid continuum: insulation, autonomy, control, and competition.

Within schools, high grid cultures are characterized by decision-making at the administrative and school board levels, as well as many role distinctions among teachers and staff, such as departments and grade levels in which teachers work in isolation. At the lower end of the continuum, low grid cultures are characterized by few role distinctions or institutional rules, and individual value is based on skills, behaviors, and abilities. In addition, teachers do not work in isolation from each other, and they are allowed a much greater degree of independence and decision-making. Roles are not assigned, but achieved, and individuals are encouraged to form their own relationships and make choices. Individual success is valued and competition is open (Harris, 2005).

The group dimension represents the degree to which people value collective relationships and the extent to which their lives are absorbed and sustained by membership in a larger social unit (Gross & Rayner, 1985; Harris, 2005). Like the grid dimension, the strength of the group dimension can be measured along a continuum from low to high group. In a high group culture, there are specific membership criteria with insider/outsider distinctions, as well as explicit pressures that influence group relationships. Survival of the group takes precedence over survival of its individual members. Douglas (1982) identified four criteria for evaluating an organization's group dimension: survival/perpetuation, membership criteria, life support, and group allegiance.

High group school cultures are characterized by group interactions, allegiances, and membership criteria that seek to perpetuate the school. Traditions and norms are perpetuated, and symbols of the school are often prominently displayed. In low group cultures, individual interests are valued above collective goals, and pressure for group oriented activities and relationships is usually weak. Groups and subgroups focus on

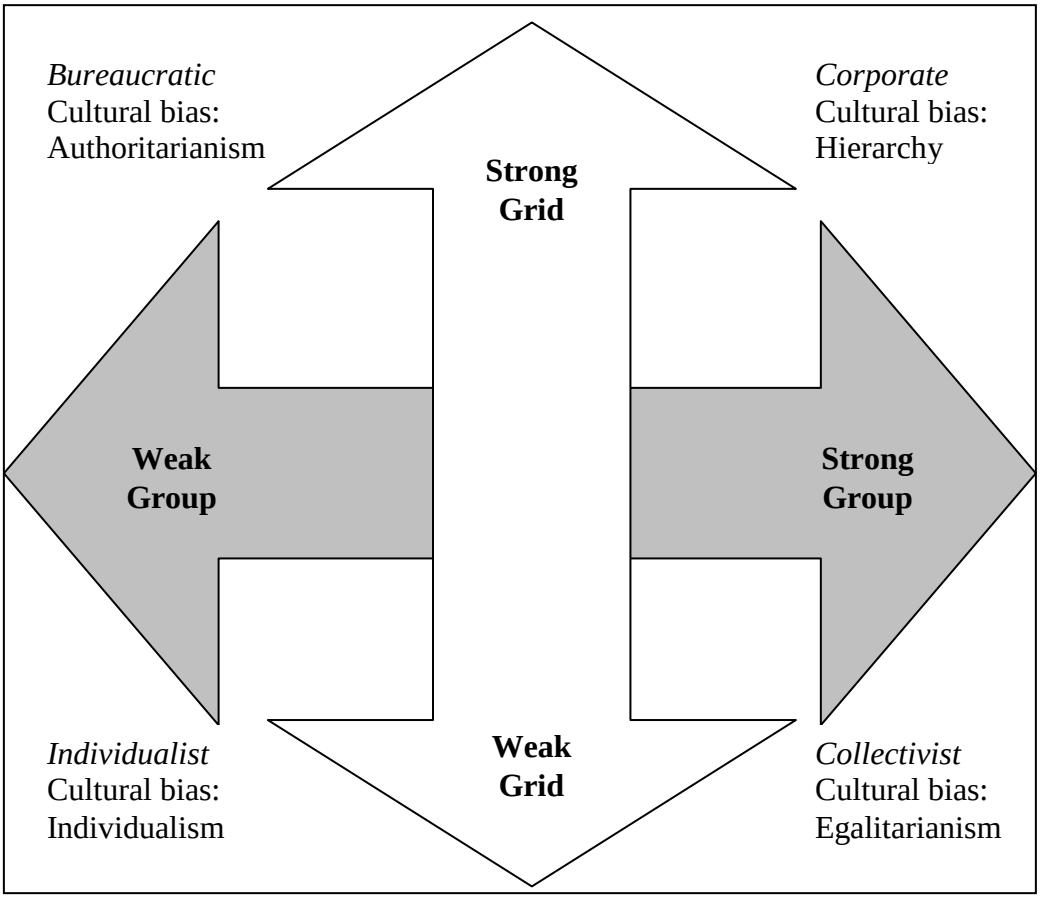
short term projects rather than long-term organizational goals, and allegiance to the larger group fluctuates. Within low group schools, strong traditions are usually absent, loyalty to the school is low, and the school social system fluctuates due to turnover in personnel. Individual interests override the few corporate goals, and no concern for perpetuation of or duty to the school is seen (Harris, 2005).

Grid and group considerations work simultaneously within organizations to define and describe the overall culture. Based on this combination, Douglas (1982) identified four distinct prototypes of cultures. Harris (2005) described these prototypes in relation to schools as:

- Individualist (weak-grid and weak-group),
- Bureaucratic (strong-grid and weak-group),
- Corporate (strong-grid and strong-group), and
- Collectivist (weak-grid and strong-group). (p. 39)

These four prototypes are presented in Figure 1.

Figure 1. Cultural prototypes according to grid/group theory.



Since Douglas introduced grid/group analysis in 1982, it has undergone theoretical elaboration (Douglas, 1982, 1989, 1992; Douglas & Wildavsky, 1982; Thompson, Ellis, & Wildavsky, 1990). In addition, it has been used to describe and analyze cultures in terms of cultural bias in a variety of areas including schools (Balenseifen, 2004; Chitapong, 2005; Harris, 2005; Kanaly, 2000; Murer, 2002) and roles of teachers and learners (Lingenfelter & Lingenfelter, 2003).

Harris (2005) identified four corresponding professional development strategies, each reflecting the best method of professional development delivery for a particular cultural prototype. These strategies are summarized in Table 2.

Table 2

Recommended Professional Development Strategy Characteristics for School Culture Prototypes

Culture	Characteristics
Individualist	• Minimal group involvement • Proof that external benchmarks and standards will help individual teachers • Goals, content, and delivery planned by teachers • Teacher autonomy and control • Action research; teachers as coaches and trainers • Year-long and personalized

Culture	Characteristics
Bureaucratic	• Anticipation of role advancement, recognition, or economic reward • Preliminary needs assessment, planning, and recommendations to principal by committee • Principal takes major role in process • Activities enhance and protect teachers' roles and responsibilities and correspond to teachers' specialties • External state or national standards help guide activities
Corporate	• Planning by representative committee that reports to the principal, who ensures that activities meet group needs • Motivation to participate comes from desire to improve academic program and status of whole school • Group participation to set goals and discuss • Content combines group-focused goals, activities, and rewards with abundant training resources • Meaningful intellectual, social, and emotional engagement with ideas and materials • Emphasis on the interdependence and enhancement of all members of the educational community

Culture	Characteristics
Collectivist	• Focus on both individual and group needs • Teachers seen as a team of equally important individuals • Equitable and pertinent content • Planning by a collective group of teachers • Teaching and learning seen in the overall context of local school community, teachers' individual needs and experiences, and students' educational needs • Multiple learning opportunities within authentic pertinent activities such as problem solving, inquiry, study groups, and mentoring of new teachers • Includes reciprocal processes, leadership-team development, and collaborative planning • External rules and criteria are viewed with suspicion unless they obviously benefit individuals and school

Methodology

A National Research Council committee described the questions commonly addressed in educational research: "What is happening (description); is there a systematic effect (cause); and why or how is it happening (process or mechanism)?" (Feuer, Towne,

& Shavelson, 2002, p. 7). Assumptions about human knowledge and reality that researchers bring to a research study shape the meaning of the research questions, the type of methodology, and the interpretability of the research findings (Crotty, 1998). The methodology chosen for this study was based on the assumptions that teachers' satisfaction with professional development is influenced by the social and cultural context of the school. Douglas (1982) explained that social reality within an institution is represented by organized social conventions.

A case study was chosen as the qualitative research strategy for this study because it is a means of examining a program in depth with detailed explorations. According to Creswell (2003), this strategy is characterized by boundaries of time and activity, and the researcher uses a variety of data collection methods to obtain detailed information. Data collection methods may include open-ended questions, text or image data, collection of participant meanings, studying the context or setting of the participants, validation of the accuracy of the findings, and making interpretations of the data. Rossman and Rallis (2003) explained that case studies are "complex and multilayered....They are particularly useful for their rich description and heuristic value" (p. 104). Case studies also provide detail and complexity, illuminating the reader's understanding and comprehension of a complex set of events or circumstances. Rossman and Rallis further described the advantages of case studies,

> The strength of case studies is their detail, their complexity, and their use of multiple sources to obtain multiple perspectives. The result is the thickness of description that allows the reader to interpret and decide the applicability of case learnings to another setting. (p. 105)

The researcher can also conduct cross-case analyses if more than one case is studied to seek commonalities and differences across several cases. Based on the information presented from a case study, the reader may be able to make judgments about whether the findings provide insight into similar contexts.

Explanatory case studies "depict events, processes and perspectives as they unfold and often build an explanation for those events or outcomes" (Rossman and Rallis, 2003, p. 104). This study was considered an explanatory case study because the researcher's goal was to provide detail and complexity to increase understanding of a "complex set of events or circumstances" (p. 105). In addition, since more than one case study was presented, the researcher conducted cross-case analyses to examine any commonalities and differences across the four cases that were presented.

By its nature, qualitative research reflects the biases, values, and interests of the researcher (Creswell, 2003). My research topic was influenced by my experiences in K-12 public education and my involvement in professional development sessions throughout my educational career. I have participated in professional development as a developer, planner, and attendee, and in those roles I have observed a variety of responses to professional development from teachers. These observations shaped my interpretation of the data.

Setting and Participants

The participants were teachers and administrators chosen from four Oklahoma public secondary schools. Selection was based on an analysis of the results of a questionnaire used to provide information about the cultural environment of each school regarding grid and group dimensions. Permission to contact teachers and administrators

and ask them to participate in the study was first obtained from the superintendent of each school. If the superintendents agreed, their high school principals were asked to forward a letter via email to teachers in their school, asking them to go online to a web site where they would find a description of the study and the role they would play as well as an opportunity for them to give consent to participate. The letter assured teachers that all responses would remain confidential and participants would remain anonymous and unidentifiable to the researcher. Accessing the web page to take the online survey constituted teachers' agreement to participate.

Each school's cultural environment was determined by plotting averages of teachers' responses to the *Grid and Group Cultural Awareness Tool* (see Appendix A for a copy of this survey), using the Grid and Group Graph Template (Harris, 2005, p. 197) (see example in Appendix B). After identifying two pairs of schools that exhibited two differing cultural environments based on the position of their response averages on the template, data about the overall school culture and professional development at those schools were collected, using a combination of interviews, observation, document analysis, and website evaluation. Administrators at the four schools were asked to volunteer for interviews with the researcher regarding the professional development strategies used at their school (see Appendix C for a list of protocol questions). They were assured their responses would remain confidential, and each administrator was asked to sign a consent form prior to being interviewed.

Teachers from each of the four schools were also asked to complete a second questionnaire regarding their school culture preference and their satisfaction with professional development provided by their school. This questionnaire was also

administered online, with teachers being asked through e-mail to follow a link to a web-enabled questionnaire where they had the opportunity to give consent, to read about their role in the study, and to submit their responses, or to request a hard copy of the questionnaire, if they preferred not to respond online. As on the first questionnaire, all responses were anonymous and participants were unidentifiable to the researcher. Teachers were again assured that their responses would remain confidential.

This study was limited to secondary teachers because of indications that reactions to professional development may differ depending on the grade level taught, with secondary teachers' attitudes being different than those of elementary teachers. This limitation was based on the researcher's observation, interviews with school administrators of the chosen schools, and comments of a professional development presenter for a national company (W. Burke, personal communication, July 17, 2007). Kelly and McDiarmid (2002), also found differences in teachers' engagement with innovative professional development based on school level.

Data Collection

Data for the qualitative portion of the study were gathered using multiple sources of data and a variety of methods to build a more complete picture, which is appropriate for a qualitative study (Rossman & Rallis, 2003). Sources of qualitative data included the initial questionnaire responses and observation, document analysis, website evaluation, and administrative interviews regarding each school's professional development. Data for the quantitative portion of the study came from a convenience sample taken from the total population of teachers at the four selected schools. These teachers were asked to respond

to a questionnaire that could be answered either online or on paper, depending on the participant's preference.

Data Analysis

Participants' online questionnaire responses were stored on an Excel spreadsheet located on the Oklahoma State University server, with each response assigned a number. The researcher was able to download this Excel file to the researcher's home computer for further analysis. Any responses on paper copies were also added to the spreadsheet by the researcher. For the school culture awareness questionnaire, scaled responses were totaled for both grid and group considerations and plotted on a two-dimensional graph to determine the most likely cultural prototype of the school. Administrators' digitally recorded interview responses were transcripted verbatim by the researcher into text documents, and then analyzed. Field notes taken during observations were also transcripted by the researcher and analyzed from the transcriptions. Documents and artifacts were analyzed in the field or after obtaining them. These qualitative data were used to help the researcher understand the context and professional development strategies of the four schools studied.

For the multiple regression analysis, the researcher combined responses to the teachers' cultural preference questionnaire in a spreadsheet that linked each teacher's anonymous identifier to his or her grid and group scores and degree of satisfaction with professional development. Each set of grid and group scores was plotted on a two-dimensional scale to determine each teacher's cultural prototype preference. This information was combined with information regarding the participant's school culture prototype and the classification of the school's professional development strategies to

determine whether teachers were participating in professional development that best fit their cultural preferences and whether schools were using professional development strategies that fit their cultural prototype. These data were coded according to whether or not a match existed between: 1) each teacher's cultural prototype preference and the professional development in which he or she participated and 2) the school culture and the professional development strategies used.

Since there were no matches between school culture and professional development strategies, only matches between teachers' cultural preference and professional development strategies were used to create one independent variable. Using effect coding, a 1 was assigned to a match and a 0 to a no-match between teacher cultural preference and school professional development strategies. The dependent variable was a scaled score used as a measure of teacher satisfaction with professional development. A regression analysis determined whether the independent variable had any effect on the dependent variable.

Significance of the Study

This study extended Douglas' (1982) Grid and Group theory to the area of professional development in schools and, thus, provided further application of the theory of organizational culture. In addition, the study expanded upon Harris' (2005) classification of the best delivery method for professional development based on the cultural prototype of the school. It also provided quantification of one aspect of professional development, teacher satisfaction, as it related to the relationship between professional development strategy and school cultural prototype.

An abundance of authors and programs promote their own plans for professional development. Likewise, Douglas' (1982) Grid and Group Theory has been used to describe organizational culture in a variety of settings. However, little research explored the interrelationship between schools' professional development strategies and school culture. This study may provide educators with information to help them evaluate those types of professional development programs most effective in their schools.

School administrators face growing pressure to increase student achievement and teacher quality, and schools are required to provide high quality professional development for their teachers. Furthermore, legislators and policymakers are faced with tightening education budgets and want to know that professional development programs are yielding tangible results (Guskey, 2002a). The researcher hopes that administrators may be able to use this study to evaluate the appropriateness of their chosen professional development strategies for their particular school culture. In addition, they may be able to determine what changes, if any, would achieve greater teacher satisfaction with their school's professional development.

As an additional benefit to teachers and administrators, teachers and administrators may became more aware of environmental and social characteristics that define their school's culture and their personal cultural preferences by simply participating in a survey about school culture. This could lead to a greater understanding of individual personality characteristics and overall school organizational focus. This increased understanding could be useful in problem solving and goal setting for the future of the school.

Limitations

Data from only four secondary schools was studied, thus, the number of schools, the number of respondents, and the choice to include only secondary teachers limited this study. Similar studies in more schools from a variety of geographic areas are needed to provide data for generalizability.

Definition of Terms

Four prototypes: This study defined schools' cultures in terms of four prototypes defined by Douglas (1982) according to the degree of grid and group considerations operating within the organizations. The prototypes are: Individualist, Bureaucratic, Corporate, and Collectivist.

Culture refers to the school social environment according to the four cultural prototypes defined by Douglas (1982) and applied to school environments by Harris (2005).

Survey and *questionnaire* were used interchangeably to refer to a grid/group survey designed specifically for use within schools and used by Harris (2005).

Teacher *satisfaction* with professional development referred to overall satisfaction, rather than specific criteria such as interest in topic, applicability, or presentation style.

Summary

Professional development, increasingly seen as an important tool for classroom and overall school improvement (Abdal-Haqq, 1996,) is required by the No Child Left Behind Act (107th Congress, 2002); however, teachers may or may not be satisfied with the professional development in which they participate (Heller, 2004; Huffman, Thomas,

and Lawrenz, 2003; O'Connor and Ertmer, 2003). This study used grid and group theory to explain interrelationships between four schools' cultures and the satisfaction of their teachers with professional development offerings.

Chapter Two provides a review of the literature related to professional development, teacher satisfaction with professional development, and grid and group theory. Chapter Three further explains the Methods used in the study. Chapter Four presents the results of the study, and Chapter Five provides an analysis of the data. Chapter Six offers discussion of the results and concluding comments about the study. Appendices contain copies of the two questionnaires used, a copy of the graph used to assign schools to cultural prototypes, and interview questions used with administrators.

CHAPTER II

REVIEW OF LITERATURE

Introduction

This study examined the organizational contexts and professional development strategies of four secondary schools according to Douglas' (1982) grid and group framework and Harris' (2005) categorizations of professional development strategies by school cultural context. This information was analyzed to determine whether teachers within those schools were more satisfied with professional development if 1) their cultural preference matched the professional development strategy used at their school and 2) the school cultural context matched their professional development strategies. Therefore, the review of literature addresses professional development in general, problems associated with professional development, and Douglas' (1982) grid and group model as the theoretical framework for this study.

Professional Development

Goals and Purposes of Professional Development

According to Corcoran (1995), "Historically, state policymakers have paid little attention to the form, content or quality of professional development. Such matters have

been left to the discretion of local boards of education and district administrators" (p. 2). However, this no longer seems to be the case. In mid-1994, the category of *Teacher Education and Professional Development* was added to the original six National Education Goals, in recognition of the importance of well-prepared teachers for reaching educational goals for students (ERIC Development Team, 1995). In fact, the U.S. Department of Education , in its *Goals 2000* report (U.S. Department of Education, 1994, p. 1), set a goal for all teachers to have access to programs of professional development that would continually build their teaching skills to enable them to prepare students for the 21st century. A year later, the Department was still working toward the same goals: "Gone are the days when teachers graduated from college fully equipped with all the skills and knowledge they would ever need for a career in the classroom. In today's information age, standing still is falling behind" (U.S. Department of Education, 1995, p. 1). According to Richard W. Riley, the then U.S. Secretary of Education:

> Schools and students have changed significantly in recent years, but teachers are still at the heart of instruction. If, as a nation, we expect to prepare all students for the 21st century, we must provide teachers with ongoing opportunities to be the most informed, the most capable, and the most inspiring classroom leaders possible. (p. 1)

Local administrators can no longer afford to take a "laissez-faire approach to professional development" (Corcoran, p. 2). As Kelly and McDiarmid (2002) explain, "in our current era of high stakes accountability, improving teacher quality through professional development is a prominent concern among many educational leaders and researchers" (p. 3).

In addition to the U.S. Department of Education's previous goals, some of the impetus for changes in professional development can be traced to the No Child Left Behind Act (107th Congress, 2002), which requires students to meet learning standards and requires all teachers to be highly qualified. These requirements and current moves toward systemic reform have placed new importance on professional development, "ultimately centering on the importance of the classroom teacher in promoting successful student learning….Professional development must serve the purpose of promoting teachers' continuous learning of integrating new knowledge about teaching and learning within the social contexts in which teaching takes place" (Dilworth & Imig, 1995, p. 5).

The No Child Left Behind Act (107th Congress, 2002) relies heavily on assessment as a tool to measure student progress. This legislation has also affected teachers' professional development. Before this legislation was enacted, Dilworth and Imig (1995) foresaw that "The previously separate functions of assessment and professional development are being merged into a new state role that establishes higher, more performance-related standards and takes responsibility for ensuring that teachers can meet the standards" (p. 4). However, Kelly and McDiarmid (2002) warn, "We must be careful to help educators think of professional development as a mechanism for long-term capacity building, rather than a quick fix to raise test scores in the next accountability cycle" (p. 23).

Although professional development for teachers has been viewed as an important part of improving teachers' practice, strategies for its implementation and delivery widely vary. For example, goals and definitions of professional development may widely differ

from one school to another, even differing according to school district size and grade level of school (Kelly & McDiarmid, 2002).

Models of Professional Development

Current professional development programs follow three basic models: traditional, reform, and virtual. Each will be discussed separately, as follows.

Traditional in-service model. The first is a model typified by traditional workshops and speakers, which tend to rely on direct instruction with limited audience participation (Heller, 2004; Robb, 2000). Teachers may or may not have a choice in the content of the professional development they attend; however, attendance is usually required. Heller suggested that there is generally no follow-up; therefore, there is no measure of the degree of application of the content of these sessions. Without follow-up and accountability, the training efforts may be wasted. Time for these sessions is usually set apart from the regular school schedule, and they may be held at sites other than the specific schools of the attendees. If the sessions are conducted prior to the first day of school, teachers are likely to be thinking about preparing for the upcoming year and all they must do to get ready for the arrival of their new students. This distraction may interfere with the teachers' ability to absorb the new learning, and they may be less likely to apply it. If the professional development sessions are held at the end of the year, teachers may still be in the habit of focusing on teaching and learning; unless they work with the content of the training over the summer, they may have forgotten much of what was learned by the time the next school year begins.

Richardson (1998) explained that traditional staff development generally "begins with someone from outside the school determining that a process, content, method, or

system should be implemented in the classroom" (p. 4). The form of professional development best suited to achieve change that is mandated from outside an organization is the training, or deficit model, which has clearly stated objectives and learner outcomes. Many professional development programs that follow the traditional training model are of limited duration and provide for little follow-up. These programs "have a chance of succeeding with those teachers whose beliefs match the assumptions inherent in the innovation; even these teachers might not try out the innovation" (p. 4).

Corcoran (1995) found that professional development was usually thought of in terms of a traditional course or workshop, which he described as follows:

> Several times a year, school administrators release students for a half or full day and hold an 'in-service' program that may or may not be relevant to teachers' professional development needs. These programs may feature experts who speak to all teachers on a 'hot' topic or they may consist of a number of simultaneous workshops offered by 'trainers' (recruited from other districts, the university, or the state education department), with teachers choosing the sessions they wish to attend. Teachers typically spend a few hours listening and, at best, leave with some practical tips or some useful materials. There is seldom any follow-up to the experience and subsequent in-services may address entirely different sets of topics. (p. 3)

In a study of Kentucky teachers, Kelly and McDiarmid (2002) found that the traditional model was by far the most common, accounting for approximately 54% of the teachers' professional development. They found that as school level increased from elementary to high school, teachers were more likely to take part in innovative

professional development. In addition, smaller districts tended to use conference attendance more than large districts, possibly due to their smaller budgets. Interestingly, when teachers were given the opportunity to assess professional development needs and plan and design the activities themselves, most of the groups still chose a more traditional in-service model. Kelly and McDiarmid further explained that this may be due to four possible factors:

- Lack of choice for professional development opportunities. The yearly focus for professional development is often shaped by the previous year's test scores. "Such a reactive approach lends itself more to a series of workshops intended to remedy the immediate problem than to the longer-term capacity building through teachers' knowledge and skills recommended by researchers and staff development specialists" (p. 19).
- Difficulty thinking of professional development formats other than what they have usually experienced in the past.
- Lack of time to commit to high quality professional development. "To think that teachers will devote the time necessary to maximize the effect of professional development opportunities, under the current organization of school calendars and the resultant time constraints, is naïve" (p. 20). Furthermore, parents and some administrators give teachers the message that if they are not in the classroom, they are not really teaching, and students are not receiving proper instruction by a substitute.
- Teachers do not see themselves as actually in control of their professional development.

Some educators have become disenchanted with the traditional in-service model of professional development. For example, Sykes (1996) wrote, “The phrase ‘one-short workshop’ has entered educational parlance as shorthand for superficial, faddish inservice education that supports a mini-industry of consultants without having much effect on what goes on in schools and classrooms” (p. 464). Although some participants may make immediate changes as the result of traditional training, the long term effects are questionable (Richardson, 1998). As school reform efforts have increased, there has been a call for a new paradigm of professional development, which will be discussed in the next section.

Reform model. The second model of professional development is connected to school reform efforts and is based on the belief that “teacher learning must be the heart of any effort to improve education in our society…better learning for more children ultimately relies on teachers” (Sykes, 1996, p. 464). This model is more collaborative than the traditional in-service and not only encourages, but requires, teachers to participate for their own growth and that of their training groups. Models of professional development in this category are ongoing throughout the school year and are embedded in the daily work of the teachers. Participants have a great deal of control over the specific topics of their development, although there may be an overall focus for the school. Training of this type is practical to everyday life in the classroom and can be applied quickly by the teachers. The overall process is much more learner-centered for the teachers, and serves as a model for classroom strategies that follow this pattern. Examples of models of professional development that fit this profile are collaboration, coaching, professional learning communities, and peer visitation (Corcoran, 1995;

Cotton, 2003; DuFour, Eaker, & Dufour, 2005; Easton, 2004; Glickman, 2002; Heller, 2004; Robb, 2000).

Easton (2004) named a large list of effective professional development practices, which she referred to as Powerful Designs. These included: "Accessing Student Voices, Action Research, Assessment as Professional Development, Case Discussions, Classroom Walk-Throughs, Critical Friends Groups, Curriculum Designers, Data Analysis, Immersing Teachers in Practice, Journaling, Lesson Study, Mentoring, Peer Coaching, Portfolios for Educators, School Coaching, Shadowing Students, Standards in Practice, Study Groups, Training the Trainer, Tuning Protocols, and Visual Dialogue" (p. 23).

One specific reform model that has attracted attention from educators is the professional learning community. Sykes (1996) referred to professional learning communities as "an invaluable resource…that can serve as a source of insight and wisdom about problems of practice" (p. 465). DuFour and Eaker (1998) described ways that educators in professional learning communities use emerging research and standards as the basis for collaborative investigation into ways in which they can meet their goals. "The school that operates as a professional learning community recognizes that its members must engage in the ongoing study and constant practice that characterize an organization committed to continuous improvement" (p. xii). Based on their view that past educational improvements, such as the Excellence and Restructuring Movements, failed to result in the desired transformation of schools, they stated that, "If schools are to be significantly more effective, they must break from the industrial model upon which they were created and embrace a new model that enables them to function as learning

organizations" (p. 15). DuFour and Eaker (1998) defined six characteristics of professional learning communities:

- Shared mission, vision, and values
- Collective inquiry
- Collaborative teams
- Action orientation and experimentation
- Continuous improvement
- Results orientation. (pp. 25-29)

DuFour, Eaker, & DuFour (2005) defined three "big ideas that represent the core ideas of professional learning communities":

- Big Idea 1: Ensuring That Students Learn: Engage with colleagues in the ongoing exploration of three crucial questions that drive the work of those within a professional learning community:
    - What do we want each student to learn?
    - How will we know when each student has learned it?
    - How will we respond when a student experiences difficulty in learning?

  The answer to the third question separates learning communities from traditional schools.
- Big Idea 2: A Culture of Collaboration: Teachers work in teams, engaging in an ongoing cycle of questions that promote deep team learning. This process, in turn, leads to higher levels of student achievement….

- Big Idea 3: A Focus on Results: Honestly confront data on student achievement and…work together to improve results rather than make excuses for them. (pp. 32-41)

Most of the Reform models of professional development involve teachers working together, but a newer model allows teachers to have more individual control over the professional development they receive. This model is explained in the next section.

Virtual model. A third model of professional development is defined as virtual, in which teachers participate in a technology-based course. This model is ideal for teachers who have not previously had access to ongoing professional development due to location or time limitations. Technology overcomes these difficulties, while delivering high-quality content and support (*Developing Highly Qualified Teachers*, 2005). Examples of this type of professional development are online courses, talk-back television seminars, live chats, web chats and web-based seminars, or *webinars*. Even United States government agencies are becoming involved in this type of professional development. The U.S. Department of Education developed an e-Learning tool that provides teachers with on demand professional development. K-12 teachers indicated significant effect on their content knowledge, attitudes, and practices from an online course in earth system science offered by colleges and universities through a NASA program (*New Teacher-to-Teacher Lessons*, 2004; Schwerin, Botti, Dauksys, Low, Myers, & Slattery, 2006).

Keller (2005) found that K-12 teachers flocked to online classes offered by universities to save time, and in some cases, money.

> The possibilities of online learning for educators have been dazzling, and over the past decade a slew of providers have rushed to create Web-based opportunities for more and better professional development-and institutional gain. Those with the online goods include businesses, cyber and brick-and-mortar universities, professional organizations, teachers' unions, nonprofit agencies, and partnerships between such groups. States, districts and individual educators are left to figure out to what extent online development might meet their needs. (p. 22)

Possible examples of healthy computer-based professional development are a principal and teacher viewing a video-streamed lesson together and discussing it afterward, online seminars held after school, and live chats that bring teachers with similar interests together without requiring them to travel to the same location (Keller, 2005). Online formats may also provide participants with immediate feedback and interesting content, according to McBride (2004), who noted, "Teachers also respond enthusiastically to professional development training tools in video format. They appreciate watching concept skills and strategies applied in a real classroom by a real instructor" (p. 2).

However, some educators have serious concerns about online professional development, especially in regard to problems with inadequate technology and isolation of learners. The coordinator of online professional development at the University of Wisconsin-Stout discovered that online delivery creates problems for the 40 percent of the students in her program who have only dial-up connections that do not allow them to easily access the audio, video, and complex graphics of some programs (Keller, 2005). Keller further explained "Even advocates of online courses acknowledge that they are not

for everyone. In general, the consumer of Web-based professional development should be motivated to learn, and be comfortable-or ready to become so-with the technology needed and the amount of writing required" (p. 23). Participants may also have to take time to learn how to use technology that is unfamiliar to them (McBride, 2004). Online sessions may also be more impersonal, and participants usually do not meet face-to-face. Keller further pointed out that online professional development courses will be more likely to help teachers raise achievement for all students if they fit an individual and school learning plan.

Because of the wide variety of online professional development programs, quality control becomes an important issue. For this reason, some school districts, state departments of education, and regional education service agencies develop their own online professional development programs to ensure that they are meeting specific, common goals (Keller, 2005). Warmack-Capes (2005) developed criteria useful for judging the quality of online professional development courses:

- Flowing Narrative, Succinct Verbiage and Non-Linear Presentation
    - A concise, smoothly flowing narrative will help hold your attention. A non-linear presentation means that all the entries under the main category are indented.
- Appealing Web Design
    - Text that is balanced with content-appropriate pictures, videos and graphics will engage educators and help them grasp the concepts easier.
- Links

    - Links allow teachers to access supplemental resources that will enhance their understanding of the topics covered by the course….
- Printable Course Content
    - Reading from computer screens can be tiring for the eyes and about 25% slower than reading from paper. If the print option is not available, minimally there needs to be less text on each page….
- Standards-Aligned Online Courses
    - …make sure that the content of the course is aligned to your county, state, or national standards. (p. 18)

As technology becomes more commonplace in our schools, technology-based sources of professional development for teachers may also increase.

Problems Associated with Professional Development

Inconsistency of Methods

Ineffective methods. Both public opinion and research support the idea that the quality of instruction accounts for a large percentage of student academic achievement; therefore, professional development for teachers is vitally important for equipping them to teach according to the needs of diverse student populations. Although too little time and money have been devoted to quality professional development in the past, more time and money alone will not lead to improved professional development; educators must become wise consumers and select programs that will lead to improved student achievement (Center for Development and Learning, 2000).

According to Marzano (2003), although many schools have regular professional development for their teachers, much of what transpires is not meaningful nor does it

have much impact on student achievement. Most of the ineffective strategies described in the literature refer to the traditional in-service model. According to Darling-Hammond and McLaughlin (1995), prepackaged or traditional top-down teacher training strategies cannot provide the knowledge necessary for teachers to view complex subject matter from the perspective of today's diverse learners. Likewise, Corcoran (1995) explained that a growing body of educators believes that traditional forms of professional development are a waste of time, and local programs typically have little effect on practice because "they lack focus, intensity, follow-up, and continuity" (p. 5). Corcoran further explained that too often, they

> lead to unfocused, fragmented, low-intensity activities that do not lead to significant changes in teaching practice….New approaches are needed to support the implementation of more rigorous standards, new curriculum frameworks, performance assessment, and changes in school organization and governance. (p. 11)

Traditional models of professional development have been described in a variety of mostly negative ways, according to Easton (2004). She described a traditional in-service she attended: The kind of staff development that the speaker used is often called 'sage on the stage.' Participants sit and get. Other tags verge on the disrespectful: seagull-style professional development (flies in, drops a load, moves on) or drive-by professional development" (p. 2).

Porter, Garet, Desimone, Yoon, and Birman (2000) found that most teachers do not experience consistent, high-quality professional development and that teachers who participated in professional development that "focused on higher-order teaching methods

and was structured as a reform-type activity reported greater use of problems with no obvious solution than did teachers whose professional development was…structured as a traditional workshop or conference" (p. 10). They explained several challenges that schools and districts face in providing high-quality professional development:

- First, districts and schools often must choose between serving larger numbers of teachers with less focused and sustained professional development or providing higher-quality activities for fewer teachers.
- Second, many districts and schools have limited capacity to translate into practice the knowledge about effective professional development.
- Third, districts and schools often do not have the infrastructure to be able to manage and implement effective professional development. (p. 14)

Effective methods. Effective methods of professional development can usually be aligned with adult learning theory and assumptions about adult learners. Using Knowles' (1980) five assumptions about andragogy, or adult learning, Merriam and Caffarella (1999) described five specific assumptions regarding adult learners.

First, adults' self-concepts are more self-directing than dependent. As people move through various life stages, they normally take on characteristics manifested in adult roles within society. They should be able to determine their learning needs and participate in the planning, implementation, and evaluation of their learning experiences.

Second, adults' life experiences can be a rich resource for learning. "Adults can call on their experiences in the formulation of learning activities, as well as serve as resources for others in a learning event" (p. 390). Life events and transitions often require adjustments based on learning, and may be the motivation for some adults to seek out

learning opportunities. “There is a strong link between the motivation to participate in a learning activity and an adult’s life experiences and developmental issues” (p. 391). Facilitators should be aware of adult learners’ prior knowledge as they are designing and implementing learning opportunities.

Third, adults’ readiness to learn is closely related to their developmental tasks within their cultures and to the learning’s usefulness in the duties and responsibilities inherent in adult roles. Adults process information and attend to their environment based on their current developmental concerns.

Fourth, adults are more interested in immediate application of learning, rather than its future usefulness, to make it meaningful to them. “Perhaps because an adult’s learning is so closely tied to his or her life situation, adults are not inclined to engage in learning unless it is meaningful” (p. 397). Time is also a factor in adult learning because response time slows as adults age, and time limits and pressures inherent in adult roles can have a negative effect on learning performance.

Last, adults’ learning is motivated more by internal factors than by external; however, “learners’ motivations for participating in adult education are many, complex, and subject to change” (p. 56). Self-directed learning programs stem from this internal motivating focus. These insights into adult learning characteristics are reflected in many of the current beliefs about effective professional development for educators.

“The goal of professional development is improved student learning. For this goal to be reached, the professional development must be effective” (Center for Development and Learning, 2000, p. 16). A number of organizations have recommended setting standards for teachers’ professional development, but it is important to include teachers

in this process, since they have insight into what methods have been effective or ineffective in the past (Corcoran, 1995).

Easton (2005) advocated a strategy for professional development that is powerful "because it arises from and returns to the world of teaching and learning. It begins with what will really help young people learn, engages those involved in helping them learn, and has an effect on the classrooms (and schools, districts, even states) where those students and their teachers learn" (p. 2). She listed three qualities of such professional development activities:

1. Powerful professional learning arises from the real work going on in classrooms or schools.
2. The focus of powerful professional learning is on what is happening with learners, both student and adult, in the classroom, school, and district.
3. Powerful professional learning is generally collaborative. (pp. 3-4)

Little (1993) expressed her belief that traditional training and coaching models of professional development are inadequate for the needs of teachers working under current reform initiatives. She stated that alternatives to the traditional training model

> rest on a common implicit claim: that the most promising forms of professional development engage teachers in the pursuit of genuine questions, problems, and curiosities, over time, in ways that leave a mark on perspectives, policy, and practice. They communicate a view of teachers not only as classroom experts, but also as productive and responsible members of a broader professional community.…(p. 133)

Porter et al. (2000) found that teachers who participate in professional development that is focused on specific, higher order teaching strategies are more likely to use those strategies in the classroom. "This effect is even stronger when the professional development activity is a reform type…rather than a traditional workshop or conference; provides opportunities for active learning; is coherent or consistent with teachers' goals and other activities; and involves the participation of teachers from the same subject, grade, or school" (p. 5). They believe professional development for teachers would have increased positive effects if schools provided "a more coherent, systemic program of high-quality professional development for their teachers" (p. 6).

This type of high-quality professional development is expressed on terms of standards developed by The National Staff Development Council (NSDC) in 1995 and revised in 2001 (National Staff Development Council, 2007). The revision of their standards was guided by the following questions:

- What are all students expected to know and be able to do?
- What must teachers know and do to ensure student success?
- Where must staff development focus to meet both goals?

Staff development must be results-driven, standards-based, and job-embedded. (p. 1)

The NSDC divided their revised standards for "staff development that improves the learning of all students" (NSDC's Standards, 2001, p. 1) into three sections: Context Standards, Process Standards, and Content Standards. The specific standards are listed below:

- Context Standards

    - Learning Communities: Organizes adults into learning communities whose goals are aligned with those of the school and district.
    - Leadership: Requires skillful school and district leaders who guide continuous instructional improvement.
    - Resources: Requires resources to support adult learning and collaboration.
- Process Standards
    - Data-Driven: Uses disaggregated student data to determine adult learning priorities, monitor progress, and help sustain continuous improvement.
    - Evaluation: Uses multiple sources of information to guide improvement and demonstrate its impact.
    - Research-Based: Prepares educators to apply research to decision making.
    - Design: Uses learning strategies appropriate to the intended goal.
    - Learning: Applies knowledge about human learning and change.
    - Collaboration: Provides educators with the knowledge and skills to collaborate.
- Content Standards
    - Equity: Prepares educators to understand and appreciate all students, create safe, orderly and supportive learning

environments, and hold high expectations for their academic achievement.

- Quality Teaching: Deepens educators' content knowledge, provides them with research-based instructional strategies to assist students in meeting rigorous academic standards, and prepares them to use various types of classroom assessments appropriately.
- Family Improvement: Provides educators with knowledge and skills to involve families and other stakeholders appropriately. (p. 1)

Kelly and McDiarmid (2002) suggested that to improve the quality and effectiveness of professional development for teachers, it needs to be redefined as integral to teacher quality and student achievement. It should also be "integrated into both the formal organization of the school day and calendar, as well as integrated into the culture of schools as a critically important, on-going function of the faculty. No longer can teaching be defined solely by time in front of students" (p. 22). They further explain that effective professional development

- is based on view of teaching as intellectual work, recognizing teachers as professionals, and incorporates teachers into planning and design of professional development.
- focuses on student learning and is assessed, at least in part, based on student learning and changes in classroom practice.
- is connected to knowledge of the content that is being taught, and is aligned with local or national content standards.

- is ongoing, and allows time for training, practice, feedback and follow-up support for teachers to master new content and strategies and to reflect, analyze and refine their practice.
- is practical, school-based, and embedded in teacher work, yet is rooted in the knowledge base for teaching.
- is collaborative, provides opportunities for teachers to interact with peers, and establishes a learning community of which all teachers are members.
- is part of a larger coherent plan for building-wide change. (pp. 3-4)

According to Corcoran (1995), effective professional development requires policymakers to define the problems clearly they are trying to solve, to account for conditions likely to result in a change in teachers' practice, to give more attention to the quality and type of experiences provided for teachers, and to use resources wisely. He found that models of effective professional development "respect the expertise of accomplished teachers…are integrated with teachers' work…are based on current research on teaching and learning…recognize teachers as a valuable source of information regarding effective professional development…and include them in its design and implementation" (p. 6). In general, research associates ineffective professional development with the traditional in-service type of training, whereas effective professional development strategies strongly follow the reform model.

Teachers' Dissatisfaction with Professional Development

Teachers and their supervisors and principals are held accountable as never before because of the No Child Left Behind Act requirements regarding assessment tests and formative test-scoring data (McBride, 2004). Teachers are expected to respond to

comprehensive assessment programs developed by their state departments of education with "curricula designed to produce high tests scores and improved student performance overall to align with state standards" (p. 38). They must construct lesson plans that address each student's needs so the student will be prepared for the state standardized tests. Therefore, it is necessary for teachers to differentiate instruction for each student "because the one-strategy-fits-all approach doesn't work in a real classroom" (p. 39). In addition, "teachers must continually reach new levels of expertise in their own content areas. They must also become nimble and adept at interpreting data to adjust lesson plans, improve instruction, and manage classrooms to bolster each student's performance on assessment tests" (p. 38). According to McBride, teachers need professional development that helps them teach to state standards and interpret test data.

Assessment tests also affect professional development for teachers. Turchi, Johnson, Owens, and Montgomery (2002) found that test content is determining the content of learning opportunities for teachers, particularly in low performing schools. Such schools are under more pressure from the state for accountability, and these schools appear to control their teachers' professional development more closely.

According to Richardson (1998), teachers are expected to change their "curricula on the basis of new knowledge and ways of knowing, to change styles of teacher-student interaction depending on needs of the student population, and to change methods when research indicates more effective practice" (p. 3). However, without examining their beliefs about what does or does not work, teachers may continue practices based on "questionable assumptions and beliefs" (p. 3) and may benefit from some outside direction.

Teachers seem to value some professional development providers more than others. According to Turchi et al. (2002), teachers seem to appreciate presenters who have classroom experience, believing their level of expertise is greater as well as more applicable and practical. Professional development offered by fellow educators who had successfully used their ideas in real classrooms gained more credibility than presenters "who only gave examples of 'idealized students'" (p. 11). The authors found teachers in every district seemingly had no goals for their own development and did not see any substantial connection to their daily work as teachers.

Teachers' attitudes toward professional development may also be influenced by factors outside of the session itself. Based on interviews with 23 teachers and two administrators at a vocational technical school, Knight (2000) identified five themes of contextual factors that influenced the teachers' attitudes toward a professional development session that Knight led: "(a) a history of interpersonal conflict with other teachers; (b) a historical belief that professional development is impractical; (c) a feeling of being overwhelmed by the tasks they need to complete as teachers; (d) resentment about the top-down decision-making in the district; and (e) anxiety about changes taking place in their schools" (p. 10).

Teachers may also express dissatisfaction with professional development if they feel they have no control in its planning or delivery. In a study of Kentucky teachers, Kelly and McDiarmid (2002) found that in most cases where teachers were allowed to be in control of the planning and implementation of their professional development, they still chose a traditional model. The reason may have been that they still felt in control because they were allowed to choose the model and, thus, experienced greater

satisfaction with the professional development. “It may be that the resultant empowerment of teachers by the devolution of professional development authority makes the formerly (externally imposed) unpalatable workshops, more palatable when actively chosen by fellow teachers” (p. 21).

Similarly, Davis (1993) explained that if reform efforts are to be effective, teachers must be at the core of the change to provide understanding of the changes needed: “Without creating professional development opportunities for teachers and others, school communities can end up adopting innovation after innovation without seeing any permanent improvement in the achievement of school goals…. Reform efforts that do not focus on teacher acceptance may fail” (p. 6). However, some teachers may not be interested in professional development. For example, teachers may feel a conflict between their teaching responsibilities and professional development. Other teachers may lack confidence in the value of professional development if past experiences have been unsatisfactory; older teachers may lose interest as they approach retirement. Some teachers want all professional development to be completed before the year begins, so they will not have to change strategies in the middle of the year. Another source of frustration is professional development that disrupts the regular school schedule with extra days off for students or lengthened school days for teachers. Davis (1993) contended that teachers “need to realize that professional development and classroom teaching are equally vital responsibilities in education….Professional development must shift its emphasis from working *on* teachers to working *with* teachers toward improvement of teaching and learning for all students” (p. 6).

Another reason teachers may be dissatisfied with professional development may be related to the American cultural norm of individualism, according to Richardson (2003). She found that effective staff development programs, although defined by research, are not commonly seen in actual practice.

> Indeed, most of the staff development that is conducted with K-12 teachers derives from the short-term transmission model; pays no attention to what is already going on in a particular classroom, school, or school district; offers little opportunity for participants to become involved in the conversation; and provides no follow-up. We have been engaged in this form of staff development for years, knowing full well that this approach is not particularly successful. (p. 401)

Based on Richardson's research, these research-based practices may still be unused because of the expense involved, the long period of time involved, and difficulties for the district to support programs and allow participants to have decision making power regarding goals and changes. However, she did not feel these reasons offered a complete explanation for the lack of implementation of research-based professional development. The American cultural norm of individualism affects the way many Americans, including teachers, approach their work, and this individuality "pervades everything we do; it is in the air we breathe" (p. 401). In schools, this individuality is supported by the traditional school structure of individual classrooms and

> the practice of 'closing the classroom door.' Many classroom teachers would subscribe to the following view: 'This is my space, and I am responsible for it. It is mine. It reflects me. I am the teacher here. This classroom is unique and is

> therefore unlike any other classroom because of my uniqueness and my particular group of students.' (p. 401)

These attitudes may unknowingly make it difficult for teachers to develop a collective sense of goals and approaches to instruction.

Similarly, Wetherill, Burton, Calhoun, and Thomas (2001/2002) stated that "It is easy, some would say natural, for teachers to concern themselves only with what happens within the confines of their own classroom walls" (p. 57). However, a teacher who is truly engaged will take a broader view of education that encompasses the entire school, community, state, and beyond. Along these lines, the authors explained that professional development should be viewed as a career-long endeavor for the "personal and professional growth of an educator" (p. 55), rather than merely an event or activity. Similarly, Richardson (1998) found that teachers need to develop a sense of responsibility that moves beyond their individual classroom to the rest of the school, program, and community.

Professional development that does not take into account the principles of adult learning may be less satisfactory to teachers. Ineffective practices tend to omit allowances for participants' levels of expertise, development, and need. Merriam and Caffarella (1999) explained,

> Acknowledging prior knowledge and experiences of learners wherever gained is important to the practice of adult educators….The most critical actions that educators of adults can take is to recognize the equal importance of the various types of adult learning and advocate that people use them in whatever situation or setting they find themselves. (p. 43)

Douglas' (1982) Grid and Group Theory

Douglas' (1982) Typology of Grid and Group provides a useful framework for examining social and organizational environments through the two dimensions of Grid and Group. Douglas described the Grid dimension as a measure of the degree to which individuals are controlled by externally imposed rules and classifications and the Group dimension as a measure of the individual's incorporation into the society.

Grid dimension. The grid dimension, the degree of importance assigned to institutional role expectations, rules, and procedures within a social context (Douglas, 1982; Harris, 2005), ranges along a continuum of low-grid to high-grid, with the higher levels indicating greater degrees of control based on roles, rules, and procedures. The lower-grid environments are characterized by a lack of role distinctions or institutional rules.

High-grid environments are dominated by roles and rules, with personal interactions regulated according to explicit internal classifications that restrain personal autonomy. These environments are also defined by many role distinctions, with proportionately fewer roles at the top of the organization. The chain of command is highly regulated, and each layer of the organization has specific duties that serve to isolate it from other positions within the organization. Power is based on an individual's position (Harris, 2005). Furthermore, many rules regulate the space and time associated with the social roles. Individuals do not usually interact with one another, and physical designations of rank may be apparent (Douglas, 1982).

At the low end of the grid continuum, rules and roles tend to disappear altogether. Individuals have the maximum degree of autonomy, and rules that emerge are designed to give each individual a fair chance. Members are not isolated from one another, giving individuals the option of making or not making their own alliances. A low-grid environment is more open and competitive, with power no longer centralized in higher levels of a well-defined social structure (Douglas, 1982; Harris, 2005). In a low-grid environment, power is personal rather than positional, and must be earned. Individuals in these environments experience greater autonomy and freedom in their choice of roles (Harris, 2005). Time and resources are also affected as one moves down the grid continuum. According to Douglas(1982), "At low grid, time becomes immensely precious…and work is directed to quick gains. Resources are exploited for the short term" (p. 197).

Group dimension. The group dimension "represents the degree to which people value collective relationship and the extent to which they are committed to the larger social unit" (Harris, 2005, p. 36). As in the grid dimension, the strength of the group dimension can be measured along a continuum from low- to high-group, which measures the degree to which people's lives are affected by group membership.

In high-group environments, the survival of the group as a whole is more important than the survival of its individual members. The group has specific membership criteria, and traditions and norms are carefully preserved. Group interactions are designed to perpetuate the existence of the group and member's allegiance to it (Harris, 2005).

In low-group environments, individual interests are valued above collective goals, and pressure for group-oriented activities and relationships is usually weak. Short term projects take precedence over long-term organizational goals, and allegiance to the larger group fluctuates. Strong traditions are usually absent, loyalty is low, and personnel turnover may be high. Individual interests override the few corporate goals, and there is no concern for perpetuation of, or duty to, the group as a whole (Harris, 2005).

Grid and group quadrants. The grid and group dimensions work simultaneously within organizations to define and describe the overall culture. The two continuums can be graphed together with the grid dimension serving as the vertical scale and the group dimension represented by the horizontal scale. Thus, the four quadrants created can explain a cultural environment in terms of both grid and group dimensions simultaneously (Douglas, 1982; Harris, 2005). Based on these quadrants, Douglas identifies four distinct prototypes of cultural environments: Individualist A, Insulated B, Strong group C, and Weak group D (p. 191). When grid and group are considered together, "Certain themes and dominant patterns of thought and behavior tend to define a particular setting. These patterns are, in effect, prevailing mind-sets that influence the entire cultural environment" (Harris, p. 40). Harris associated these patterns with each of the grid and group quadrants and explained them as follows:

- Individualist (weak-grid and weak-group): Individual relationships and experiences are not controlled by imposed rules or traditions. Role status and rewards are competitive and attained according to existing standards. There is little social distinction among members, and little value on the long-term survival of the group. Members are encouraged to make the most of individual

opportunities, to take risks that might result in personal gain, and to be competitive. Harris described this cultural environment as Individualistic.

- Bureaucratic (strong-grid and weak-group): Members have little individual autonomy. Roles are hierarchical and highly classified, and individual behavior is clearly defined. Meaningful relationships exist outside the group, and little value is placed on group survival. Harris labeled this cultural environment as Authoritarian.
- Corporate (strong-grid and strong-group): Boundaries are designed by the group to keep out outsiders. Individuals are identified primarily by their group membership, and their behavior is subject to group control. Roles are hierarchical, usually with a few roles at the top having special value and power. Harris referred to this cultural environment as Hierarchical.
- Collectivist (weak-grid and strong-group): There are few social distinctions, and high value is placed on the survival of the group and perpetuation of its goals. Members compete for role status, with stable rules for status definition and placement. High value is placed on unity. Harris labeled this cultural environment as Egalitarian.

Figure 1 (p. 13) shows a graphic depiction of each cultural environment and its characteristics.

Since its introduction in 1982, Douglas' Grid and Group Typology has undergone theoretical elaboration (Douglas, 1982, 1989, 1992; Douglas & Wildavsky, 1982; Thompson, Ellis, & Wildavsky, 1990). In addition, the typology has been used to describe and analyze cultures in terms of cultural bias in a variety of settings, including

schools (Balenseifen, 2004; Chitapong, 2005; Harris, 2005; Kanaly, 2000; and Murer, 2002), implementation of instructional technology in schools (Spitzer, 2003; Stansberry, 2001; Stansberry & Harris, 2005), and roles of teachers and learners (Lingenfelter & Lingenfelter, 2003).

Harris' Categorization of Professional Development Strategies

Harris (2005) identified four sets of professional development strategies reflecting the best method of professional development delivery for each of the four grid and group cultural environments. These strategies are summarized in as follows:

- Individualist:
    - Minimal group involvement
    - Proof that external benchmarks and standards will help individual teachers
    - Goals, content, and delivery planned by teachers
    - Teacher autonomy and control
    - Action research; teachers as coaches and trainers
    - Year-long and personalized
- Bureaucratic:
    - Anticipation of role advancement, recognition, or economic reward
    - Preliminary needs assessment, planning, and recommendations to principal by committee
    - Principal takes major role in process
    - Activities enhance and protect teachers' roles and responsibilities and correspond to teachers' specialties
    - External state or national standards help guide activities

- Corporate:
    - Planning by representative committee that reports to the principal, who ensures that activities meet group needs
    - Motivation to participate comes from desire to improve academic program and status of whole school
    - Group participation to set goals and discuss
    - Content combines group-focused goals, activities, and rewards with abundant training resources
    - Meaningful intellectual, social, and emotional engagement with ideas and materials
    - Emphasis on the interdependence and enhancement of all members of the educational community
- Collectivist:
    - Focus on both individual and group needs
    - Teachers seen as a team of equally important individuals
    - Equitable and pertinent content
    - Planning by a collective group of teachers
    - Teaching and learning seen in the overall context of local school community, teacher's individual needs and experiences, and students' educational needs
    - Multiple learning opportunities within authentic pertinent activities such as problem solving, inquiry, study groups, and mentoring of new teachers

- Includes reciprocal processes, leadership-team development, and collaborative planning
- External rules and criteria are viewed with suspicion unless they obviously benefit individuals and school

Summary

Professional development for teachers is increasingly viewed as a primary means of equipping teachers to meet student learning needs in the current culture of accountability. Three predominant models of professional development are used by schools: traditional, reform, and virtual models. Unfortunately, the outcomes of professional development are not always what was originally desired or intended by schools and teachers. This discrepancy may be due to ineffective means of professional development or to problems associated with the participants themselves.

Douglas (1982) defined four cultures according to a Grid and Group Typology, which measures their attributes according to their degree of grid (rules, roles, procedures) and their degree of group (identification, membership, and allegiance to the group). In addition, Harris (2005) described the four cultures as they relate to schools and the characteristics of professional development associated with each one. This study used the Douglas and Harris studies as a framework to study relationships between school culture and teachers' satisfaction with professional development.

.

CHAPTER III

METHODOLOGY

This chapter describes the methodology and data collection procedures chosen for this study, based on the type of study desired by the researcher. A qualitative approach was chosen to incorporate human participants' experiences and perspectives with observation of structures and processes to provide information about a particular phenomenon.

Qualitative study looks at themes that develop as data are collected and analyzed. As the researcher examined information gathered from two questionnaires, personal interviews, observations, and document collection, a picture of each school and the participants' experiences and perceptions began to emerge. A regression analysis of questionnaire responses further added to the researcher's understanding of processes and perceptions within the contexts that were studied.

A case study was chosen as the specific qualitative research strategy for this study, because it is a means of examining a program in depth with detailed explorations. According to Creswell (2003), this strategy is characterized by boundaries of time and activity, and the researcher uses a variety of data collection methods to obtain detailed information. Data collection methods included open-ended questions, text or image data, collection of participant meanings, studying the context or setting of the participants,

validation of the accuracy of the findings, and making interpretations of the data. Rossman and Rallis (2003) explained that case studies are "complex and multilayered....They are particularly useful for their rich description and heuristic value" (p. 104). Case studies also provide detail and complexity, illuminating the reader's understanding and comprehension of a complex set of events or circumstances. The researcher can also conduct cross-case analyses if more than one case is studied to seek commonalities and differences across several cases. Based on the information presented from a case study, the reader may be able to make judgments about whether the findings provide insight into similar contexts.

Explanatory case studies "depict events, processes and perspectives as they unfold and often build an explanation for those events or outcomes" (Rossman and Rallis, 2003, p. 104). This study was considered an explanatory case study because the researcher's goal was to provide detail and complexity to increase understanding of a "complex set of events or circumstances" (p. 105). In addition, since more than one case study was presented, the researcher conducted cross-case analyses to examine any commonalities and differences across the four cases that were presented.

Data Collection Procedures

School district information from the Oklahoma State Department of Education website was used to identify school districts within approximately 100 miles of the researcher's home, having only one high school within the district and at least 35 faculty. Twenty-seven schools met the researcher's criteria; fifteen of the superintendents from those schools responded to a participation request, and teachers from six of the fifteen responded to an initial questionnaire, the *Grid and Group Cultural Awareness Tool.*

Based on teachers' responses to the questionnaire, four secondary schools were selected for further study regarding the overall school culture and professional development offered by those schools. Data collection methods included a second survey, the *Grid and Group Cultural Preference Tool*, observation, document analysis, school website analysis, interviews with administrators, and a regression analysis of teachers' responses to the questionnaires. This information more fully explained the context of the overall study.

Selection of Participants

Participants in this study were 65 secondary teachers and 4 administrators chosen from a purposive sample of Oklahoma public school districts with more than 35 faculty members and only one secondary school. Four schools were chosen based on teachers' responses to a cultural awareness questionnaire used as a screening tool to identify a pair of schools from each of two different cultural environments in terms of grid and group scales, according to a Grid and Group Template (Harris, 2005, p. 197). The superintendent of each school was asked for permission to contact teachers and administrators via e-mail prior to the request for participation in the study.

If the superintendents agreed, the principals of their high schools were asked to send an email to their teachers asking them to go online to a web site where they would find a description of the study and the role they would play as well as an opportunity for them to give consent to participate. The teachers were assured that all responses would remain confidential and participants would remain anonymous and would be unidentifiable to the researcher. Accessing the web page to take the online *Grid and Group Cultural Awareness Tool,* based on Harris' (2005) *Grid and Group Assessment*

Tool, constituted teachers' agreement to participate. Selection of the two pairs of specific schools with different cultures was based on the analysis of teachers' responses to this questionnaire.

Teachers from each of the schools were asked to complete a second questionnaire, the *Grid and Group Cultural Preference Tool,* based on Harris' (2005) *Social Game Assessment Tool,* which provided information regarding their school culture preference. An additional question with a Likert-type response asked teachers to evaluate their satisfaction with professional development provided by their school. This questionnaire was also administered online, with teachers asked through e-mail to follow a link to a web page where they had the opportunity to give consent, read about their role in the study, and to submit their responses or request a hard copy of the questionnaire, if they preferred not to respond online. As on the previous questionnaire, all responses were anonymous, and participants were unidentifiable to the researcher. Teachers were reassured that their responses would remain confidential. Accessing the web page to take the online *Grid and Group Cultural Preference Tool* and rate their satisfaction with professional development constituted teachers' agreement to participate.

This study was limited to secondary teachers because reactions to professional development may differ depending on the grade level taught, with secondary teachers' attitudes differing from those of elementary teachers. This decision was based on the researcher's personal observations, comments made by a professional development presenter for a national company (W. Burke, personal communication, July 17, 2007), and Kelly (2002).

Administrators from the four schools were also asked to participate in personal interviews regarding the professional development offered in their respective schools. They were assured that they would remain anonymous, with their names and school names assigned pseudonyms, and they were asked to sign a consent form to participate.

Data Collection

After obtaining permission from the administrators of schools whose superintendents had agreed for their staff to participate in the study, secondary teachers were sent an email requesting their participation in the initial phase. This email contained a link to a web page explaining participation in the study and from which they could access an online questionnaire, or request a hard copy of the questionnaire if they preferred not to respond online. Data from the *Grid and Group Cultural Awareness Tool* were analyzed to determine the cultural environment of each school in order to select two from each of two different cultural prototypes.

Once identified, those four schools were the sites of further study to determine the type of professional development offered by each school. Information was gained through site visits to the schools, interviews with administrators, analysis of documents, and examination of each school's web site. Data were gathered using a triangulation strategy, where multiple sources of data or a variety of methods is employed to build a more complete picture (Rossman and Rallis, 2003). These data provided further information about the schools' cultural prototypes and professional development offerings.

The purpose of the interviews was for administrators to describe the professional development offered by their respective schools. These interviews were guided, based on

an interview protocol designed to elicit information about the school culture and professional development strategies used by the school. All participants were asked the same set of questions (Appendix C), but could respond freely, which is characteristic of standardized open-ended interviews (Rossman and Rallis, 2003). This provided continuity since the study took place at multiple sites. Participants chose the time and place for their interviews. Each interview was audio taped using a digital voice recorder and later transcribed by the researcher using Microsoft Word.

In addition to the interviews at the four schools, a second email was sent to teachers from those schools, inviting them to complete a second questionnaire by following a link to a web page describing the purpose of this portion of the study and their role in it. Permission to participate was given by their accessing the webpage containing the online questionnaire or by requesting a hard copy if they preferred not to answer online. As before, all responses were anonymous, and participants were unidentifiable to the researcher. This second questionnaire asked for information regarding their personal school culture preference using the *Grid and Group Cultural Preference Tool,* which also asked them to rate their satisfaction with professional development provided by their school by rating their satisfaction on a Likert-type scale from 1 (Very Dissatisfied) to 8 (Very Satisfied). Data gathered from this questionnaire were analyzed for the quantitative portion of the study.

The questionnaires served two purposes. The *Grid and Group Cultural Awareness Tool* (see Appendix A), given to teachers in the initial purposive sample of schools, asked about their perception of their schools' cultural environments based on a grid and group scale. This information was used to identify the predominant cultural

prototype of each school, and used questions from the *Grid and Group Awareness Tool*, a survey instrument used by Harris (2005) to obtain data regarding school cultures based on Douglas' (1982) Grid and Group Theory.

The second survey, the *Grid and Group Cultural Preference Tool*(see Appendix A), sent only to teachers in the four selected schools, requested information regarding their school cultural environment preferences and their present satisfaction with the professional development offered by their schools. This questionnaire contained questions from the *Social Game Assessment Tool* used by Harris (2005), with the addition of a Likert-type scaled response regarding the teachers' overall satisfaction with professional development at their school.

Data Analysis

Participants' online questionnaire responses were stored on Excel spreadsheets located on the Oklahoma State University server, with each response assigned a number. The researcher downloaded these Excel files to the researcher's home computer for further analysis. Five questionnaire responses on hard copies were also added to the spreadsheets by the researcher. For the school culture awareness questionnaire, scaled responses were totaled for both grid and group considerations and plotted on a two-dimensional graph to determine the most likely cultural prototype of the school. This information helped to narrow the field and determine which four schools were selected for the study, based on different classifications on both grid and group scales.

Further qualitative data collection helped the researcher to understand better the characteristics of professional development at these schools and to classify the strategies according to Harris' (2005) categories of professional development by cultural prototype.

Administrators' digitally recorded interview responses were transcripted verbatim by the researcher into Microsoft Word documents, and then analyzed. Field notes were made during observations or immediately thereafter, using either pen and paper or an audio recorder, and were subsequently transcribed into a Microsoft Word document by the researcher. Documents and artifacts were analyzed either in the field or after obtaining them and were then organized into separate folders for each school. Analysis took place as they were gathered. The researcher analyzed school websites as they were presented online, using paper copies of some of the pages.

Responses to the teachers' cultural preference questionnaire were combined into a Microsoft Excel spreadsheet that linked each teacher's anonymous identifier to his or her grid and group scores and degree of satisfaction with professional development. Each set of grid and group scores were plotted on a two-dimensional scale to determine each teacher's cultural prototype preference. This information was combined with information regarding the participant's school culture prototype to create independent variables and a dependent variable for a regression analysis that was used to explore the possible effects of school culture on teachers' satisfaction with professional development.

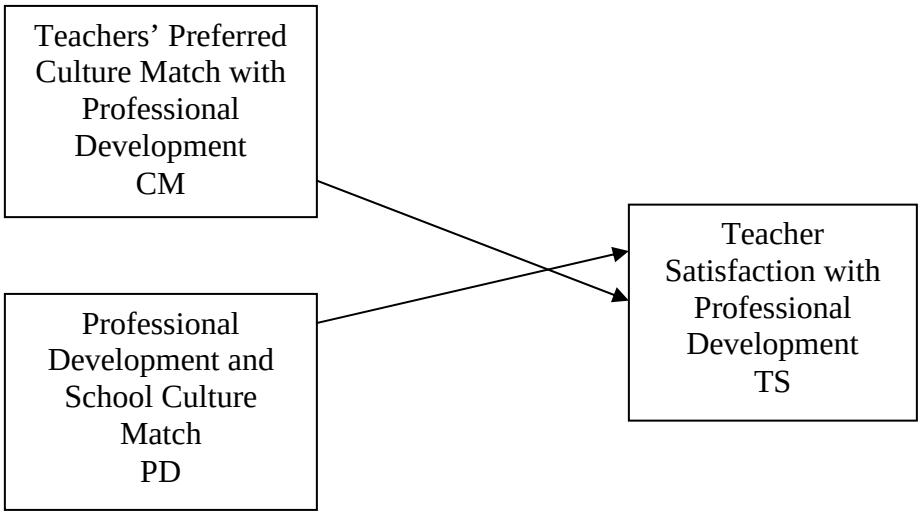
School culture data and teachers' preferred school culture data were used to determine whether matches existed between:

- each teacher's cultural prototype preference and the professional development in which he or she participated
- the school culture and its professional development strategies.

These matches were used to create two independent variables which were coded as *yes=1* if there was a match or *no=0* if there was not a match. The dependent variable in

this analysis was the numerical score of teacher satisfaction with professional development, based on the teacher's Likert scale response to the specific question on the survey. The independent variables were subjected to a regression analysis to determine any effects on the dependent variable of teacher satisfaction with professional development, using a SPSS program. Figure 3 shows a path analysis for this study.

Figure 2. Initial path-analytic model: Influence of a match between teachers' preferred cultural prototypes and professional development strategies (CM) and a match between professional development strategies and school cultural prototype (PD) on teacher satisfaction with professional development (TS).



Theoretical Framework

Douglas' (1982) Grid and Group Typology and Harris' (2005) categorizations of school cultures based on the Typology served as a theoretical lens for analysis of the data. This lens was used in selecting interview protocol questions creating coding categories, organizing data into themes, and analyzing data.

Summary

In the social sciences, qualitative research is a useful method incorporating human participants' experiences and perspectives with observation of structures and processes to provide information about a particular phenomenon.

A case study was chosen as the specific qualitative research strategy for this study, because it is a means of examining a program in depth with detailed explorations. For this study, data collection methods included open-ended questions, text or image data, collection of participant meanings, studying the context or setting of the participants, validation of the accuracy of the findings, and making interpretations of the data. Rossman and Rallis (2003) explained that case studies are complex, multilayered, provide detail, and contain rich description. These strategies result in data that illuminate the reader's understanding and comprehension of a complex set of events or circumstances. For this study, the researcher also conducted cross-case analyses, to examine any commonalities and differences across the four cases.

Douglas' (1982) grid/group theory provided the theoretical lens through which information regarding four purposefully chosen high schools were analyzed. The analysis used qualitative methods to narrow the population to four specific school cultures and to explain the professional development strategies chosen by those schools. Harris' (2005)

categorization of successful professional development strategies for each of the four cultural environments was used to determine whether a match existed between the school culture and its professional development strategies.

Data from questionnaires, interviews, observations, and document analysis were combined to create two independent variables and one dependent variable for a multiple regression analysis. Results of the analysis were used to determine whether the following two null hypotheses were supported:

- H_{o1}: A match between school context and professional development strategies makes no difference on teacher satisfaction with professional development
- H_{o2}: A match between teacher preferred school culture and school professional development strategies makes no difference on teacher satisfaction with professional development.

CHAPTER IV

PRESENTATION OF CASES AND DATA

The purpose of this study was to determine the interrelationships, if any, between school culture, and teachers' satisfaction with professional development. Harris (2005) suggested a theatrical metaphor for categorizing observations of a particular school to understand the organizational dynamics and culture operating in that particular culture. He suggested observing the following four features of a school: the stage, the cast, the plot, and the time. This framework was used to organize and describe the data collected through surveys, observations, interviews, and documents from four high schools, which are presented as separate case studies.

The Stage refers to the space in which work occurs and includes the physical environment, the context of the school, and the types of behavior these factors prevent or promote. Harris (2005) described this component of a school culture as follows:

> Comprehending and conveying the life of a school involves understanding the space in which it occurs. In theater, artistic performance occurs in an area referred to as the stage. In schools, all activities transpire in a specific space that has social meaning for the participants. (p. 67)

The Cast refers to the participants in a culture. In a school, this may include administrators, directors, teachers, students, support staff, parents and family, and community members. This study specifically looks at three of these categories: administrators, teachers, and students. Harris (2005) provided the following description of the Cast:

> Regardless of the type or complexity of a production, all theater performances require roles and responsibilities, which include administrator(s) or director(s); cast members; artistic and technical personnel, and last but certainly not least, the audience. These categories of participants can be translated readily to educational settings. (p. 69)

The Plot refers to the activities and interactions within the school. According to Harris (2005):

> Every play has a plot, a series of acts and tales that unfold as the play progresses. Likewise, every school has some, if not many, stories to convey. School members organize their relationships and activities around general themes and presumptions. They construct rules to direct and guide the stories, which are conveyed through the daily routines and interactions of the workplace. (p. 70)

The Time explains the time frame in which the activities and interactions occur. It may refer to the value placed on time, parameters and adherence to the school calendar, beginning and end of the school day and year, and time allotted to meaningful activity or relationships. Harris (2005) compared the Time component of a school to that of the theatre: “Theatrical performances transpire in a time frame. Like theatrical performance,

all educational and social activities in schools are bounded by and occur in a specific time frame" (p. 71).

Riverside High School

The Stage

Riverside High School serves grades 9 through 12 in a small, rural town of fewer than 8,000 people. There are no major industries within the city; however, several small industries are located there, and the surrounding farmland is quite productive. According to the 2000 Census, median household income was approximately $26,000 at that time. A career technology center and a junior college are located within 30 miles of the high school. Riverside High School students are encouraged to pursue post-secondary education at one of these schools.

Riverside's academic building is comprised of three single-story wings radiating from a glass-walled central open area. Surrounding the glass-enclosed entrance, glass trophy cases exhibit multiple trophies, pictures of current team members and former staff and students, Riverside Foundation fundraiser symbols, historical artifacts, and many award plaques.

The glass-walled center section contains a large area of long tables arranged in rows that are used by the students as a cafeteria and for large-group meetings. In the center of this common central area, there is a sunken library surrounded by glass walls. Bench seats line the perimeter of the room, and the shelves are decorated with baskets and birdhouses that add a friendly, homey atmosphere to the area. Outside of the library on the opposite side from the area of long tables, there are several sections of free-standing metal lockers for the students; there are no lockers in the classroom halls. A

large sign on the front of the central common area proclaims that “Riverside Students are College Bound,” written in large letters beside the school symbol of Big Red, the school mascot. When I commented on the poster, Riverside’s principal, John Rivers, replied, “We have one of those in the gym, in the field house.”

Organization of Classes and Students

In contrast to the openness of the central section, the academic wings have outside windows only along the floors of the classrooms, but there are interior walls of glass that look into the halls and a series of atrium-type gardens. Some teachers covered their interior glass walls with attractive curtains for privacy. All of the gardens were well-tended and attractive. One garden in the arts area was decorated with a metal scrap scarecrow and a sign reading “Imagination at Work.” Mr. Rivers explained that the teachers have an unofficial competition to have the most attractive garden; some had added decorations and signs in the gardens outside their rooms to achieve that goal. Classrooms in each wing are organized by groups of subject areas, with math and science in one wing; English, foreign language, and social studies in another; and special education, art, computer, and home economics in the third. Classroom decorations were attractive. When I visited, the building was clean and very quiet, even though when I visited, students had been testing all day, and it was very close to dismissal time.

The main office is located in the math/science wing. The office secretary was friendly and helpful, and the secretary’s desk was located off to the side, leaving a straight path into the principal’s office. A poster on the office wall showed the increase in Riverside’s test scores last year. Another sign read “TEAM-Together Everyone Achieves More.”

A new auditorium and gymnasium complex, the football stadium, and a second practice gym are located within a short walking distance from the main academic building. Pictures of former Riverside Graduates of the Year, chosen for their lifelong contributions to society and honored at a yearly banquet, hang in the foyer of the auditorium. The surrounding grounds are well-kept, with some landscaping.

Organization of Faculty

Riverside's teachers are organized by departments, which is easy to achieve since each department's classrooms are located together in the same wing. However, these groups are now referred to as departmental teams. Mr. Rivers explained,

> We used to call them departments; we had a department head, and we had departments. Now we call them departmental teams, and we have a team leader. It's very similar to the way it was done, but I don't think that they met on a regular basis before I came. You had a person who was the department chair, and that's who you would go to, and if they wanted to get some advice, they would. But our teams meet. They're required to meet.

The teams are required to keep a record for their weekly meetings, which they must sign and turn in to Mr. Rivers. Sometimes he has topics for them to discuss; other times they discuss common concerns, such as test scores.

Each departmental team is chaired by a team leader chosen by the high school principal. According to the Board Policy manual, these leaders have the following responsibilities:

- To be familiar with all departmental instructional materials and their uses;

- To be knowledgeable of the textbooks used in each course within the department;
- To assist new teachers within the department with the instructional materials and textbooks that will be used;
- To coordinate textbook orders for the department;
- To assume responsibility for the department inventory of textbooks and instructional materials;
- To assume responsibility for organization of the ordering of all materials for the department for instructional purposes;
- To assume responsibility for holding and organizing curriculum meetings within the department at least one time each semester;
- To serve as subject coordinator for the extended studies program.
- To perform other duties as assigned by the building principal.

Website

The Riverside school district website provides contact information about all administrators, the school board meeting agenda and policy book. The superintendent's newsletter explains a new enrollment procedure that will greatly simplify that process for parents. The school calendar gives a full-month view and is easy to navigate, and a Teacher Links page lists linked websites that contain classroom and professional resources for teachers. Although the district and high school sites are visually simple, there are multiple layers of links and information of interest mostly to students, but to parents, teachers, and alumni as well.

Riverside High School's website is created and maintained by a high school computer class. The high school Home Page shows a picture of the front of the school and the large sign in front, surrounded by links related to school activities. The school's mission statement is located at the bottom of the page: "to join efforts with the parents and community in providing a safe productive learning environment which promotes critical thinking across the curriculum while integrating learning technologies, improving self-esteem, and encouraging lifelong learners." Tabs guide readers to the district home page and a community information page. Links to the home pages of all the other schools in the district are also provided.

The high school site has an extensive list of music, sports, and other activities with many pictures. The Sports webpage contains links to eight separate sports. At the top of the Football page, a banner declares: "Riverside High School Football The Tradition Continues." Below the banner, large pictures and names of each player are arranged according to class. Other webpages at the site contain the roster, coaches' names, and a scrapbook page of pictures of the team with cheerleaders and trainers. The Wrestling webpage links to a roster, schedule, a page with individual pictures of each team member, and a listing of former state champions from 1931 to 2009. The current high school principal is listed as a state champion for two years in the 1960s, when he was a student at Riverside High School. Cheerleader and Softball webpages also show team and individual pictures. Some of the other sports' pages have only a schedule or are still under construction. The Band site shows each member's picture, name, and instrument played, and the first page displays the band's district contest rating of Superior. Links to the Pep Club, FCCLA, Student Council, and FFA were not working at

the time I accessed the page. The Scholarships page lists links to available scholarships and contact information about the school counselor. On the Alumni Website page, one can click to find a list of graduates for classes from 1898 to 2008. A Homecoming page links to an agenda of the celebration, float winters, and pictures of winners and runners up for Big Red and Miss RHS, the boy and girl chosen annually as school leaders in all areas. It also links to a history of the school symbol, Big Red, which states that his spirit is

> the Past, the Present, and the Future of [Riverside] High School. It is the years of traditions piled up by thousands upon thousands of strong, eager, intelligent, aspiring youths. It is the efforts, the struggles to get there, the rebuffs, the heartaches, the injuries, the disappointments-and the successes. It is every game learned, and won or lost. It is studies, lessons, and their application. It is high moral standards; honor, fair play, respect for the right of others. It is accomplishment in the academic, the physical and the practical. It is leadership - and intelligent followers. It is the pride of and the joy in the Worthy. It is the spirit of Democracy and the present and the forwarded-upward fascinations of the future. It is all the little kindnesses and courtesies, and both the little and the overwhelming loyalties. It is more than these. It is a joyous living Presence symbolized in conduct, in colors, in movement, and properties.
>
> Each hour, each day, each year, many [Riverside] High school youth emblazon the [Big Red] Spirit with finer and deeper essentials of greatness. Each year the colors of the [Big Red] Spirit are brighter and brighter. Today [Riverside] High School has a glowing Spirit to make more brilliant with deeds and

> aspirations. Today, the whole world calls for the [Big Red] Spirit to strengthen Democracy and to promulgate the doctrines of Christianity.

The web page for Big Red/Miss RHS has a scrapbook section of pictures of this year's winners and runners up, taken in a very attractive backyard of a local home. The page also lists the names of former students granted these titles as far back as 1942 for big Red and 1955 for Miss RHS.

The *Student Handbook,* which can be accessed from the website, includes basic information and regulations. In addition, it lists the information about the Big Red Spirit, the school poem and words to two school songs. The handbook also names guidelines for School Spirit and Sportsmanship, which state

> The traditions at [Riverside] High School are legendary and extraordinary. The guiding principles of being courteous to our guests, showing positive school pride, and above all, good sportsmanship to a high level is and will be our focus. However, school spirit must and will be conducted in an appropriate manner. Any behavior that is derogatory toward the opposing team or the official's will not be tolerated. The administration will determine if the behavior is unacceptable. School spirit means loyalty to our school on every level. A loyal student body, individually and collectively, supports RHS in a manner that will continue to maintain long-established high standards.

The Cast

Administrators

Riverside school board policy describes the role and responsibilities of the principals as follows:

> The school principal is a key position of educational leadership. The principal is responsible for the total education of students in the building. He or she reports directly to and is responsible to the Superintendent of Schools. The authority of the building principal is delegated to him or her by the chief school administrator, who has received his or her authority from the Board of Education. The primary function of the principal is to provide leadership so that the job of teaching can be successfully accomplished. The overall responsibility is to provide leadership which will encourage the staff, the community and the students to work together toward an excellent school program.

John Rivers, who graduated from Riverside High School, started with the district as a coach, then became an assistant principal/coach at the middle school, then athletic director and assistant principal at the high school, returned to the middle school as principal, and finally to his current position as head high school principal for 14 years. His assistant principal has been with him for nine years. He had a very positive attitude toward his staff, and stated, “All of my assistant principals have been excellent. I’ve got great help here. I’ve got great people that work for me. That’s a key. Surround yourself with great people. Their input is what’s important.”

Teachers

Riverside High School has 38 teachers. According to Mr. Rivers, 50 % of them have Master’s Degrees. Two special projects that Mr. Rivers seemed especially proud of are based on faculty work. The first is a laser engraver the woodshop students use to create name tags for all the staff and signs throughout the school. The Woodshop teacher took special training during professional development time to be able to teach the

students how to use the machine. The second program is a computer website that is used extensively by Riverside faculty to align their curriculum and to analyze test data. Core teachers post curriculum maps for their courses by months. The teachers recently presented their curriculum maps for a well-known educator in Oklahoma City. The presentation was so impressive that they have been asked to repeat it on a national level at Orlando, Florida.

Of the 38 faculty members, 29% responded to the online *Grid and Group Cultural Awareness Tool*, which measured their perceptions of their school's cultural environment. Twenty-six percent of the faculty responded to the online *Grid and Group Cultural Preference Tool*, which measured their preferred school cultural environment and degree of satisfaction with professional development at their school.

Teachers' attitudes toward professional development. Mr. Rivers believes that teachers' input for professional development is important. As he explained

> I think that teachers, since they have a role in the selection of what professional development is…they're a little bit more receptive to the professional development. But I think there's still that degree that teachers sometimes don't like professional development. They'd rather be in the classroom teaching.

He also feels that professional development needs to be interesting. "It can't be boring. It's got to be something that teachers are receptive to."

In addition, Mr. Rivers finds that professional development needs to be relevant and related to teachers' subjects.

> I think there's some subject areas that they're not interested in. I think … they're always asking for a motivational speaker, someone to come in here and kind of

> build them up a little bit. You know, we've kind of dedicated ourselves to curriculum, more curriculum-oriented things, rather than building the ego up and doing those type things. So I think they would like to have subject areas sometimes.

There is a great deal of emphasis in professional development at Riverside on topics that will increase student learning and proficiency on the state tests. This results in core subject areas being the target of most of the training. Therefore, elective and non-core faculty members are allowed seek out professional development topics that will enhance their teaching according to their subject areas, rather than being required to sit through training that is not relevant to them. Mr. Rivers explained this process more fully:

> Because it is so curriculum oriented, sometimes your elective teachers feel like they're a little bit left out of the professional development. We've done a lot of visitations where we send our elective people out to visit different schools and look at a different way of doing things. They get a signature from whoever they go with that they attended, and they get their staff development points. Good professional development is-number one-teachers get something out of it that is relevant to what they're doing.

Students

Students at Riverside High School are mostly low income; according to Mr. Rivers, 70 percent qualify for free or reduced lunch. According to the National Center for Education Statistics (2009) there were approximately 450 students enrolled in grades 9 through 12 at Riverside. The largest non-white minority is American Indian,

approximately 35 percent of the student body. In 2006-2007, the enrollment remained fairly steady among the four classes. Riverside's student to teacher ratio is 14:1, lower than the national average. They are proud of the progress they have seen in state test scores, with increases of 20 percent proficient for English II and 15 percent for Algebra I. Their test scores are the highest in their county. According to the School Report Card on the State Department of Education website, all of their benchmarks were met for all subgroups. Table 3 (p. 132) compares district API scores, high school End of Instruction test scores, and four-year graduation rates for the four schools included in this study.

The Plot

Professional Development Scheduling Process

Mr. Rivers described professional development in Riverside schools as a collaboration within the district. "It's pretty much district wide." Teachers have input through surveys. Mr. Rivers believes that "since they have a role in the selection of what professional development is, then I think they're a little bit more receptive to the professional development....Their input is what's important above everything." Teachers participate in district-wide sessions as well as weekly Professional Learning Community meetings.

Goals of Professional Development

Riverside's focus on increasing test scores and state and national requirements for professional development play a large part in the determination of content of professional development throughout the district. Mr. Rivers explained that they are limited by governmental guidelines and *No Child Left Behind* (107th Congress, 2002).

> You have to stick to what state guidelines are expecting you to do. There are certain things that they expect you to have done, so we do those, and then it's whatever. There are restrictions now. You can't bring in motivational speakers and those types of things, so we're pretty much dedicated to whatever it's going to take to reach those standards and make those standards be accessible to our students and our teachers.

Since increasing student test scores is an important part of the focus of professional development at Riverside, Mr. Rivers was quite proud of the fact that Riverside's Algebra test scores were 97 percent proficient for the 2008 school year, and that their average ACT score was 21.

Topics of Professional Development

Topics for professional development are geared toward student achievement and meeting state mandates, and they tend to be targeted at the core subject areas that are tested.

Professional Learning Communities (PLCs). PLCs meet by department once a week. They are required to keep records of their meetings and turn in signed worksheets. Mr. Rivers keeps this documentation in a book. They do have objectives; discussion topics may include goals for the upcoming year, topics assigned by Mr. Rivers, or test scores. Mr. Rivers explained that "they may spend several meetings breaking down test scores and then looking at those.

Vertical alignment. An important part of professional development at Riverside High School has been vertically aligning curriculum from middle school through the junior college level, working with faculty from the nearby junior college. Mr. Rivers

explained, “That’s an area we’ve taken a step further in vertical alignment…we’ve gone beyond the high school to the college level now.” Mr. Rivers first required the teachers to write out curriculum for their core classes with pencil and paper to become more comfortable with the process; then they posted them online. Teachers now post the monthly curriculum for their classes on a website where they can be viewed by any other teachers in the nation who subscribe to this service.

The Time

Riverside’s school year is divided into four nine-week blocks, with four 85-minute class periods per day. The student handbook lists the bell schedule for the four periods, including a 25-minute *Encore* period for enrichment and correctives. Students are assigned by teachers to the corrective sessions, and attendance is mandatory. Students who do not need academic assistance go to the enrichment classes. The handbook explains that this is not free time, but instructional time for students.

Students are not allowed to be in the halls for any reason during the first 50 minutes of each class period. Mr. Rivers stated that the schedule has worked very well for them; however, he thinks it would be an advantage test-wise if core teachers could have more weeks with their students. He explained how they have adapted their block schedule to allow more time for Algebra:

> Now we do Algebra I with our students year long. We run them all four blocks.
>
> One of the reasons our test scores are at 97% - they have more time.
>
> Yes, they have a lot of time and a lot of time to prepare and get ready for the test.
>
> So I think that’s been a real advantage for us.

Riverside High School has an open campus. In addition, each week, they have "Flexible Fridays," which include an advisory period to discuss different topics, such as qualities of good character. Fifteen students are assigned to one teacher, who keeps those same students all four years so they "will know an adult they can go to for help." Students who have at least a C average with no discipline problems, tardies, or missing work, are dismissed 40 minutes early. Mr. Rivers believes this has led to fewer tardies and discipline referrals. In addition, students now seek out teachers to avoid missing assignments. Students who do not qualify for the early release are required to attend tutoring sessions to receive academic help as needed in their subjects.

Lakefront High School

The Stage

Lakefront High School serves grades 9-12 in the community of Lakefront, which has a population of approximately 25,000 people; the population has decreased somewhat in the last eight years. The city is within a 90 minute drive of three metropolitan areas. The main employer for the city has downsized significantly in the past 10 years; however, its influence is still quite evident in the architecture, history, and culture of the Lakefront community. In addition to this larger industry, several smaller manufacturing plants and businesses provide employment for area citizens. According to the 2000 Census, median household income was approximately $30,000.

A career technology center is located on the outskirts of Lakefront, and college courses are available locally at a center for technology-based delivery of undergraduate and graduate level college and university courses. A junior college is approximately 20 miles from Lakefront, and a large state university is within an hour's drive.

The Lakefront School District maintains a well-organized system of communication including TV and radio broadcasts, school and faculty websites, newspapers, and newsletters to keep the community informed of what is going on in the district. The theme, Panther Pride, is seen throughout the community, and is especially evident at Lakefront High.

Organization of Classes and Students

Lakefront High School first opened in January of 1928 as a three-story structure built in the art deco style that can be seen in many other structures constructed during that time in this community. This building still houses many of the classrooms, some of which still contain the original ornate woodwork; one classroom even has a large stone fireplace. More classrooms, cafeterias, and a gymnasium have been added onto the original building; however, the oldest areas continue to be well maintained and are in constant use. The multi-story additions require many sets of stairs; there is only one elevator with limited use. The football stadium, fieldhouse, and baseball field are located within the same block, sharing a parking lot.

The main entrance to Lakefront was re-located from the ornate front door of the original building, which required ascending several stairs and a long, sloping sidewalk. The new entrance is adjacent to the faculty parking lot. Three sets of glass doors open to a large, well-lit foyer. The back wall of the foyer has been painted with a large mural of the front view of the original building. Two large banners hang in the hallway outside the main office: “Academic All State, Oklahoma Foundation for Excellence” and “Panther Pride.” This main hall also contains glass-fronted trophy cases along one wall, displaying students’ art, student council plaques, and two cases of sports trophies. Branching

hallways have school-related “street” names hanging above the intersections. A large professional-looking display case hangs on the wall outside the guidance office to provide information regarding the school calendar and career, college, and military information. Names of students who have received special recognition are posted on one wall of the cafeteria.

The high-ceilinged halls in most of the buildings are not wide enough to allow for an easy flow of students during passing times; lockers line walls in the oldest part, which adds to the congestion as students open them. Between classes, the halls are crowded with students, and there are often a few students in the halls during class. Hallways in the newer additions are carpeted; tile floors in the older sections make those halls noisier.

When the ninth grade students were moved up to the high school from the mid-high several years ago, the intention was for them to be isolated in one of the additions; however, in reality, those students have integrated with the upperclassmen due to their needs for elective and advanced courses.

Students may be involved in a wide variety of sports, arts, and music. Because of the number of students wishing to participate in several activities as well as advanced placement classes, the counselors and administrators had difficulty creating an overall schedule to accommodate every student.

Organization of Faculty

Lakefront’s 79 teachers are organized by subject area departments, with classrooms that are generally located in the same area; however, some of the ninth grade core math, science, English, and social studies teachers are isolated in the ninth grade building. PLCs meet by subject area departments twice a month for according to a

complex, detailed schedule. Ninth grade core teachers are organized into a team called *Panther Academy* to assist these younger students in making a successful transition to the high school.

Teachers are encouraged to use the technology provided at Lakefront High School. Promethean and Smart Boards are available to all teachers, although they are not located in each classroom. Teachers are encouraged to create their own web sites within the school district website to improve communication with students, parents, and faculty. Optional training sessions throughout the year provide instruction on a variety of hardware, software, and web-based programs. Most of these training sessions are held at the high school, but are open to all district teachers, which allows the high school faculty to mix with staff from the lower grades.

Website

The Lakefront school district website home page has a large welcome sign and a link to an online parent and student school climate survey. The site is extremely full of information; there are 20 side links to sites with information for community members, staff, parents, and students. “Achieving Excellence" is the theme of the school district, and is written on the banner heading for all web pages. According to the superintendent’s page,

> Achieving Excellence is the focus of our academic and extra curricular programs. The district is committed to providing all children with the academic skills necessary to excel in the 21st Century. The education of children is a cooperative effort of parents, the community and the school district. Historically, these groups have joined forces in [Lakefront] to create one of the best school systems

> in Oklahoma. In addition to strong academic programs, [Lakefront] students have many opportunities to participate in fine arts, athletics and leadership programs, encouraging personal and social development beyond the classroom.

Lakefront High School's website pages are very attractive and professional-looking. A common banner at the top of each page is decorated with school emblems and school colors. An extensive list of links is provided on the home page, including Administration, Calendar, Classroom webs, Clubs and Groups, Guidance Office, Media Center, Panoramic Tour, Parent Resources, Pictures, Quick Links, Sports Zone, Staff Directory, Staff Resources, Teachers of the Year, Videos, and Panther E-news. Many of the pages contain wide-angle photos of the school that were taken by a former Lakefront graduate. The website contains many layers of links and pictures; it is a very well-organized, complex site with much information. The goal seems to be open communication among all stakeholders while expressing Panther Pride.

According to the school website, the mission of Lakefront High School is: "to be a collaborative learning community that develops citizens committed to lifelong learning, academic achievement, and personal excellence." According to the school handbook, the high school is "the place where everyone learns." The vision is stated to be "a collaborative community of responsible, productive citizens committed to learning and to excellence." The *High School Handbook* states that the high school "is in the process of becoming a Professional Learning Community and part of that process is to re-examine our vision, mission and values."

The student handbook, which is accessible from the website, also contains the words to the school creed and two school songs. The principal has written a page

explaining the “fish” philosophy that he has promoted among the school staff and administration. Based on the daily work attitudes of fish market workers in Seattle, the basic tenets are:

- Choose your attitude
- Be there
- Make their day
- Have fun

This philosophy is also carried over into his office, which contains many decorations and references to fishing, not in terms of the activity, but as reminders that he wants this philosophy to be apparent in the daily life of the school.

The Cast

Administrators

The Lakefront board policy book sets forth 18 duties and responsibilities of administrators that are considered to be minimum requirements for an administrator. These duties are in the areas of preparation, routine, discipline, learning environment, and instructional leadership. Hierarchy of authority is described in board policy as follows:

> Levels of direct authority will be those approved by the Board and shown on the district organization charts and listed in the Personnel Attachments. Personnel will be expected to refer matters requiring administrative action to the administrator to whom they are responsible. That administrator will refer such matters to the next higher administrative authority when necessary. Additionally, all personnel are expected to keep the person to whom they are immediately

> responsible informed of their activities by whatever means the person in charge deems appropriate.

John Lake, Principal of Lakefront High School, served as the assistant principal for 17 years prior to becoming the head principal. He has been the head principal for four years. During his years as an assistant principal, he experienced several changes in the principal position. As he explained,

> In the last ten years, we've had three principals – one for two years in the last ten years, and he had been here two years prior to that. So we had a four year principal, and then a three year principal, and then I've been here the four years. So within a ten year span, we've had three principals at this position.

Lakefront also has four assistant principals, one for each grade.

Mr. Lake is especially interested in strategies that will decrease the drop out rate of approximately 35% and increase the graduation rate at Lakefront. He recognizes that too many of their students are under-supported in terms of home life and academics, which has affected the drop out rate at their school. He supports educational strategies that will help those students be more successful, and he helped to design the content of this year's professional development, which included speakers and videos to target specific needs of motivating students and understanding differences between social classes. Mr. Lake also encourages PLC groups to address student test scores, in an effort to raise those scores each year.

Teachers

According to school board policy, teachers at Lakefront are required to meet state certification regulations and have the following characteristics:

- High moral character.
- A genuine interest in children and youth.
- A loyalty to America and its cultural heritage and an appreciation of our democratic way of life.
- A willingness to comply with post-employment local physical examination requirements, drug tests, and felony checks.
- A devotion to the profession of teaching, based on a recognition of its vital place in developing responsible citizens.
- A desire to serve the school and community.
- A willingness to collaborate with peers, parents, patrons, and the public.
- Evidence of vitality, enthusiasm and intelligence.
- Effective self-expression.
- In addition to the major field of study, evidence of competency and development in the fields of guidance, child development, technology, remedial reading, literacy development, brain research, and assessment.

The faculty at Lakefront High School tends to organize itself by proximity of classrooms, since the classroom area is spread out among several interconnected buildings with many stairs. Several teachers' lounges are located throughout the buildings, and teachers tend to congregate in the lounge closest to their classrooms. Some teachers do socialize outside of the school day, but this is generally done with teachers from the same subject area.

Of the 79 Lakefront faculty members, 46% responded to the online *Grid and Group Cultural Awareness Tool*, which measured their perceptions of their school's

cultural environment. Thirty-eight percent of the faculty responded to the online *Grid and Group Cultural Preference Tool*, which measured their preferred school cultural environment and degree of satisfaction with professional development at their school.

Teachers' attitudes toward professional development. Mr. Lake feels that some of the teachers at Lakefront have an attitude of "I've heard it all before."

> I've had the philosophy a lot of times, a lot of teachers, especially the older ones, feel like they have seen about everything or that it's just taken a different name, but it's the same thing. I think a lot of them think that it's the same thing that they've seen before, and so it kind of affects their attitude. But there are different ways to present material involving technology. I think how it's presented, even if it's some old information, sometimes just a presenter that connects with the faculty and keeps the day moving and is not boring.

In the past, teachers at Lakefront have been observed to appear bored in school-wide, speaker-centered professional development sessions. Mr. Lake himself complained if a particular training did not seem to be sufficiently practical. This year, one group of teachers did not return to an afternoon professional development meeting after the morning session, because it interfered with the time that was originally designated as their classroom work time.

Mr. Lake also feels that relevance to teachers' practice in the classroom and to their subject areas is an important factor in their attitudes toward professional development. He explained:

> I really think that they want to get something out of that to be able to use, and if they do that, they feel like a day of professional development has been

worthwhile. They're looking for something that they can use in their classroom, and I want them to take something from what happens in these meetings to be able to make a difference with what they do in the classroom.

Elective teachers have complained in the past, because they had to attend professional development that was geared toward core subjects. They felt that there was nothing for them to attend that would help them in their classrooms. However, recent professional development topics that have focused on motivating and supporting students were applicable to the practice of all teachers.

Students

According to the National Center for Education Statistics (2009) there are approximately 1600 students enrolled in grades 9 through 12. The largest non-white minority is American Indian, approximately 14 percent of the student body. In 2006-2007, the enrollment remained fairly steady among grades 10 through 12 after a sharp decline after grade 9. Last year's dropout rate was 35%, the highest in the county. Lakefront's student to teacher ratio is 15.2:1, slightly lower than the national average of 15.5.

Some students are very involved in a variety of activities at the school, including sports, music, arts, and advanced placement courses. Agriculture courses are also available. There are so many students who want to be involved in several of these activities, that class scheduling becomes a problem. Students may also attend the local technology center half days. Some students choose to participate in concurrent enrollment between Lakefront High School and the nearby junior college.

There is also a group of students who tend to be detached from school activities and can be seen congregating and smoking in the park across the street from Lakefront. An open lunch policy allows students to leave campus during one of the three lunch periods. Administrators are usually not able to distinguish between upper and lower classmen during those times, which allows the freshmen to experience new freedom and contact with older students. This group of students generally do not have the same academic goals as the first group, have less support at home and at school, and are more at-risk for dropping out. Professional development strategies have been targeted at those concerns.

Lakefront High School students made progress in state test scores last year, with increases of 2 percent proficient proficiency for English II and 12 percent for Algebra I, a particular point of pride for their algebra teachers. There is still concern over the large number of students who do not progress from ninth to tenth grade, either due to being retained because they have not accumulated sufficient credits to move on, or due to their dropping out of school, in spite of the fact that most of them are not legally old enough to do so. Table 3 (p. 132) compares district API scores, high school *End of Instruction Test* scores, and four-year graduation rates for the four schools included in this study.

The Plot

Professional Development Scheduling Process

In preparation for determining the topics of professional development for the next year, teachers are asked to participate in an online needs assessment. This survey asks teachers to rate how often a variety of research-based best teaching practices, chosen by the district-level administrators, can be seen in operation at their school site. Some

teachers reported being confused by the survey. Results of the survey are analyzed by the principals and district curriculum coordinators to determine areas of strength and weakness, based on the teachers' perceptions. This analysis is used by the principals and curriculum coordinators to choose the direction for professional development at each site. Mr. Lake explained this process:

> The final decision is made between myself and the Board, the curriculum persons at the Board of Education, after deliberation and collaboration on the things that we're trying to accomplish at our school. And then looking at those things, we make a decision on who we can bring in to get those things accomplished.
>
> We have people that the district brings in – speakers and people who present and discuss strategies and things that would help improve either instruction or help give us ideas on how to structure what we do to help students, and usually, keep trying to improve the things at our school. The professional development is centered around those things. And then we look for people to come in to help us with those areas. We're using several different areas that the district has sent us to and the direction which meets ... the direction we're wanting to go, and moving the staff towards that.

The final decision as to the topic(s) and time of school-wide professional development is made at an administrative and district level, with little teacher input beyond the initial needs assessment. The administrator works with either the elementary or secondary curriculum director to develop the content and strategies for professional development for the upcoming year. Sites may differ in their presentations based on the needs at the

school. Sometimes, several sites may combine for a particular presentation, if it is a topic that is of interest to all of those schools.

In addition to regularly scheduled professional development days and PLC meetings, 14 professional development opportunities for the summer are listed on the school website. Other opportunities are held throughout the year, usually on topics related to technology. Once teachers have met their contractual obligations for 18 hours of professional development during the school year, they can be compensated at the rate of $30 per hour for up to 14 additional hours of professional development. This policy is an attempt to encourage teachers to take part in additional professional training.

Goals of Professional Development

The definition for professional development in Lakefront school district is presented in the school board policy:

> The [Lakefront] Schools Board of Education recognizes that quality professional development is essential and important. As such, efforts in the district have focused on securing professional development opportunities that are firmly rooted in research and related to the academic and instructional goals of the district while adhering to the regulations under state law requiring professional development points for certified personnel and following the guidelines set down in the district professional development plan located in the District Four Year Improvement Plan.

District and school administrators are expected to use these guidelines in planning professional development for the schools each year.

Professional development at Lakefront High School is focused on meeting students' needs. Mr. Lake described it as:

> how to go about putting structures in place to help kids who aren't getting the help they need outside the school and looking at the problems of our school-trying to address dropout, graduation, and all the things that are associated with that. And trying to do what we think is best for kids.

Extra professional development sessions that are optional for teachers focus on the use of technology, unless it is a new program, such as an online gradebook, that all teachers must use. Teachers are expected to use technology in their classrooms to enhance student learning and to improve teachers' educational strategies. Prizes are awarded to teachers who are determined to have the best web sites. The high school has a staff member assigned to assist teachers in learning and using new technologies such as Smart boards, United Streaming, video and picture editing software, and the new gradebook and record keeping system. This year, it has become more important for teachers to be comfortable using computers, since all End-of-Instruction tests must now be administered online, and teachers may be required to assist in this process by serving as test administrators in the computer labs.

The focus of departmental PLCs is increasing student learning as measured by state test scores. During the PLC meetings, teachers are expected to create common checkpoint assessments which are administered at the same time in each state-tested subject area, analyze the results of those assessments, and determine strategies to overcome weakness that are shown as a result of the assessments.

Topics of Professional Development

At the beginning of the 2008-2009 school year, the entire faculty at Lakefront attended professional development sessions with speakers and videos that targeted ways to reach unmotivated and under-supported students. Teachers also met by departments to look at test data from the previous year to determine specific areas of strength and weakness. Teachers are expected to develop strategies to address weak areas of their students' learning and to use them with students in their classes, hoping that this will eliminate any weak areas in their teaching and address common problem areas of student learning.

Professional Learning Communities (PLCs). The Lakefront school district is committed to developing strong PLCs at each site. PLCs at Lakefront High School are organized by departments and meet at least twice a month according to a complex schedule. These meetings are usually attended by the high school curriculum director, the district secondary curriculum director, or both. PLC members are expected to focus on data from common assessments and student progress. The overall goal is to increase students' learning, as demonstrated by proficient scores on state-mandated *End of Instruction* tests. The teachers also work in their PLCs to develop checkpoint assessments that align to state standards. This plan has met with varying degrees of success in the departments. Some are on schedule with analyzing data from the assessments and planning strategies for remediation where it is necessary. Other departments are still trying to finalize their common checkpoint assessments.

Vertical alignment. Within the past 10 years, curriculum has been aligned by subject areas throughout all grades. Curriculum Maps for each core subject at Lakefront High School are posted on the district web site, and teachers are expected to follow those

maps closely as they develop their own lesson plans. These maps are updated by faculty groups with each department as necessary to reflect changes in state standards or changes in the district's grading periods. Secondary vertical curriculum teams meet throughout the year to discuss academic concerns related to their subject.

The Time

Professional development at Lakefront takes place on three designated days per year. The high school teachers usually meet in sessions at their own site; sometimes they are joined by teachers from other sites. Three professional development days are set into the school district calendar, which is developed by a committee and approved by the school board in January of the previous year. Last year, all three days were scheduled at the beginning of the year; next year, two will be at the beginning of the school year, and the third will be in January. PLCs meet twice a month throughout the year in 45-minute time periods.

Lakefront currently has three trimesters with five-period days; however, next year they will be returning to a more traditional semester calendar with six-period days. Goals for the new schedule include increasing instructional time in an effort to increase student test scores, increasing the amount of time teachers have to develop relationships with students, and increasing time within the school day for PLCs to meet. Currently, teachers do not feel they have sufficient time in their PLCs to accomplish all of their goals.

Hillcrest High School

The Stage

Hillcrest High School serves grades 10 through 12 in a city of approximately 20,000 people located within ten miles of a metropolitan area. The district website

describes the town as having “small town distinction” while being **“**just 15 minutes from the heart” of a large metropolitan area. According to the 2000 Census, median household income was approximately $32,000. According to its website, the city of Hillcrest, which is the county seat, is home to over 120 industries that employ nearly 5000 workers. This growing community is mostly middle class with a sense of community pride and a diversified workforce. According to the school districts home page, “Approximately one-third of the people within 20 miles of Hillcrest have college degrees. According to the district website, the city of Hillcrest “enjoys a revitalized downtown, a strong economic base and diversified civic and cultural involvement.”

Hillcrest High School is located in a mostly commercial area, just a few blocks off the main street of the city. The high school is adjacent to the administration building and junior high school for eighth and ninth graders. An elementary school is quite nearby, and a common stadium is located behind the high school and junior high school buildings. The high school is a dark red brick single-story building attached to a two-story auditorium. It is very easy to locate, as it is very well marked with the address and name in large white letters on a dark blue awning. Tenth through twelfth grade students attend classes in the high school building.

Organization of Classes and Students

The entrance to the high school building is a clean cement courtyard with flags in the center and two low signs which read, “Warriors live here.” A sign by the glass front entrance doors reads “Visitors Must Check in at Office,” but upon entering, the location of the office is not immediately apparent. The entrance hall extends to a cafeteria; it is intersected by a wide hallway leading to classroom areas. The entrance hall is rather

narrow and is similar to a business or medical office building. Locations of main offices of the school are listed on a black directory board with small white letters, similar to those seen in office buildings. The right wall of the entrance hall is lined with small plaques with pictures of past and current student council officers. The main office is located at the intersection of the halls behind a single glass door. A bring blue awning over the door states that it is the Main Office.

The clean, neat main office is rather small, with a few comfortable cloth covered chairs, medium gray carpet and walls with light gray trim, and light wood furniture and doors. Ceiling tiles are stained. One wall contains a large window looking out to the hallway. The opposite wall is decorated with four large shadow boxes, each containing a uniform jacket representing one of the following activities at Hillcrest High School: band, chorus, ROTC, and FFA. Three built-in glass trophy cases are located just off the main hall. Each one is dedicated to a different class – tenth, eleventh, and twelfth – rather than activities or sports. Across from these trophy cases is a gymnasium painted in the school colors and decorated with several “Champs” banners and a large school logo on the back wall. Very few school-related banners or signs were hanging in the halls.

Hallways in the academic areas are very wide and well lit, with white and bright blue tile floors. One hall is lined with unobtrusive tan lockers. Branching hallways to other areas of the building have hanging “street signs” which give directions. Classrooms have wooden doors with single column windows in each door and large outside windows with blinds. Although the classrooms appear to be older than some other portions of the building, most are brightly painted. During class periods, most of the classroom doors are closed; some rooms appear crowded. In one, I observed that the desks were aligned in

rows; in another, they were arranged in rows facing each other. Halls are usually quiet, with little traffic during class. A two-story auditorium area appears to be newer than the classroom buildings and contrasts with the adjacent single-story classroom wings.

Joan Hill, Hillcrest High School's principal, contrasted her school to nearby large metropolitan high schools:

> [Hillcrest] is about ten miles, from that district, and sometimes it's hard for us in [Hillcrest] to know, do we respond, act like a big school because we're a big 6A school, or, you know, we're just [Hillcrest]. We're just a little community here. We're not [named two large metropolitan school districts]. "That's not how we do in [Hillcrest]." You'll get that quaint colloquialism quite a bit. And sometimes we're just kind of confused ourselves in terms of 'Are we a big school today or are we just a little small community today? We're still figuring that out.

Organization of Faculty

The faculty of Hillcrest High School is organized by departments. Department heads meet with the principal on a monthly basis. Teachers in certain classes, such as advanced placement, are somewhat isolated because there are no other teachers teaching that same subject. As Joan Hill explained:

> I have one AP Calc teacher. I have one AP Chem teacher. Now they may have AP in common, but to say "I know what you're going through," you don't find that a lot at the secondary, especially at a school like [Hillcrest]. We're considered a 6A school, so we're considered large, but we're like number 30 out of 32 6A schools. So we're like the smallest, or one of the smaller, 6A schools. So we may have AP Calc, which is great - you don't find that in smaller schools,

but we have one. We won't have eight sections of AP Calc or two AP Calc teachers, so we are a large school, but we're a small, large school. So that, in itself is a unique part of [Hillcrest]. We are 6A, but we're bureaucratic, at that level. But we're a small community, and we are a small, large school and hence, the group. We do still have staff development that meets over at the superintendent's house. She lives about four blocks away, and they all meet at her house to talk about staff development. So that is very quaint, and that's a reflection of our community, but at the same time, we are a 6A school.

Website

The Hillcrest school district home page declares that Hillcrest schools promote "Academic Excellence in a Caring Environment." Hillcrest High School's website is somewhat plain, but attractive and organized. Below the district banner heading is an added statement, "Pride of the Warriors – Built on Tradition." The simple home page shows a picture of the school; the week's calendar; log-ins for parents, students, teachers, and staff access to private content and combined calendars; and news, including a schedule of parenting help seminars. Side menu links lead to Academic Team, Art, Choir, District calendar, District web site, Football, School information, Transcript request, and Yearbook. Art and Choir are empty links, and School Information has only ACT test dates. Under Sports, the Baseball link led to a highly sophisticated professional website sponsored by the booster club. The Football site provides mainly schedules and lists of students; some pictures are also available as thumbnails. The other sports pages listed only current schedules. Eighteen clubs and organizations are available to students; however, there was little or no information on their web pages. Instrumental and vocal

music, as well as Indian Education, also had little or no information posted. There was no access to the student handbook; it is unknown whether students could access this document from their private accounts. There was not a great deal of specific information on the website or links; it appears that the private log-ins might lead to more detailed information, based on the website instructions.

One link from the Professional Development page contains a description of this program at Hillcrest, "[Hillcrest] Public Schools have a strong commitment to Staff Development. The program is designed to provide teachers and administrators with information on current trends and practices in education."

The Cast

Administrators

Starting at the school board level, roles and responsibilities are delegated by policy. According to the board policy book available on the district website,

> the School Board is the final authority in setting up policy. The Board approves the rules and regulations that are consistent with its policies. It does not attempt to deal with details that are a part of the administrative operation of the schools. Execution of policy through the detailed steps and procedures of school administration is the job of the Superintendent of Schools and the staff.

Joan Hill, the head principal at Hillcrest, has been an administrator there for ten years. She explained, "I have been an administrator; this is my tenth year. I was an assistant principal for five, and this is my fifth year as the principal. I am the second principal in ten years." Ms. Hill was extremely friendly, despite being very busy. When one of the teachers came into the office to talk with her about an issue, the teacher asked,

"Is she still up to her eyeballs?" The secretary replied that she was and that she had several meetings scheduled one after the other. Despite her busy schedule, Ms. Hill does not take an authoritarian stance toward her staff. She related an incident in which she apologized to a teacher for possibly being viewed as a micromanager, "I apologized to this teacher, 'I'm sorry; I'm not really a micromanager, and I'm sorry if I appeared that way, but this is my need, for this reason.'"

Teachers

Desirable characteristics for teachers are not mentioned in the Hillcrest board policy. Teachers' role descriptions are phrased in terms of functionality rather than personal characteristics. According to the board policy:

> Teachers shall be responsible for the care, discipline, and instruction of their pupils during the prescribed school day or any additional time they are placed in a position of responsibility by the principal or Superintendent; they shall endeavor to maintain hygienic conditions and practices in their classrooms, and shall report to the principal any serious accident or illness affecting pupils in their charge. They shall exercise such control over children as would be exercised by a kind, firm, and judicious parent. They shall exercise the greatest care in granting permission for children to leave school at the request of, or in the company of any person not a parent or a school officer, and then only with the approval of the principal.

Hillcrest High School employs a faculty of 74 teachers. The teachers at the high school generally reflect different characteristics than other teachers in the district. According to Ms. Hill, they tend to be more independent than elementary teachers:

> By definition, secondary people are loners, you know, in terms of 'my classroom, I'm the only AP Calc teacher here. No one else can relate to me and my issues." Secondary teachers tend to be just a little more critical and serious by nature, so they're data driven. They want to see all the charts. They want to see the pie graphs. I know the junior high principal, one thing that he did have them do was go to the bowling alley. They kind of had some team-building things.
>
> He took his teachers to the bowling alley; that's part of their staff development. I would love to go to the bowling alley with my teachers, but they would find that very much a waste of their time. His teachers love it, but you know, junior high is a transition between elementary and high school, so they still have a little bit more of the fun, and they go to the movies, and they give away TVs to help you meet your reading goal. They're [the high school teachers] not going to be real motivated by going to the bowling alley or by little T-shirts and that sort of thing. They want true grit. They want, "give me the numbers, get me the books, send me to the training." They want the hard core. "Don't waste my time." And I love it. I was a secondary teacher.

Teachers at Hillcrest also feel the pressure for their students to pass the state mandated tests, especially since they will eventually be required to pass specific tests to get a high school diploma. Ms. Hill explained their feelings:

> When that kid does not pass English 2, it doesn't say Ms. Hill on it. It says, you know, Mrs. So-and-so. And they take that seriously. It is their name on that test as to why they didn't get their diploma. And I'm not sure if the elementary teachers quite feel that. Not being promoted to third grade - that's serious,

> something's wrong. But when you don't get a high school diploma…you're changing someone's life. And our secondary teachers take that seriously.

Of the 74 Hillcrest faculty members, 14% responded to the online *Grid and Group Cultural Awareness Tool*, which measured their perceptions of their school's cultural environment. Only five percent of the faculty responded to the online *Grid and Group Cultural Preference Tool*, which measured their preferred school cultural environment and degree of satisfaction with professional development at their school.

Teachers' attitudes toward professional development. Teachers are encouraged as a matter of board policy to participate in professional development outside of the school district, and they are required to accumulate almost half of their professional development points by attending activities outside of the school. According to the policy,

> The Board of Education encourages participation of professional conferences and conventions by certified teachers. The Board of Education will pay all expenses including substitutes if required or requested by the Administration. Application must be approved by the principal and the Deputy Superintendent and/or Superintendent.

Ms. Hill explained that the teachers at Hillcrest High School seem to appreciate being able to share concerns and solutions with other teachers in the same subject areas during professional development sessions that meet in small groups, such as the PLCs,

> I think that they like hearing all the new ideas and the new methods, being exposed to just, different ways of approaching and solving a problem, being given an opportunity to collectively talk about a challenge that they may have and to see how others may solve it. I think they just really appreciate the time to meet with

colleagues and to even meet with colleagues that they don't see a lot, you know, with our high school English teachers would have an opportunity to meet with the junior high English teachers during staff development.

Ms. Hill also finds that her teachers appreciate whole-group professional development that is relevant and subject-specific, without a lot of distracting activities and gimmicks that might be more appropriate for teachers of younger students:

> We had a very well-known speaker come in before Thanksgiving Break, and he was great, but it was more of a bells and whistles kind of a presentation, and it was all about excitement. And, of course, you know with the secondary people, they're a hard sell. They're not into all the puppets and the…he had all kinds of props, and well, you know that kind of works more with your elementary. You know, with the secondary crew, I mean they're…they're a tough crowd, and they want a little bit less "fluff," and they want a little more substance when it comes to their presentations.
>
> I think that they do not appreciate shallow or a shallow staff development, meaning just a very soft attempt at trying to fill a day. I think there is a disdain for a wasting of my time, you know. And I hear that from time to time, and I usually do hear that when we have national speakers come in that can't relate to... "Well, that can't work at our school. They don't know enough about our school." They want to hear about math if they're in math. They want to hear about English, if it's English. They want it very specific for their content area. At the secondary level, I think it needs to be relevant towards the content area. I think it

needs to be free of a lot of elementary type devices that are more geared toward your elementary staff.

Students

According to the National Center for Education Statistics (2009), in 2006-2007, Hillcrest had approximately 1150 students enrolled in grades 10 through 12. The largest non-white minority was American Indian, approximately 25 percent of the student body. In 2006-2007, the enrollment remained fairly steady among the three classes. Riverside's student to teacher ratio is 16.7:1, higher than the national average of 15.5.

Students at Hillcrest have conflicting influences on them. They are very close to a large metropolitan area, yet some of the students come into Hillcrest from feeder schools in surrounding small communities. Ms. Hill explained these attitudes of the students:

> To our kids, it's all relative. We get kids from surrounding communities, very small schools like [named two area small towns]. They'll come to our school, and it is, "Oh my goodness, you guys are so big. I don't even know where to go in this building." And so to them, we are this school. Our [Hillcrest] kids think that we're very small. And I have taught at [big school], and I taught at [bigger school], so I'm coming from bigger schools, and I'm thinking, "Wow, this is very small." You know, the last school I taught at was like a mall, as big as [the] Mall over here, and so it's all relative. But our students truly believe that they're a very small, tiny school and that [big school], they're the big city school and the big city kids.

Hillcrest's middle class demographic is reflected in motivational strategies that will be successful with the high school students, as opposed to those that are used with the younger students in the district. Ms. Hill explained,

> [at the junior high], they give away TVs to help you meet your reading goal. You know I can't give away TVs. Giving away a $200 TV is not really going to motivate them to have better attendance. That's not really going to motivate them; they drive $40,000 vehicles. They drive nicer cars than I do. And giving away a $200 TV is not really going to motivate them to have better attendance, but it sure works next door.

Hillcrest students' scores on state end-of-instruction tests decreased slightly in percent proficient last year, with decreases of 3 percent for both English 2 and Algebra I. Table 3 (p. 132) compares district API scores, high school End of Instruction test scores, and four-year graduation rates for the four schools included in this study.

The Plot

Professional Development Scheduling Process

Most of the responsibility for organizing professional development at Hillcrest High School is in the hands of a committee that is representative of the faculty. According to the school website, "The majority of Staff Development activities are submitted, planned and presented by [Hillcrest] staff. Numerous activities are offered each Staff Development Day during the school year. Opportunities for professional development are also available during the summer months." Ms. Hill explained this process and the involvement of administration in the area of professional development more fully:

> You know, honestly as principal here at the high school, I have very little input with the staff development. From what I understand, they get together, they talk about it, they submit it. Actually, they have me come in and sign. You know, that's fine. And then it goes from me to the administration center across the parking lot, and they actually do all of the contacting of the speaker, I guess the fees, if there's any fees that need to be paid. I don't pay for any of the fees; I don't schedule any of the speakers, and so that has really not been a part of our process here.

Regarding the frequency of the professional development committee meetings and their involvement with the assistant superintendent of curriculum, Ms. Hill described that process more fully:

> Honestly, I have no idea. That falls under the jurisdiction of the assistant superintendent of curriculum, and he is new. Our superintendent now, she was the assistant superintendent, and she was directly involved, and they met at her house. I mean, yeah…They would meet at her house several times throughout the year, and so she was directly involved with staff development. That was more her area, her responsibility, so I've never met with the staff development committee. She lives about four blocks away, and they all meet at her house to talk about staff development. So that is very quaint, and that's a reflection of our community, but at the same time, we are a 6A school.

Traditionally, the staff development committee representatives contact the faculty about concerns to determine the needs and direction for professional development. According to Ms. Hill, this is accomplished at the monthly faculty meetings:

> I ask them always, 'We're going to have a faculty meeting the next day. Do you want to put anything on the agenda for the good of the club? And I would say, probably, out of the nine faculty meetings, that probably, half of those… Staff Development would like to speak. So generally, at our faculty meetings, our Staff Development rep for the high school will address the faculty, 'Guys, if you want to submit your ideas, what are the needs?' And it really goes straight to her people, and it really does not go through me at all.

As far as the teachers' actual attendance at professional development sessions, Ms. Hill explained that "it's [the professional development program] got a lot of meetings; we're not sure who goes to what. They pick what they want to go to."

A recent change in central office administration may lead to changes in the patterns of scheduling for professional development. Ms. Hill expressed her surprise and interest in taking more part in professional development as an administrator, which has not traditionally been part of the role of the principals:

> We just had a meeting with our assistant superintendent yesterday, - he's new to our district - and he enlightened us, the junior high principal, as well as myself, that he would like to see us have more influence on decision making in staff development. Whereas, before, it's always been a staff development committee, a group of teachers. They decided it; they submitted it; we signed it, with very little input from us. You know, we just trusted, hey this is what they want.
>
> It was kind of surprising when our assistant sup[erintendent] said, 'Where are all your people during professional development?' They pick what they want to go to. And he said, 'Well, don't you have more input on that, or who goes, or

accountability?' You know, they sign their sheets where they go, and that goes to you guys across the way, and we never really know. We just kind of walk around, saying hi and welcome back. And he said, 'Well, I would like to see you as principals to come up with some programs or to have your people come up with some programs, for you to have more input into the programs.' And that was something very different than the culture that we've experienced before here, and so … which is exciting to us because there are things that we'd like to do. We do our normal, once a year in the summer welcome back, kick off, but especially at our mid-year staff development [which] we just had a week ago. And he said, 'Well, how much input did you have in that?' And that's very little, because our assumption has always been that there's so many other programs that people want to do, there's really no room for anything for us. It's just, that's never dawned on us that we would have an ability to schedule something at this time. And he said, 'Well, by all means, we need you to have a little bit more…' So really, you usually hear more about teacher input, so this is kind of opposite in that more administrator input ....And he said, 'Yeah, I really want you guys to schedule something, and then we'll schedule around that, if we can.' So that was new and different. So hopefully, we'll have more input from now on.

Goals of Professional Development

The Hillcrest district website has eight web pages devoted to professional development. The Professional Development home page provides the following description of this process:

> [Hillcrest] Public Schools have a strong commitment to Staff Development. The program is designed to provide teachers and administrators with information on current trends and practices in education. The majority of Staff Development activities are submitted, planned and presented by [Hillcrest] staff. Numerous activities are offered each Staff Development Day during the school year. Opportunities for professional development are also available during the summer months. A complete Staff Development handbook is available in each building and can also be obtained from Staff Development Committee members.

From the website, teachers can access forms to evaluate professional development, to record their staff development points, and to request credit for summer professional development points.

Teachers are required to accumulate 15 total Staff Development points per year, with one hour equaling one point. A minimum of eight must be Focus points, meaning that they were "obtained by attending workshops organized and/or presented by [Hillcrest] Schools. The remaining seven may be Alternative points, which are points obtained by attending workshops outside the district.

Rules and regulations for professional development are spelled out explicitly on one of the web pages, covering the areas of points, proposals for activities, payment of in-district presenters, payment of tuition/fees, quality assurance and verification, recording and reporting, and professional development committee membership. A Site Based Procedures page explains the roles of the professional development committee and the school/site committees. The overall committee is composed of at least one representative from each site, four from administration, and one each from curriculum, technology, and

parents.

Identified Needs and Goals are presented in a set of complex charts. According to the district website, Hillcrest Public Schools has five main goals for professional development:

- Increasing the academic performance index (API) scores for the district and each school site
- Closing achievement gaps among student subgroups
- Increasing student achievement as demonstrated on state-mandated tests and the ACT
- Increasing graduation rates
- Decreasing college remediation rates.

One of the main goals of professional development for Hillcrest's teachers is to learn strategies that will help students pass the state mandated end of instruction tests. The principal, Ms. Hill, explained that this focus is a fairly new development:

> When we went to a trimester, we didn't really have testing as a, I mean testing was important, but it was not necessary for a high school diploma. But now that students have to pass four of the seven tests to get a high school diploma, that's some serious high stakes. And so we definitely need to get more core curriculum; it's really what that's about. It was great – trimester - you know, our kids could be on the dance team, they could be in choir, they could take Spanish 5. You know, you had all these nice electives, but we've got to get back to reading and math.

> When it comes to test scores, these teachers are held accountable. These kids will not graduate. So it has changed even dramatically within the last four or five years, their whole want and need, because that is their name... on that test as to why they didn't get their diploma.

Topics of Professional Development

Teachers at Hillcrest have recently taken part in ALCA training, which gives teachers detailed information on students' test scores throughout their school careers. The plan for this system is to allow teachers to identify each student's strengths and weaknesses more clearly to provide a more individualized educational program for each student, according to the student's need. Based on this information, teachers and administrators will also be able to chart students' progress more clearly. Ms. Hill described the program and its use more clearly:

> That is a, I want to say, a web site, but it is a web site that you have to have access to and training. You have to have FERPA authorization because it's all about access to student test scores. You can actually go in as a teacher or principal on one student, and you can see every grade that they've ever had on any test from, you know, third grade up, first grade up. So this is very new, and they can actually use that to help pinpoint. They can see a student's progression. Ok, from first grade we've had reading comprehension problems or why do you have reading comprehension, but we're over here looking at your other scores, and you're doing fine here. So it gives them all this information. And then we use this My Test Improvement which gives you charts that look like this that we use. Now we expect for the first time to use these in our test improvement meeting with the

> Board. And you can do all kinds of …they do all the graphs for you, and they give you the breakdown by ethnicity. We went through six hours of training to access all this information.

Professional Learning Communities (PLCs). Teachers have recently started participating in PLCs on a regular basis, after receiving training in the process last summer. According to Ms. Hill:

> We have PLC training, which is our Professional Learning Community. That is something new that we're doing here this year. We were trained this summer, and we had some more training. I know we had our individual departments, like our English department had their meetings. I'm not sure specifically what they discussed. I'm sure it was benchmarks, assessments. I think that they like hearing all the new ideas and the new methods, being exposed to different ways of approaching and solving a problem, being given an opportunity to collectively talk about a challenge that they may have and to see how others may solve it. And, I know that's what the PLC… that really provides a good time for everyone.

Vertical alignment. Teachers meet by departments in their PLC's. According to Ms. Hill, "When English teachers meet, it's going to be junior high and high school. So to have that alignment, it's really not cross curriculum, but I guess it's a vertical alignment each time."

The Time

Hillcrest High School is organized according to a trimester schedule, with three 12-week grading terms per school year. Professional development meetings are held when school starts at the beginning of the year in the form of a "summer welcome back

and kick off," according to Ms. Hill. This program "is only for a portion of the day, and then they're so busy going to all their other activities."

The trimester schedule makes it difficult to provide sufficient time for PLCs to meet. The Hillcrest district is considering changing to a semester schedule, which would present a possible solution to the problem of not having enough time for PLCs. Ms. Hill described these changes:

> You know with the trimester - that made it really hard for us to find any time for our PLCs. So one of the things that we're looking at with the six period day is having at least a consistent time that we can meet. We're looking at a flex hour or a flex time within the six period day so our PLCs can meet.

Plainfield High School

The Stage

Plainfield High School is located in the city of Plainfield, a community of nearly 14,000, located less than 15 miles from a large metropolitan area. According to the 2000 Census, median household income was approximately $50,000. The community is growing and has experienced unprecedented growth in elementary school population over the last several years, according to the district superintendent. These new students are now starting to enter the secondary facilities, which are not prepared to handle the additional students.

According to the Plainfield High School handbook, the mission of the district, "as a dynamic educational community, is to enhance the potential of all children and to develop responsible, productive citizens through comprehensive, innovative programs."

The district seeks “to create a school improvement plan that accurately targets school excellence and quality programs.” The district defines “quality as continuous improvement.” The district goals are:

- All district students will reach high standards by attaining proficiency or better in all core academic areas.
- All district ELL students will become proficient in English and reach high standards by attaining proficiency or better in all core academic areas.
- All district teachers will be highly qualified in the areas in which they are teaching.
- All district students will be educated in a safe, efficient, drug free learning environments.
- Plainfield students will attain a 100% graduation rate.

The district philosophy explains that due to a proliferation of knowledge in the world today, it is necessary to have “not just a traditional approach to education, but also an education that fosters a life-long learner, acutely aware of personal, social and multi-cultural responsibilities.”

The school colors, emblem, and motto take up only six lines in the handbook; only basic descriptions are given without explanation. There are no songs or school creeds listed.

The high school campus itself is large and open. The high school buildings – classrooms, sports, fine arts, and trades - are spread out in a single large block located in an older residential area. Seven separate buildings contain high school classrooms or offices. In addition, there are separate buildings for vocational agriculture, automotive,

welding lab, physical education, ROTC, in-school-detention, and four portable buildings. The old gymnasium is the first building on your right as you enter the high school complex; it is a rectangular “box”, painted very dark gray with a black roof. The main fieldhouse, football stadium, wellness center, gymnasium, tennis courts, and auditorium appear to be newer structures and in excellent condition. The newer gymnasium has a large “P” on the front and a sign that reads, “Home of the Eagles.” In contrast, some of the classroom buildings need paint. According to the superintendent, the average age of the school buildings is 40 years; some in regular use were built approximately 60 years ago. The central office and classroom buildings are difficult to find, as their entrance is located near the center of the complex, and they are not well marked with either directional signs or easily-seen signs on the buildings themselves.

The main office has a central lobby with a large bay window on one wall. A hanging file exhibiting pictures of previous classes hangs on the wall to the right of the entrance; a framed woven throw depicting area landmarks hangs on the wall to the left. Instead of a trophy case, tall trophies are arranged in a row along the back wall of the lobby area, behind a large mosaic crest embedded in the floor and protected by velvet ropes. The crest is divided into four quadrants, depicting a torch, a lyre, an open book and quill, and mathematics tools. The head of Plainfield’s mascot, the eagle sits atop the crest, and a banner across the bottom reads, “By courage and knowledge.”

A tall wooden counter is located along the left side of the lobby. Three secretaries sit behind the counter under three signs that designate them as “Senior, Junior, and Sophomore.” Three identical low file cabinets located behind each secretary form the back barrier to the secretaries’ offices. The walls in office area are covered with rich,

dark wood paneling and red brick, making them somewhat dark. A hall at the back of the offices leads outside to other classroom buildings; a row of interior windows along this hall is covered with non-matching curtains. The principal's offices are more open with windows looking out to a grassy area and two of the classroom buildings. A tall pole holding a figure of the school mascot stands in the middle of this area.

Organization of Classes and Students

Joan Field, one of Plainfield's assistant principals, explained the physical organization of the classes:

> This is all high school. Across the street, right behind the football field, is our ninth grade building. Our freshmen are separate. And then we have tenth, eleventh, and twelfth just on this side. They [the ninth graders] do come over maybe one elective…one or two electives. We have some ROTC kids that will come over for that, and we bus them over here, but their core classes are all at the mid high. We tried our sophomores - we moved our sophomores to our Central Building, the building that we're in, and then the West building and the South building. We tried to kind of make a little community for our sophomores and then segregate them from our seniors. And it needs a little work, but it's been good. For the most part, you know, they're by themselves.

The classroom buildings themselves are single story, flat-roofed buildings. Most are connected by covered breezeways and surrounded by grassy areas with meager landscaping. Ms. Field commented on the organization and size of Plainfield's campus, "Our campus is so big, and like a college campus, it's difficult to keep up with all of them." Most of the classroom hallways are painted gray and are somewhat stark, with

few wall decorations other than flyers advertising school events. One hallway has bright orange lockers that provide some color. Hallways are generally narrow, and I would expect them to be quite congested between classes due to the large enrollment of Plainfield High School. Most classroom doors have one large window beside them; some of those are covered with fabric or curtains; most have one or two square windows on the outside. Generally, the classrooms appear to be isolated from the hall and from each other. Some classrooms have attractive colors and posters in them. Foreign language and English seem to be located in one building, but some subjects, such as math and social studies, have some classes in several buildings throughout the campus. Some classrooms were very full of students; others had only a few. A student guide explained that the smaller ones were probably honors classes. Few rooms had their doors open, but all of the classrooms I was able to see into had desks arranged in rows, whether the room was full of students or not.

In addition to regular academic and elective classes, Plainfield offers courses that might be more closely aligned with a career technical center, such as automotive and woodshop. These classes are held in several smaller buildings located behind the main classroom buildings.

Organization of Faculty

Teachers at Plainfield are organized by departments, and some of their professional development is also departmental. Principals are assigned to oversee activities of the various departments. As Joan Field, assistant principal at Plainfield explained, “I’ll meet with the math teachers – I’m over the math department – and we might talk about some area that they would like to see someone come in and present on.”

Assignment of principals to departments is not necessarily made according to their subject area of expertise. When asked whether she had taught math previously, Ms. Field stated, “No, I taught English. I wish, being over the math department, it would help me. I just….wing it and hope to facilitate it well.”

Website

The Plainfield High School website displays an attractive new design. The Home page posts the nine weeks’ testing schedule, a link to senior college scholarship information, pictures of cheerleaders and the pom squad who had recently won national honors, a listing of DECA competition winners and a link to the DECA website, the bell schedule, a picture of industrial arts students with the governor, and Spring Break dates. There is a link to information regarding the upcoming all night graduation party hosted by parents and community members to eliminate alcohol-related accidents on graduation night. A box for “Notes from the Principal” is blank. An Activities page shows spring break dates and four pictures of students engaged in a woodshop competition, a ROTC ropes course, and two musical activities, with no captions or names. The Athletics page has links with pictures to 15 different sports. Information on this page contains names of the all conference softball teams and information regarding the signing ceremony for one athletes to attend a state college. A link to the district Athletics page leads you to calendars for each sport. Four of the pages have team pictures; the rest show the sports facility or the schedule only. The Counselors page is very informative with names and emails of four high school counselors, the counseling secretary, the registrar, the gifted and talented counselor and the test coordinator. A section posted on October of 2008 lists college news, information important dates, and other information for eight colleges and

universities. There are 13 scholarships listed in a section for senior scholarships. In addition, there is a list of graduation and college entrance requirements. The page for Seniors shows a calendar with dates specific to that class. The Staff page lists only teachers, no administrators. Administrators names can be found only on the first page of the online student handbook, and their emails are not listed. The Textbook page provides links to all online textbooks.

The Cast

Administrators

According to the hierarchy charted in the School Board Policy, principals report directly to the Deputy Superintendent. Their levels within this structure are the same as those of directors of secondary curriculum, elementary curriculum, personnel, special services, and federal programs. The names of the high school principal and assistant principal are not listed anywhere on the high school website, nor are their emails listed in the faculty directory. The only place I was able to locate their names was on the front page of the high school student handbook, which was linked to the district home page, not to the high school website.

Joan Field, the assistant principal who has the most involvement in professional development at Plainfield High School, is in her first year of administration, having taught there for ten years previously. Describing one of the other assistant principals, Ms. Field stated, “I think this is her eighth year here in administration and she taught here prior to that.” The third assistant principal is in his second year at Plainfield. Ms. Field explained that the head principal has been at Plainfield as long as she has been, “He was

the assistant principal before he was the head principal, so he has been in administration a long time."

Teachers

Character traits that are expected of the Plainfield school district teachers are specified in board policy. They include tolerance, leadership, respect/self-respect, integrity, self-discipline, volunteerism, courage, enthusiasm, responsibility, patriotism/citizenship, caring/forgiveness, and courtesy.

Plainfield High School has a faculty of 111 teachers, teaching 10th through 12th grades. Of the 111 faculty members, only 7% responded to the online *Grid and Group Cultural Awareness Tool*, which measured their perceptions of their school's cultural environment. Fourteen percent of the faculty responded to the online *Grid and Group Cultural Preference Tool*, which measured their preferred school cultural environment and degree of satisfaction with professional development at their school.

Teachers' attitudes toward professional development. According to Ms. Field, teachers at Plainfield appreciate "the opportunity to have input. If they find something that they're interested in, they can bring that." She also explained that they prefer topics that are relevant and applicable to them:

> things that they think will help them in the classroom. They look at if it's really relevant to what I do in the classroom every day. You know, things that are going to help them increase our student achievement and help them be better teachers. I think just anything that you go to that you leave thinking, 'Oh, you know, that's great and I can use that.'

She described topics that the teachers do not appreciate: “That’s probably their least favorite…just knowing that things are required that they don’t see a benefit to right then.”

Students

According to the National Center for Education Statistics (2009), in 2006-2007, Plainfield had approximately 1650 students enrolled in grades 10 through 12. The largest non-white minority was American Indian, approximately 9 percent of the student body, closely followed by Asian/Pacific Islander at 7 percent. In 2006-2007, the enrollment remained steady between grades 10 and 11, with a slight drop for grade 12. Plainfield’s student to teacher ratio is 16.4:1, higher than the national average of 15.5.

According to the school website, students may select from 15 different sports in which they may participate. Students’ scores on state end-of-instruction tests last year increased by 14 percent proficient in English II and 7 percent proficient in Algebra I. Table 3 (p. 132) compares district API scores, high school End of Instruction test scores, and four-year graduation rates for the four schools included in this study.

The Plot

Professional Development Scheduling Process

Professional development is not addressed in school board policy. The school district has a director of secondary curriculum, John Plain, who operates at the same hierarchical level as the principals and serves as a coordinator and a resource person for professional development. In addition, the high school has a professional development committee. The committee receives requests from the faculty for professional development topics for which they see a need. These topics may be specific to one teacher, subject-related, or overall school concerns. The committee consults with the

principal prior to scheduling speakers for the training. Based on the topics to be addressed, presenters may come from within the district or be brought in from the outside. The director of secondary curriculum, John Plain, is often used a resource for presenters from outside the district. Ms. Field described who serves on the school professional development committee and how it functions:

> We get several resources from [John Plain]. Then we have a professional development committee here, and we meet and discuss options. One administrator, and then we have three teachers in different areas. One's a science teacher, one's actually our media director-he gets a lot of the technology-and then another teacher. The media director, he's pretty involved. He's pretty helpful; he comes up with quite a bit of ours. Then the committee will look at that and the cost and give teachers an opportunity to do things that they think will help them in the classroom. Usually they'll go through [the head principal], and then the committee will look at that and the cost and give teachers an opportunity to do things that they think will help them in the classroom. If we're looking for somebody in the district, I might contact another site and say, "Hey, I know that you went to…Mr. [Plain] mentioned that you were at this workshop. Would you be willing to come present whatever," if it's something in-district. If it's not, our title federal programs coordinator or director, she'll sometimes help us get speakers to come in. [John] is really good about…he sent me an email at the beginning of the year when we were trying to find somebody to present on Safari, and using Safari with our SmartBoards. And [John] had a really good resource from the state. It's just kind of a combination. I'll call somebody like that; I

would call and see about getting them out. He knows a lot of resources. He's pretty much a resource person…just knows a lot of people and is always willing if he knows someone, to send you that contact so you can get somebody out.

Teachers also have an opportunity to offer input through surveys. Topics that are subject-specific are generally taught by presenters from within the district. Ms. Field described the way in which this process works through an example from the department she oversees:

> We'll usually send out a survey…what would you like to see more of, and it's usually departmental. I'll meet with the math teachers – I'm over the math department – and we might talk about some area that they would like to see someone come in and present on, you know, teaching slope. So we'll get a teacher to come in and the teachers will all be able to do that.

Goals of Professional Development

Generally, professional development is designed to meet Plainfield's teachers' needs, as expressed through surveys and in departmental meetings. A mix of presenters from inside and outside the district is used to best meet the needs of the faculty and the school budget. Grade levels may be mixed for professional development that would apply to multiple grades. Topics focus on ways in which teachers can meet students' needs such as specific academic topics, motivation, discipline, and reading.

Topics of Professional Development

Professional development speakers generally come from outside the district at the beginning of the year, with follow-up throughout the year. However, for professional development during the school year, local teachers may be asked to present on a topic on

which they have recently had training or in an area of their professional expertise, depending on the topics desired. According to Ms. Field,

> Unless we know someone who's been to a workshop, usually our teachers go, and we'll ask them if they'll come back and present to our district. We do both. Usually it's when we have our days set up, teachers will look at our calendar we make available for the whole district, so if it's an elementary site that wants to do something on reading across the curriculum, or they might come to the high school and our high school teachers…we might have one that presents, so we do both. At the beginning of the year we usually have one speaker for our entire district. And then we have follow-ups that are small group looking at what [the speaker] talked about and then, just kind of site based, or departments will send a suggestion for things they would like to see, whether its classroom discipline, whatever it might be… motivation or, whatever the topic might be, and then we get with our ninth grade building and our middle schools. A lot of the time we'll do that together.

Professional Learning Communities (PLCs). No evidence was found that Plainfield faculty meet in organized PLCs that are designated as such. However, they do meet in departments that may have some of the same functions and goals as PLCs.

Vertical alignment. Teachers from elementary, middle, ninth grade, and high school may meet together from time to time for training in a particular topic that is of interest to all of them. These meetings are not organized, however, for the purpose of aligning curriculum, rather for professional development. In some cases, high school

teachers will conduct the presentations, particularly if they are subject-related, since it is assumed that they are "experts" in those subjects.

The Time

Plainfield School District has a semester schedule, with six-period regular school days as well as an advisory schedule. Six professional development days are scheduled throughout the year: four before school begins, one in October, and one the day after school is dismissed in May. Ms. Field described this schedule: "We do, at the beginning of the year, we have, I think, two days throughout the school year, one in the first semester and one in the second semester, and then we have end of the year. We have one day each semester set aside for that." Four evenings throughout the year are designated on the school calendar for parent/teacher conferences to allow two extra school holidays.

The four schools studied have been presented as case studies, using triangulation of data. In the next section, combined data from each school are presented.

Summary of Data

School Demographics

Data for each individual school are presented as part of each case study and questionnaire response analysis; however, it is sometimes useful to compare data from each individual school to the others to understand a school in context.

Table 3 compares data from the State Department of Education regarding students' progress at each school site, based on district Academic Performance Index (API), four-year graduation rate for 2006-2007, and End of Instruction (EOI) test scores of proficiency for English II and Algebra I.

Table 3

Comparison Data from State Department of Education

School	District API Regular Ed only	State API Regular Ed only	Graduation Rate Within 4 years	English II EOI % proficient And growth from previous year	Algebra I EOI % proficient And growth from previous year
Riverside	1340	1279	78.8 %	76 % (+20 %)	97 % (+15 %)
Lakefront	1275	1279	65.6 %	76 % (+2 %)	89 % (+12 %)
Hillcrest	1287	1279	85.2 %	75 % (-3 %)	75 % (-3 %)
Plainfield	1362	1279	87.4 %	83 % (+ 14%)	87 % (+ 7%)

Table 4 summarizes data from each school regarding overall demographics of the student body.

Table 4

Student Demographics by School

School	Ethnicity (White)	State Avg	Ethnicity (Minority)	State Avg	Free/reduced lunch	State Avg.	Total Enrolled
Riverside	54 %	59 %	45 %	41 %	47 %	55 %	463
Lakefront	74 %	59 %	26 %	41 %	37 %	55 %	1637
Hillcrest	67 %	59 %	33 %	41 %	55 %	55 %	1169
Plainfield	77 %	59 %	23 %	41 %	18 %	55 %	1668

Multiple Regression Analysis Results

The professional development strategies used at each of the four schools were categorized as being indicative of one of the four cultural prototypes, using Harris'(2005) descriptions of professional development strategies associated with each type (see Table 2, p. 14). These two sets of data were then compared to determine whether there was a match between the grid and group categories of each school and its professional development strategies. These matches were coded as match = 1, no match = 0. This coding became the raw data for the first independent variable of the multiple regression analysis.

Each teacher's response on the *Grid and Group Cultural Preference Tool* was compared to the actual grid and group category of the school to determine whether the teacher's preference for cultural environment matched the professional development strategies used at the school. These data were coded as match = 1, no match = 0. This coding became the raw data for the second independent variable of the multiple regression analysis.

The teachers' degree of satisfaction with professional development at their schools was measured on a scale of one to eight. This score was used for the dependent variable in the multiple regression analysis.

There were no matches between the school's culture and professional development strategies; therefore, it was meaningless to include these matches as an independent variable in the multiple regression equation. The regression analysis then contained one independent variable and one dependent variable. The independent variable was a match between teachers' preferred culture and professional development

strategies at their school, coded as TCHRtoPD. The dependent variable concerned teacher satisfaction with professional development offered at their school, coded as TCHRSATIS. Effect coding for categorical variables was chosen to set up the data for analysis, because that coding method indicates the effect of group membership. Tables 5 through 8 summarize the data obtained from the regression analysis.

Table 5 shows that the mean score for the degree of satisfaction with professional development for the 60 teachers who responded to the questionnaire was slightly more than 5, on a scale of 1 to 8, with 8 highest. Matches between the 60 teachers' cultural preference and the cultural environment most closely associated with their professional development were scored as either 1 for a match or 0 for a no-match. The mean score for these matches was approximately 0.12

Table 5

Descriptive Statistics

	Mean	Std. Deviation	N
Teacher satisfaction with professional development	5.1333	1.93511	60
Match between teacher cultural preference and actual PD strategies	0.1167	0.32373	60

Table 6 shows the R square values and significance for the effect of teachers' cultural preference matching the cultural environment most closely associated with the professional development strategies they experience at their schools on their degree of satisfaction with that professional development. As the R squared value becomes higher,

the effect of the independent variable on the dependent variable becomes stronger. The F score is a measure of the significance of R at the specified significance level. For this model, the independent variable of a match accounted for 7.4% of the variance in the degree of satisfaction, which was significant at a $p<.05$ level, but not at a $p<.01$ level. The Standard Error of the Estimate is an index of the amount of error in the whole study.

Table 6

Model Summary

R Square	Adjusted R Square	Std. Error of the Estimate	Mean Square	F	Significance
.074	.058	1.87793	Regression = 16.389 Residual = 3.527	4.647	.035

Predictors: (Constant), TCHRtoPD

The values in Table 7 indicate that there is a 95% confidence that the values of the variables will fall within these boundaries. The Table also lists the B value coefficients for the regression equation and the Beta value, which is equivalent to R from Table 6.

Table 7

Coefficients

Model	Unstandardized Coefficients B	Unstandardized Coefficients Std. Error	Standardized Coefficients Beta	Sig.	95% Confidence Interval for B Lower Bound	95% Confidence Interval for B Upper Bound
(Constant)	4.943	.258		.000	4.427	5.460
TCHRtoPD	1.628	.755	.272	.035	.116	3.140

Dependent Variable: TCHRSATIS

Table 8 provides a summary of the overall regression analysis results for the independent categorical variable of a match between teachers' preferred cultural environment and the professional development strategies at their schools, and a continuous dependent variable of a rating between 1 and 8 for the teachers' degrees of satisfaction with professional development.

Table 8

Summary of Regression Analysis for a Variable Predicting Teachers' Satisfaction with Professional Development (N = 60)

Variable	*B*	*SE B*	∃
Match between teacher cultural preference and actual PD strategies	1.628	.755	.272

Note. $R^2 = .074$ ($p<.05$)

Summary

The four case studies are portraits based on collected data and supplemented with data from the two questionnaires. The multiple regression analysis provided further information about the relationship between teachers' satisfaction with professional development and professional development strategies. In the next chapter, I will analyze the data presented here in terms of Douglas' (1982) Grid and Group Typology.

CHAPTER V

RESEARCH ANALYSIS

The previous chapter presented case studies of four public high schools, Riverside, Lakefront, Hillcrest, and Plainfield. A cultural awareness questionnaire was used to help determine the grid/group cultural environment category for each of these schools prior to gathering further information based on interviews with administrators, observations, school websites, government data, and document analysis. The information gathered supported the initial categorization of the grid and group makeup for each school. A second questionnaire provided information on teachers' cultural preferences and satisfaction with professional development. Development of the questionnaires (APPENDIX B) was based on Mary Douglas' (1982) grid and group categorization of social groups and Harris' (2005) application of grid and group theory to school settings.

This chapter provides analysis of the four case studies based on Harris' (2005) components of a school culture: the stage (the space in which work occurs), the cast (the participants), the plot (activities and interactions within the school), and the time (time frame for the activities and interactions). Cultural awareness questionnaire results for the schools as a whole and then for each school will be discussed first to provide background information on the initial identification of each school's grid and group environment. These results will be followed by an analysis of further research completed on each school which will support and complement the questionnaire results. In addition, results of a multiple regression analysis based on information taken from the cultural preference questionnaire will be discussed.

Questionnaire Responses

Teachers in the four schools responded to two online questionnaires. The *Grid and Group Cultural Awareness Tool* (see Appendix A) asked about their perceptions of their school's cultural environment based on a grid and group scale. This information was used to identify the predominant cultural prototype of each school. The second survey, the *Grid and Group Cultural Preference Tool* (see Appendix A) requested information regarding their cultural environment preferences and their present satisfaction with the professional development offered by their school. The combined data from each school were analyzed to determine which of the four grid and group cultural prototypes best fit each school's culture. Tables 3, 4, and 5 provide comparisons of all schools' questionnaire responses.

Grid and Group Cultural Awareness Tool

Table 9 summarizes the number of low and high grid and group responses regarding teachers' perceptions of their schools' cultural environments, based on the criteria of a low response being less than a rating of 4 and a high response being greater than a rating of 4.

Table 9

Number of Low and High Grid / Group Responses to Cultural Awareness Per School

School	Number of Low Grid Responses	Number of High Grid Responses	Number of Low Group Responses	Number of High Group Responses
Riverside	35	77	17	91
Lakefront	127	248	105	256
Hillcrest	32	69	56	48
Plainfield	35	44	44	35

Table 10 lists the *Cultural Awareness* item numbers that were most closely associated with each category of grid and group response, based on the averages of the responses. Responses were considered low if they were less than 4 and high if they were greater than 4, on a scale of 1 to 8. The wording of each questionnaire item is listed in Appendix A.

Table 10

Cultural Awareness Item Numbers

School	Low Grid Response Items	High Grid Response Items	Low Group Response Items	High Group Response Items
Riverside	Items 6, 9	Items 1, 2, 3, 4, 5, 7, 8, 10, 11, 12	None	Items 1 – 12, inclusive
Lakefront	Items 5, 6, 9	Items 1, 2, 3, 4, 7, 8, 10, 11, 12	Items 3, 12	Items 1, 2, 4, 5, 6, 7, 8, 9, 10, 11
Hillcrest	Items 5, 9	Items 1, 2, 3, 4, 7, 8, 10, 11, 12	Items, 1, 2, 3, 6, 8, 11, 12	Items 4, 5, 7, 9, 10
Plainfield	Items, 5, 9	Items 1, 2, 3, 4, 7, 8, 10, 11, 12	Items 1, 2, 3, 6, 8, 11, 12	Items 4, 5, 7, 9, 10

Grid and Group Cultural Preference Tool

Table 11 summarizes the number of low and high grid and group responses regarding teachers' preference for schools' cultural environments, based on the criteria of a low response being less than a rating of 4 and a high response being greater than a rating of 4.

Table 11

Number of Low and High grid / Group Responses to Cultural Preference Per School

School	Number of Low Grid Responses	Number of High Grid Responses	Number of Low Group Responses	Number of High Group Responses
Riverside	53	44	16	99
Lakefront	167	122	27	303
Hillcrest	28	13	4	40
Plainfield	96	73	36	131

Table 12 lists the *Cultural Preference* item numbers that were most closely associated with each category of grid and group response, based on the averages of the responses. Responses were considered low if they were less than 4 and high if they were greater than 4, on a scale of 1 to 8. The wording of each questionnaire item is listed in Appendix A.

Table 12

Cultural Preference Item Numbers

School	Low Grid Response Items	High Grid Response Items	Low Group Response Items	High Group Response Items
Riverside	Items 3, 4, 5, 6, 8, 12	Items 1, 2, 7, 9, 10, 11	None	Items 1 – 12, inclusive
Lakefront	Items 3, 4,5, 6, 8, 9, 11, 12	Items 1, 2, 7	None	Items 1 – 12, inclusive
Hillcrest	Items 3, 4, 5, 6, 8, 9	Item 2	Item 5	Items 1, 2, 3, 4, 6, 7, 8, 9, 10, 11, 12
Plainfield	Items 3, 4, 5, 6, 8, 9	Items 1, 2, 7, 10, 11, 12	Item 3	Items 1, 2, 4, 5, 6, 7, 8, 9, 10, 11, 12

Table 13 summarizes the average degrees of teachers' satisfaction with professional development at their schools, based on a scale of 1 to 8, with 8 being the highest.

Table 13

Average Degree of Teacher Satisfaction with Professional Development (1=low; 8=high)

School	Riverside	Lakefront	Hillcrest	Plainfield
	4.8	4.8	6.5	5.63

The preceding data represent summaries of responses, comparing each school to the others. In the following sections, individual data from each school will be analyzed separately.

Riverside High School (Corporate: High Grid, High Group)

Cultural Awareness Questionnaire Results

Twenty-nine percent of Riverside's 38 faculty members chose to respond to the C*ultural Awareness* questionnaire. At my request, the principal forwarded an email from me to his teachers, explaining the study and asking them to follow the link to take the online survey or to request a paper copy.

Grid Questions

Based on total numbers of responses overall, 77 responses were in the high grid category; 35 responses were in the low grid category. Ten responses were associated with a high grid environment:

Item #1: Authority structures are centralized.

Item #2: Job responsibilities are well defined.

Item #3: Individual teachers have no autonomy in textbook selection.

Item #4: Individual teachers have little autonomy in generating their educational goals.

Item #5: Individual teachers have no autonomy in choosing instructional methods/strategies.

Item #7: Teachers obtain instructional resources through administrative allocation.

Item #8: Instruction is not personalized for each student.

Item #10: Hiring decisions are made without teacher input.

Item #11: Class schedules are determined without teacher input.

Item #12: Rules and procedures are numerous.

Two of the responses indicated a low grid environment:

Item # 6: Students are encouraged to participate / take ownership of their education.

Item # 9: Individual teachers are motivated by intrinsic / self-defined interests.

Group Questions

Based on total numbers of responses overall, 91 responses were indicative of a high group environment, while just 17 responses could be associated with low group. All of the responses were associated with a high group environment:

Item #1: chain of command is all educators working collaboratively.

Item #2: Educators' socialization and work are incorporated / united activities.

Item #3: Extrinsic rewards primarily benefit everyone at the school site.

Item #4: Teaching and learning are planned / organized around group goals / interests.

Item #5: Teaching performance is evaluated according to group goals, priorities, and criteria.

Item #6: Teachers work collaboratively toward goals and objectives.

Item #7: Curricular goals are generated collaboratively.

Item #8: Communication flows primarily through corporate, formal networks.

Item #9: Instructional resources are controlled / owned collaboratively.

Item #10: People hold much allegiance / loyalty to the school.

Item #11: Responsibilities of teachers and administrators are clear / communal with much accountability.

Item #12: Most decisions are made corporately by consensus or group approval. No responses were associated with a low group environment.

The questionnaire responses to items used in this survey followed a continuum from 1 to 8, which measured dimensions of grid and group used in this typology. Of the twelve grid items on the *Cultural Awareness* questionnaire, ten were high grid, and two were low grid based on averages of scores along the continuum. Out of the 12 group items on the *Cultural Awareness* questionnaire, all 12 were high group, and none were low group, based on averages of scores along the continuum. Therefore, based on the results of the *Cultural Awareness* questionnaire, the initial grid and group category for Riverside High School was Corporate (High grid, High group). Subsequent data gathered also supported this categorization.

Cultural Preference Questionnaire Results

Twenty-six percent of Riverside's 38 faculty members chose to respond to the C*ultural Preference* questionnaire. At my request, the principal forwarded an email from me to his teachers, explaining the study and asking them to follow the link to take the online survey or to request a paper copy. After my second request, the principal sent paper copies of the questionnaire to six more teachers, resulting in five additional valid responses.

Grid Questions

Based on total numbers of responses overall, 44 of the responses were in the high grid category; 53 responses were in the low grid category. Based on averages of responses, six items were associated with a high grid environment:

Item #1: I prefer a work atmosphere where authority structures are centralized / hierarchical.

Item #2: I prefer a work atmosphere where my role(s) is / are specialized / explicit job descriptions.

Item #7: I prefer a work atmosphere where teachers obtain instructional resources through individual competition / negotiation.

Item #9: I am motivated by extrinsic / institutional rewards.

Item #10: I prefer a work atmosphere where hiring decisions are centralized / controlled by administrator(s).

Item #11: I prefer a work atmosphere where class schedules are determined through institutional rules / routines.

Based on averages of responses, six responses were associated with a low grid environment:

Item #3: I prefer a work atmosphere where teachers have full autonomy in textbook selection.

Item #4: I prefer a work atmosphere where individual teachers have full autonomy in generating their educational goals.

Item #5: I prefer a work atmosphere where individual teachers have full autonomy in choosing instructional methods / strategies.

Item #6: I prefer a teaching and learning atmosphere where students are encouraged to participate / take ownership of their education.

Item #8: I prefer a teaching and learning atmosphere where instruction is individualized / personalized for each student.

Item #12: I prefer a work atmosphere where rules and procedures are few / implicit.

Group Questions

Based on total numbers of responses overall, 99 of the responses were in the high group category; 16 responses were in the low group category. Based on averages of responses, all 12 responses were associated with a high group environment:

Item #1: I prefer a work atmosphere where instructional activities are initiated / planned by all educators working collaboratively.

Item #2: I prefer a work atmosphere where socialization and work are incorporated / united activities.

Item #3: I prefer a work atmosphere where intrinsic rewards primarily benefit everyone at the school site.

Item #4: I prefer a work atmosphere where teaching and learning are planned / organized around group goals / interests.

Item #5: I prefer a work atmosphere where performance is evaluated according to group goals, priorities, and criteria.

Item #6: I prefer a work atmosphere where members collaboratively toward goals and objectives.

Item #7: I prefer a work atmosphere where curricular goals are generated collaboratively.

Item #8: I prefer a work atmosphere where communication flows primarily through corporate, formal networks.

Item #9: I prefer a work atmosphere where educators and students have much allegiance / loyalty to the school.

Item #10: I prefer a work atmosphere where responsibilities of teachers and administrators are clear / communal with much accountability.

Item #11: I prefer a work atmosphere where most decisions are made corporately by consensus or group approval.

Item #12: I prefer a work atmosphere where most decisions are made corporately by consensus or group approval.

The questionnaire responses to items used in this survey followed a continuum from 1 to 8, which measured dimensions of grid and group used in this typology. Of the twelve grid items on the *Cultural Preference* questionnaire, six were high grid, and six were low grid, based on averages of scores along the continuum. Of the 12 group items on the *Cultural Preference* questionnaire, all 12 were high group, and none were low group, based on averages of scores along the continuum. Data from the *Cultural Preference* questionnaire was used to generate a grid and group preference for each individual teacher. These categorizations were used to determine the matches for the multiple regression analysis.

The Stage

Grid Considerations

Riverside's main building is designed to separate subject areas and functions throughout the school day. Each wing houses specific subjects, and the architectural design of interior glass walls and no useable exterior windows encourages students to maintain focus on the subjects at hand. The open cafeteria / library area is also well-organized and structured for functionality with tables in rows and an orderly arrangement in the library, despite its rather unconventional round shape.

The school website, which is maintained by students in a computer technology class, is well-organized with multiple layers of links for information.

Typical of a high grid environment in which teachers are grouped into departments whose work is scrutinized by superiors (Harris, 2005), the Riverside faculty is organized into departmental teams, which are required to meet on a regular basis and to turn in records of those meetings to the principal. At times, the principal designates the topic for their meetings; other times they may choose, but topics must promote student achievement. The principal has the duty of designating the departmental chairs, and their responsibilities are clearly spelled out in the board policy book. This hierarchical structure is an additional example of a high grid environment.

Group Considerations

The school motto, "to join efforts with the parents and community in providing a safe productive learning environment which promotes critical thinking across the curriculum while integrating learning technologies, improving self-esteem, and encouraging lifelong learners," is indicative of an emphasis on group considerations

through its focus on joint efforts among the school, parents, and community to create an environment conducive to development of abilities they consider to be desirable for their students.

The high school building itself promotes contact with the community outside of the school. The center section of the school is completely lined with glass walls, which seems to indicate an openness to the surrounding school grounds and community. In fact, this section of the building is often used for community meetings, which is an indication of a strong group environment (Harris, 2005). Immediately inside the glass entrance doors, glass-enclosed trophy cases surround the entrance to the main office hall. These cases exhibit multiple trophies, awards, photos of team members, symbols associated with the fundraising foundation, and a multitude of historical artifacts and photos of former school personnel. This is an indication of the importance of the history of the school throughout the generations and the celebration of the school's awards and achievements. In addition, former graduates are honored yearly, and their pictures are hung prominently in the school auditorium foyer, which further highlights the community support and appreciation for the historical contributions made by Riverside's former graduates.

The signs and posters located throughout the school complex provide another indication of the importance of tradition that is associated with a high group environment. A large sign posted on the front wall of the school proclaims that Riverside's students are college bound and is decorated with the school's symbol. Similar signs are located throughout the school complex, according to the principal. Another sign located in the main office promoted teamwork: "TEAM-Together Everyone Achieves More."

Teachers are organized by departments, but those departments are called teams, and the department heads are referred to as team leaders. Departments are located in close proximity, since the three wings are designated for specific subject areas. Within the halls, friendly competition exists among the teachers to create and maintain the most attractive garden outside their classroom. This, in turn, leads to a friendlier, welcoming overall environment for students and teachers.

The school website provides easy access to information for students, parents, and community members, which promotes communication among all stakeholders of the Riverside educational community. Students' photos are frequently presented both as teams and individual photos; however, most individual photos are also associated with a group, such as a class or club. Even the band members' pictures are grouped according to the instruments they play. The importance of school history and tradition, which are hallmarks of a strong group environment (Harris, 2005) can be readily seen in items posted on the website. Historical data can be found for graduates as far back as 1898, state wrestling champions back to 1931, and for students chosen to represent the school as Big Red Spirit and Miss RHS back to the 1940s and 1950s. A webpage is dedicated to the meaning and history of the school symbol, Big Red.

The high school student handbook contains not only basic information about rules, procedures, and schedules, but also lists the words to a school poem and two school songs. The importance of these documents is a further indication of the importance of history and tradition associated with high group environments.

The Cast

Grid Considerations

The principal has been in that position for 14 years, and The Riverside principal was a state champion wrestler and graduate of Riverside High School. He started with the district as a coach, moved through several administrative positions at the middle and high schools, and has been the head principal for 14 years. Promotion from within the ranks, such as this case, is an example of a corporate environment-high grid and high group (Harris, 2005). In this case, it is an example of high grid, because an insider would understand the rules and regulations that are an important part of the operation of the school.

The principal appreciates and values the input of the assistants and teachers who work for him; however, it was clear that his role was at the top of the school hierarchy and that teachers were expected to fulfill their roles as well. The responsibilities of school principals are clearly spelled out in the board policy book, which states, “He or she reports directly to and is responsible to the Superintendent of Schools. The authority of the building principal is delegated to him or her by the chief school administrator, who has received his or her authority from the Board of Education.” Thus, the chain of command is very clearly spelled out, which is another indication of a high grid environment.

Approximately one-half of the teachers at Riverside have Master’s Degrees; however, they have remained in teaching positions. Teachers are expected to use a website to align their curriculum and analyze test data. They post their curriculum maps by months. Teachers within subject areas have also vertically aligned the curricula for their subjects to cover a wide range of grade levels, including junior college. This high degree of structure of the curriculum is indicative of a high grid environment (Harris,

2005). Elective teachers sometimes feel left out of professional development that is primarily focused on core subject areas, so they are allowed to choose to visit other schools for information and inspiration during professional development time. However, they are required to obtain a signature from the school personnel they are visiting.

When I visited the school, it was close to dismissal time, and students had been testing all day; however, the halls were clean and very quiet. The students I observed in the classes were either working or talking quietly. These observations indicated to me that there is a high degree of structure and expectation for student behavior at Riverside.

Group Considerations

Principal John Rivers has been at Riverside for 14 years, and his assistant principal has been with him for nine. This longevity has led to a degree of stability for the school. In addition, the lengthy tenure and promotion of the principal from within the ranks are indications of the strong group aspect of a corporate environment (Harris, 2005), in which membership is continued for as long as possible. In addition, due to his long history with the school, both professionally and as a student, the principal has a deep understanding of the history and traditions of Riverside. He expressed appreciation for the input of his teachers and their achievements, such as being selected to present at a national level and the increase in their students' test scores.

As another example of a high group environment, the teachers are willing to work together toward common goals, such as increases in state test scores. The teachers and principal are quite proud of the fact that Riverside had the highest test scores in its county last year. In addition, one teacher developed expertise in using a laser engraver and has

created name tags and desk signs for all the staff, rather than several independent projects, a further sign of strong group considerations.

The principal sees the goal of professional development in terms of its benefits to teachers. In fact, he explained that he feels that the most important aspect of professional development is for teachers to "get something out of it that is relevant to what they're doing," and he recognizes that it needs to be interesting and something to which the teachers will be receptive. According to the principal, teachers sometimes ask for motivational speakers for professional development to "boost them up a little bit;" however, these requests are usually denied because of state mandates and the group goals of increasing student achievement. This is a further indication of a high group environment in which individual wishes are put aside to meet group goals.

The Riverside High School website provided an insight into the high group consideration of the importance of student input into the school community. Students are allowed to be in charge of the website, and it displayed a number of pictures of students participating in a variety of activities of the school. Even though individual achievement is recognized, often with personal pictures, the individuals are still most often associated with the group they were representing. Some of the students' pictures were taken in the backyard of a local home, which indicates the high group importance of connections with the community.

Enrollment has remained fairly steady among the four classes, which indicated to me that the group as a whole advanced, without a specific time in students' high school careers where there was a higher level of dropping out.

The Plot

Grid Considerations

Professional development at Riverside is limited by governmental guidelines and No Child Left Behind. The principal explained that they must do the things specified by the state, rather than certain topics requested by the teachers, such as motivational speakers. Riverside has dedicated their professional development to providing teachers with tools to reach state standards and to increase students' test scores. Increasing those scores is a strong focus of their professional development, and topics generally target only those subjects that are tested. These efforts to meet mandates and expectations imposed from higher educational offices within the state are a further indication of a high grid environment.

Departments are required to meet weekly in Professional Learning Communities (PLCs), where they are required to keep records and turn in signed worksheets to the principal. Discussion topics are usually specified, such as topics assigned by the principal, goals for the upcoming year, or test scores. Breaking down test scores and looking at them seem to be frequent topics for their meetings. This weekly departmental structure, accountability to the principal, and assignment of discussion topics provide further indications of a high grid environment.

Another popular topic of professional development at Riverside involves vertical alignment of curriculum from middle school, through high school, and on to early college courses. This alignment provides even more structure to what, how, and when topics within subjects are taught.

Group Considerations

Professional development at Riverside is a collaboration within the entire district; all schools participate in the same presentation for their general meetings. Professional development occurs throughout the year in their weekly PLC meetings involving departmental teams working toward common goals. These types of meetings are indicative of a high group environment, in which the goal of group interaction is to achieve goals and perpetuate life of the entire school, rather than to pursue individual interests (Harris, 2005).

The Time

Grid Considerations

The school year for Riverside is carefully structured into four grading periods, or blocks, with four 85-minute class periods per day. Although this schedule has worked very well for them, the principal would like to see the teachers have more time with their students in courses that are tested. They have, however, restructured their blocks to allow for Algebra I to be a year-long class to help meet the goal of increased test scores in that subject. Apparently, the strategy has worked; 97% of their students scored at the proficient level in Algebra I last year. The fact that they were willing to change the master schedule in an effort to increase tests scores is a further indication of high grid. Class schedules are changed on Fridays to allow students with no discipline problems, tardies, or missed work to leave campus early. The goal of this program is to decrease these negative student behaviors, and the principal felt it had been successful. The overall goal-directed structure of the school day and year is an example of a high grid environment.

District professional development days are designated at the beginning of the year and twice during the school year in addition to the weekly PLC meetings at the high school.

Group Considerations

The changed Friday schedule allows students to participate an advisory period to discuss different non-academic topics, such as Character First. Fifteen students are assigned to one teacher who will stay with them throughout their four years in high school, so each student will know an adult to go to in case they need help. Providing students with the opportunity to be part of one of these little "families" is an indication of a high group environment in which collective relationships are valued (Harris, 2005).

Professional Development Strategies and Results

Teachers at Riverside are allowed input through surveys; however the decision for topics of professional development is mostly made by district administrators and principals and involves all teachers in the district for large group training. State mandates and local district goals in terms of student test scores have a strong influence on the topics chosen.

Throughout the year, teachers at Riverside High School participate in weekly small group PLC meetings, focusing on topics assigned by the principal or school goals, usually involving student test scores or curriculum.

The professional development strategies used at Riverside most closely resemble those recommended for a Bureaucratic (High Grid, Low Group) environment, based on Harris' (2005) descriptions of recommended professional development strategies for school cultures. However, it is noted that Riverside appears to be a Corporate (High Grid,

High Group) culture. A complete listing of recommended strategies for all four cultures may be found in Table 2 (p. 14). The Bureaucratic professional strategies that I found to be most apparent at Riverside were the following:

- Preliminary needs assessment, planning, and recommendations to principal by committee (recommendations are made through a survey of all teachers)
- Principal takes major role in process
- Activities enhance and protect teachers' roles and responsibilities and correspond to teachers' specialties
- External state or national standards help guide activities.

Most of the professional development at Riverside High School is focused on increasing test scores in the core academic areas and aligning the curriculum, which in turn will insure that the standards covered on the state tests are taught. Based on students' End-of-Instruction tests scores for 2007-2008, these strategies are working, with a gain of 20% in the number of students proficient in English II and a score of 97% proficient in Algebra I, the highest score in Riverside's county. All testing benchmarks for all student groups were met, and the district Academic Performance Index (API) score was above the state average for regular education students.

Summary

In summary, Riverside High School has a structured environment with a strongly centralized administration. Expectations are well-defined at all levels of the school system, from student to administration. Faculty and administration are very focused on common goals, such as student test scores and curriculum alignment. Professional

development topics are geared toward meeting state requirements and both school and district goals. Therefore, Riverside's culture falls into the High Grid category.

At the same time, Riverside is a very group-oriented environment. School history and traditions play an important part in current daily school life, and evidence of school pride can be seen throughout the campus. The school is also strongly connected to the local community through the sharing of facilities and efforts toward communication. Year-long weekly PLC meetings allow departments to continue professional development in small groups and to work together toward school goals. These observations are indicative of a High Group environment.

Based on responses to the *Cultural Awareness Tool* and further investigation and observation, Riverside High School appears to be in a Corporate (High Grid, High Group) school culture. However, their professional development strategies most closely resemble those of a Bureaucratic culture. Therefore, a mismatch between the school culture and its professional development program implementation is evident.

Furthermore, of the Riverside teachers who responded to the *Cultural Preference Tool*, 10% prefer an Individualist culture, 30% prefer a Collectivist culture, and 60% prefer a Corporate culture. Since Riverside's professional development strategies are best suited for a Bureaucratic culture, there are no matches between teachers' preferred culture and the professional development strategies at the school. The average of teachers' overall satisfaction was 4.8, slightly above an average score of 4 on a scale of 1 to 8. However, it is noted that since Riverside represents an overall Corporate culture, 60% of the teachers there are working in the type of culture they prefer. This could be a factor in the academic success they experienced last year, as evidenced by the increase in

their *End of Instruction* test scores and high API score. This relationship could be an area for further study.

Figure 3 illustrates the grid and group typology of specific characteristics of Riverside High School. Figure 5 illustrates the same typology for the implementation of professional development strategies at Riverside.

Figure 3. Riverside High School grid and group typology for school environment.

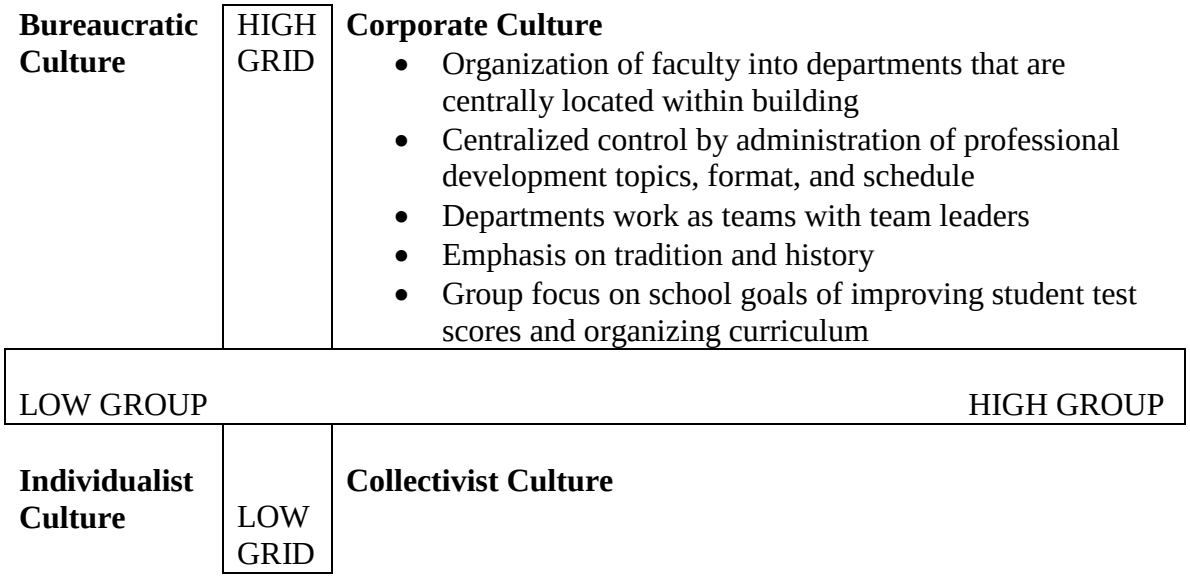
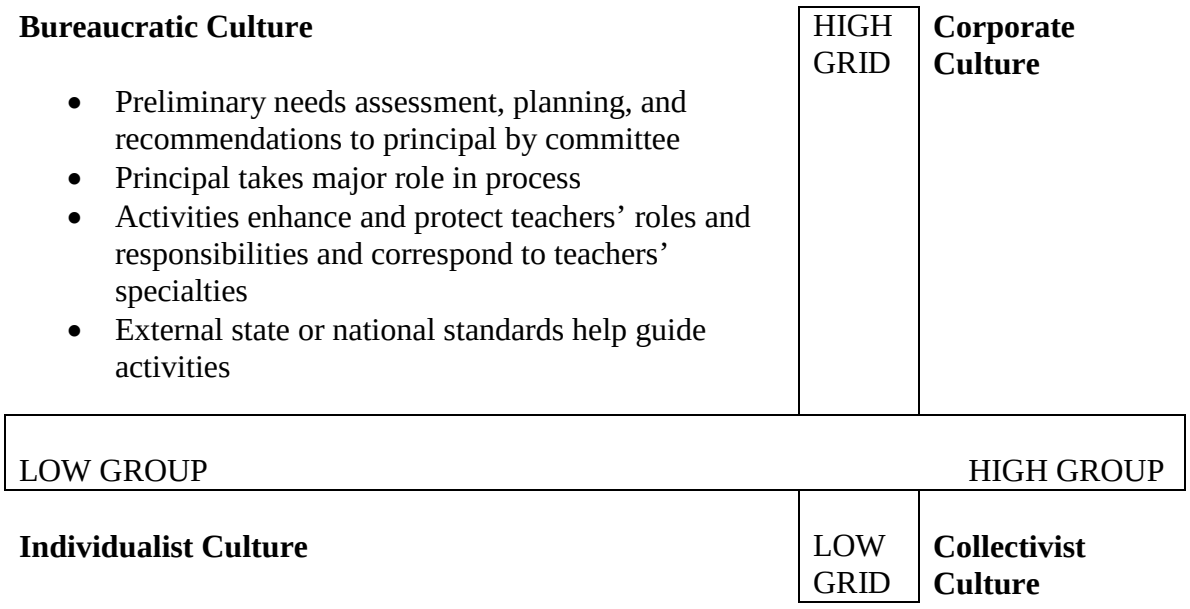


Figure 4. Riverside High School professional development strategies associated with characteristics of a particular grid and group category.



Lakefront High School (Corporate: High Grid, High Group)

Cultural Awareness Questionnaire Results

Forty-six percent of Lakefront's 79 faculty members responded to the cultural awareness questionnaire. Teachers were directly contacted via email explaining the study and asking them to follow the link to take the online survey or to request a paper copy.

Grid Questions

Based on total numbers of responses overall, 248 responses were in the high grid category; 127 responses were in the low grid category. The responses most closely associated with a high grid environment were:

Item #1: Authority structures are centralized.

Item #2: Job responsibilities are well defined.

Item #3: Individual teachers have no autonomy in textbook selection.

Item #4: Individual teachers have little autonomy in generating their educational goals.

Item #7: Teachers obtain instructional resources through administrative allocation.

Item #8: Instruction is not personalized for each student.

Item #10: Hiring decisions are made without teacher input.

Item #11: Class schedules are determined without teacher input.

Item #12: Rules and procedures are numerous.

Three responses were associated with a low grid environment:

Item #5: Individual teachers have full autonomy in choosing instructional methods/strategies.

Item #6: Students are encouraged to participate / take ownership of their education.

Item #9: Individual teachers are motivated by intrinsic / self-defined interests.

Group Questions

Based on total numbers of responses overall, 256 responses were in the high group category; 105 responses were in the low group category. The responses most closely associated with a high group environment were:

Item #1: Chain of command is all educators working collaboratively.

Item #2: Educators' socialization and work are incorporated / united activities.

Item #4: Teaching and learning are planned / organized around group goals/ interests.

Item #6: Teachers work collaboratively toward goals and objectives.

Item #7: Curricular goals are generated collaboratively.

Item #8: Communication flows primarily through corporate, formal networks.

Item #9: Instructional resources are controlled / owned collaboratively.

Item #10: People hold much allegiance/loyalty to the school.

Item #11: Responsibilities of teachers and administrators are clear / communal with much accountability.

Two responses were closely associated a low group environment:

Item #3: Extrinsic rewards primarily benefit the individual.

Item #12: Most decisions are made privately by factions or independent verdict.

The questionnaire responses to items used in this survey followed a continuum from 1 to 8, which measured dimensions of grid and group used in this typology. Of the

twelve grid items on the *Cultural Awareness* questionnaire, nine were high grid, and three were low grid based on averages of scores along the continuum. Out of the twelve group items on the *Cultural Awareness* questionnaire, ten were high group, and two were low group, based on averages of scores along the continuum. Therefore, based on the results of the *Cultural Awareness* questionnaire, the initial grid and group category for Lakefront High School was Corporate (High grid, High group). Subsequent data gathered also supported this categorization.

Cultural Preference Questionnaire Results

Thirty-eight percent of Lakefront's 79 faculty members chose to respond to the C*ultural Preference* questionnaire Teachers were directly contacted via email explaining the study and asking them to follow the link to take the online survey or to request a paper copy.

Grid Questions

Based on total numbers of responses overall, 122 responses were in the high grid category; 167 responses were in the low grid category. Based on averages of responses, three items were associated with a high grid environment:

Item #1: I prefer a work atmosphere where authority structures are centralized / hierarchical.

Item #2: I prefer a work atmosphere where my role(s) is/are specialized / explicit job descriptions.

Item #7: I prefer a work atmosphere where teachers obtain instructional resources through individual competition / negotiation.

Based on averages of responses, eight responses were associated with a low grid environment:

Item #3: I prefer a work atmosphere where teachers have full autonomy in textbook selection.

Item #4: I prefer a work atmosphere where individual teachers have full autonomy in generating their educational goals.

Item #5: I prefer a work atmosphere where individual teachers have full autonomy in choosing instructional methods / strategies.

Item #6: I prefer a teaching and learning atmosphere where students are encouraged to participate / take ownership of their education.

Item #8: I prefer a teaching and learning atmosphere where instruction is individualized / personalized for each student.

Item #9: I am motivated by intrinsic / self-defined interests.

Item #11: I prefer a work atmosphere where class schedules are determined through individual teacher negotiation.

Item #12: I prefer a work atmosphere where rules and procedures are few / implicit.

Group Questions

Based on total numbers of responses overall, 99 responses were in the high group category; 16 responses were in the low group category. Based on averages of responses, all 12 responses were associated with a high group environment:

Item #1: I prefer a work atmosphere where instructional activities are initiated / planned by all educators working collaboratively.

Item #2: I prefer a work atmosphere where socialization and work are incorporated / united activities.

Item #3: I prefer a work atmosphere where intrinsic rewards primarily benefit everyone at the school site.

Item #4: I prefer a work atmosphere where teaching and learning are planned / organized around group goals / interests.

Item #5: I prefer a work atmosphere where performance is evaluated according to group goals, priorities, and criteria.

Item #6: I prefer a work atmosphere where members collaboratively toward goals and objectives.

Item #7: I prefer a work atmosphere where curricular goals are generated collaboratively.

Item #8: I prefer a work atmosphere where communication flows primarily through corporate, formal networks.

Item #9: I prefer a work atmosphere where educators and students have much allegiance / loyalty to the school.

Item #10: I prefer a work atmosphere where responsibilities of teachers and administrators are clear / communal with much accountability.

Item #11: I prefer a work atmosphere where most decisions are made corporately by consensus or group approval.

Item #12: I prefer a work atmosphere where most decisions are made corporately by consensus or group approval.

The questionnaire responses to items used in this survey followed a continuum from 1 to 8, which measured dimensions of grid and group used in this typology. Of the twelve grid items on the *Cultural Preference* questionnaire, three were high grid, eight were low grid, and one was in the center of the continuum, based on averages of scores along the continuum. Out of the 12 group items on the *Cultural Preference* questionnaire, all 12 were high group, and none were low group, based on averages of scores along the continuum. Data from the *Cultural Preference* questionnaire was used to generate a grid and group preference for each individual teacher. These categorizations were used to determine the matches for the multiple regression analysis.

The Stage

Grid Considerations

The Lakefront High School complex is comprised of several buildings and sports areas, each with a specific function. The main classroom building obviously has had additions built onto it since the main high school was built in 1928, but the newer additions have retained many of the same architectural features of the original building. Most sections of the building have specific functions in terms of subject areas or use. During passing times, the halls are generally congested, and connected by a maze of stairs. Having a structured and congested physical layout is an indication of a strong grid environment (Harris, 2005).

Lakefront has one head principal and four assistant principals, one assigned to each of the four grades; there is also a counselor for each grade. Each principal and counselor has a separate office within the main office complex. In addition, there are ten secretaries who perform very specific functions. Roles and responsibilities are very well-

defined both within the high school community and according to district policy, which would be expected in a high grid environment.

The faculty at Lakefront is organized by departments according to subject area, which is also associated with a high grid environment (Harris, 2005). Each department has a department head selected by the principal. This person is usually in charge of departmental supplies and organizes the other members in departmental meetings. Several teachers' lounges are scattered throughout the building, but teachers tend to congregate according to their own subject areas in their section of the building. Characteristic of a high grid environment, the activities of each department tend to be isolated from those of the other subject areas; however, identification with each specific department is strong, and the different departments have been described as having their own unique personalities. An exception to this is the ninth grade teachers, who, as part of the "Panther Academy," comprise a multi-disciplinary team with a united focus of helping the younger students to transition successfully.

Group Considerations

Both the Mission and Vision of Lakefront High School use terms of "collaborative" and "community." The superintendent's message explains his view that "The education of children is a cooperative effort of parents, the community and the school district. Historically, these groups have joined forces in [Lakefront] to create one of the best school systems in Oklahoma." Statements such as these that refer to the history of a community partnership with the schools, as well as the invitation for parents and students to provide input for the school system, are all indications of the importance of a high group culture that encompasses the school as well as the community.

Because the town of Lakefront was built around one major industry, which at one time brought a significant amount of money into the city, there is a long history of civic pride. The influence of the early architecture, history, and culture are readily seen in civic and private buildings throughout the city, including the original section of the high school. Even during remodeling, the high school's original carved wood moldings and other decorative elements have remained as a testament to its past history. The hall outside the original main office still displays black and white photographs of past principals, and the central trophy case holds historical trophies and awards. This preservation of historical artifacts helps to carry on the traditions and norms of the school to future generations, which is a hallmark of high group cultures (Harris, 2005). In addition, signs of "Panther Pride" can be seen throughout the school and community and on school memorabilia. The traditional school songs and creed are still an important part of the overall school culture.

Immediately opposite the new entrance to the classroom building, a large mural depicts the front of the original section of the high school. Banners in the hallway celebrate academic achievements and "Panther Pride," both signs of a high degree of identification with the school and its achievements. The trophy case along the side wall displays not only sports-related awards, but also examples of student art work, and awards and memorabilia from other school organizations and activities. Students' school-related achievements are obviously acknowledged and appreciated, but they are presented as part of a class or group, rather than individual recognition, as would be expected in a high group culture. The fact that a former student's artistic photos of areas within the

school is a further indication that group members' contributions to the school as a whole are valued and appreciated.

Subject area classes are generally located in proximity to each other, which allows the teachers in departments to have more frequent contact with each other and helps to develop a strong sense of group within the department. Bonds within departments appear to be stronger than those between different departments, which may be an effect of the high grid aspect of the school.

Technology plays an important part at Lakefront. One of the faculty members is designated as the high school technology coach, and teachers are encouraged to take a wide variety of technology training sessions held throughout the year. Teachers are encouraged to develop their own websites to improve communication with parents and students. Teachers from all grade levels can participate in these training sessions, although they are usually held at the high school. Technology used throughout the district keeps all members of the district educational community connected and informed. A school television network, online access to students' grades, and regular use of emails further increase communication to parents and the community. The close connections facilitated by these activities are associated with a high group environment (Harris, 2005).

The Cast

Grid Considerations

The head principal at Lakefront has been at the school for many years – 17 years as assistant principal, and now four years as head principal. Promotion from within the ranks is an indication of a high grid environment, where insiders would be more familiar

with the roles, regulations, and expectations of the culture (Harris, 2005). Within the last 10 years, Lakefront has had four different head principals. Roles and responsibilities among the head principal and four assistant principals are well-defined and specific, which further indicates a high grid environment. The four assistant principals are generally each assigned to a different class of students and different teachers to evaluate.

The principal at Lakefront has specific aims of implementing strategies that will decrease the drop out rate and help under-supported students to be more successful in school. He relies on his assistant principals to take a large degree of responsibility in student discipline, teacher evaluations, and planning. He also closely follows guidelines passed down from the central administration, which reinforces the hierarchy that is associated with high grid environments.

According to board policy, teachers are expected to demonstrate specific characteristics. These designations are another indication of a high grid culture.

Group Considerations

Having been a teacher himself and having been in administration at Lakefront for 21 years, the principal seems to have a good understanding of the attitudes and thoughts of his faculty. His longevity in an administrative role adds to the stability of the school and contributes to a strong group culture. His main goals for professional development are to help teachers develop strategies to reach under-supported students and to decrease their drop out rate. His attitude, which indicates concern for the teachers and students, and can be seen in his “fish” philosophy, is an important addition to a high group environment.

In terms of professional development, he understands that some of the older teachers feel that they have "seen it all before," but he encourages them to learn new ways of presenting their material, especially using technology. He is concerned with how the presenters are accepted by the faculty and how they get their point across and whether or not the teachers get something they feel they can use in their classrooms. It is important to him for his teachers' professional development to be relevant to them.

Teachers tend to gather with their departmental peers during lunch times. Faculty socialization outside of the school day further strengthens the group bond; however, most social gatherings are among teachers within the same departments.

Among the students, there are strong group designations. There is one group that is very involved in a wide variety of activities. So many students want to be involved in an assortment of electives, sports, foreign language, and advanced placement courses, that creating the master schedule has become a difficult task for the counselors. These students seem to feel a sense of belonging to the group and feel the "Panther Pride." However, there is a second group that is much more disenfranchised. They do not participate in clubs or electives unless they are forced to, and many slip across the street to a city park to smoke during the lunch periods or even the school day. Concerns and efforts toward reducing the drop out rate and increasing support for under-supported students is probably an effort to increase this disenfranchised group's identification with the school and its goals. The existence of in- and out-groups is usually associated with a strong group environment (Harris, 2005).

The Plot

Grid Considerations

Professional development is a highly structured process at Lakefront, and decisions are made at the upper levels of the hierarchy. Teachers have input through a complex needs assessment survey, which does not ask them in what areas they would like to receive professional development, but rather to rank the degree to which they see best teaching practices in operation in their buildings. These survey results are evaluated by central office administrators and principals, who determine the areas in which teachers as a whole need further training. The final decisions about professional development are then made collaboratively between central office administration and the principal, with little further input from the teachers. Usually, the central administration schedules a speaker to address the faculty on specified professional development days. The principal hopes that it will be someone who will be interesting and connect with the teachers, and who will provide them with some practical and relevant strategies they can use in their classrooms. The clearly defined role definitions and hierarchy in decision making are associated with a high grid environment (Harris, 2005).

Bi-monthly PLC meetings for departments are also attended by central office and school-level curriculum directors. Teachers are expected to focus on goals of increasing student proficiency as demonstrated on state tests. This model of hierarchical decision-making and centralized control is an indication of a strong grid environment (Harris, 2005).

The emphasis on technology use could also be seen as a high grid indication, since most software, hardware, and websites require a series of sequential steps to be

used. Teachers usually require training in these steps to be able to access the technology and become comfortable with its use.

Group Considerations

The faculty meets by departments at least two times a month in PLCs. During these meetings, they work on common goals, such as writing common assessments, examining assessment data, and aligning curriculum. They may also discuss strategies that will help to meet their goals. Group progress differs from one department to another; however, departments seem to have their own norms and goals specific to their subject and department, which creates cohesiveness within each department.

The Time

Grid Considerations

Days for professional development are planned and scheduled on the school calendar during the preceding year for the district as a whole. Each site has some flexibility for scheduling content within the designated days, but they are bound by the days determined for professional development in the school calendar for the year. Close adherence to a calendar and schedule are marks of a high grid environment (Harris, 2005).

The current trimester schedule for Lakefront High School is complex and requires careful organization and structure, especially in carving out time for PLCs to meet. Teachers generally feel they do not have enough time to accomplish their goals in these meetings; however, attempts of departments to meet at different times have met with little success.

Group Considerations

Lakefront will return to a semester schedule next year. One reason for making this change is to allow teachers to spend more time with the same group of students and to build stronger relationships. Another reason for the change is to allow PLCs to have longer time periods to meet together. Both of these criteria demonstrate a desire on the part of Lakefront faculty to increase the strength of relational bonds with each other and with their students.

Professional Development Strategies and Results

The Lakefront school district puts a great deal of emphasis on professional development. The district's definition and goal of professional development is written two places in the board policy and guides professional development strategies and content for all the schools. This top-down plan is indicative of a high grid culture.

Teachers at Riverside are allowed input only through the needs assessment. Beyond that, the direction for professional development is determined by administration at the school and district level, according to their designated role within the hierarchy. State mandates and local district goals in terms of student test scores have a strong influence on the topics chosen. Yearly professional development days are almost always spent with a speaker in a traditional training setting.

Teachers at Lakefront High School also participate in departmental PLC meetings twice a month, focusing on topics assigned by the curriculum administrators. Specific topics to be covered are aimed at increasing student scores on state mandated exams; teachers are allowed little flexibility in the topics of their PLCs. The topics do differ in the amount of progress they have made toward the goals.

Most of the professional development at Lakefront High School is focused on providing support to under-supported students, increasing test scores in the core academic areas, and increasing teachers' use of technology. Based on students' End-of-Instruction tests scores for 2007-2008, these strategies are meeting with moderate success, with a gain of 2% in the number of students proficient in English II but a score of 89% proficient in Algebra I, an increase of 15%. All testing benchmarks for all student groups were met, and the district Academic Performance Index (API) score was slightly below the state average for regular education students. This year's drop out data has not been completed to see whether efforts to support students and to increase their motivation and engagement are meeting with success. Some teachers have reported increased engagement of their students due to the use of technology in their classrooms; however, it is too early to determine whether these effects will be seen on this year's End-of-Instruction tests.

The professional development strategies used at Lakefront most closely resemble those recommended for a Bureaucratic (High Grid, Low Group) environment, based on Harris' (2005) descriptions of recommended professional development strategies for school cultures. However, it is noted that Lakefront appears to be a Corporate (High Grid, High Group) culture. A complete listing of recommended strategies for all four cultures may be found in Table 2 (p. 14). The Bureaucratic professional strategies that I found to be most apparent at Lakefront were the following:

- Preliminary needs assessment, planning, and recommendations to principal by committee (recommendations are made through a survey of all teachers and go to the district administration)

- Principal takes major role in process
- Activities enhance and protect teachers' roles and responsibilities and correspond to teachers' specialties
- External state or national standards help guide activities.

Summary

In summary, Lakefront is a structured environment with a strongly centralized administration. Expectations are well-defined at administrative, faculty, and support personnel levels. Faculty and administration are very focused on common goals, such as student test scores, common assessments, and curriculum alignment. Professional development topics are geared toward increasing tests scores and keeping students involved in school. Therefore, Lakefront's culture falls into the High Grid category.

At the same time, Lakefront is a very group-oriented environment. School and community history and traditions play an important part in daily school life, and evidence of school pride can be seen throughout the school complex. The school is also strongly connected to the local community through dissemination of information through technology. Bi-monthly PLC meetings help departments continue professional development in small groups and to work together toward school goals. These observations are indicative of a High Group environment.

Based on responses to the *Cultural Awareness Tool* and further investigation and observation, Lakefront High School appears to be in a Corporate (High Grid, High Group) school culture. However, their professional development strategies most closely resemble those of a Bureaucratic environment. Therefore, a mismatch between the school culture and its professional development program implementation is evident.

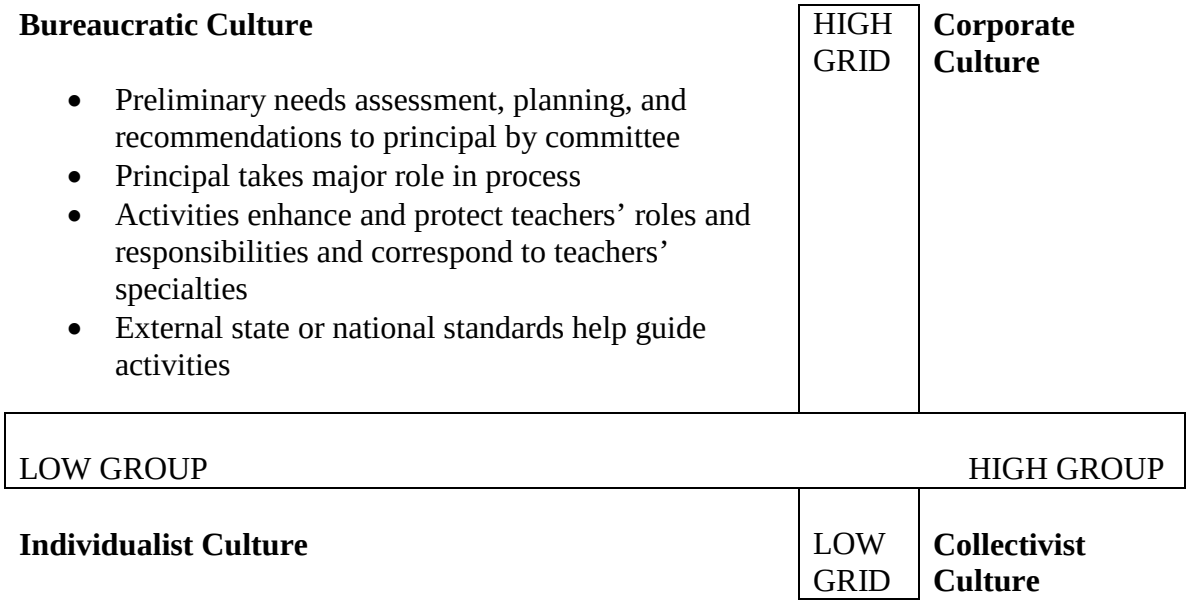
Furthermore, of the Lakefront teachers who responded to the *Cultural Preference Tool*, 63% prefer a Collectivist culture, and 37% prefer a Corporate culture. Since Lakefront's professional development strategies are best suited for a Bureaucratic culture, there are no matches between teachers' preferred culture and the professional development strategies at the school. The average of teachers' overall satisfaction was 4.8, slightly above an average score of 4 on a scale of 1 to 8. It is also noted that since Lakefront represents an overall Corporate culture, 37% of the teachers there are working in the type of culture they prefer, while the majority are not.

Figure 5 illustrates the grid and group typology of specific characteristics of Lakefront High School. Figure 6 illustrates the typology for the implementation of professional development strategies used at Lakefront.

Figure 5. Lakefront High School grid and group typology for school environment.

Bureaucratic Culture	HIGH GRID	**Corporate Culture** • Organization of faculty into departments that are centrally located within building • Centralized control by administration of professional development topics, format, and schedule • Emphasis on tradition and history • Group focus on school goals of improving student test scores, decreasing drop out rate, and helping under-supported students
LOW GROUP		HIGH GROUP
Individualist Culture	LOW GRID	**Collectivist Culture**

Figure 6. Lakefront High School professional development strategies associated with characteristics of a particular grid and group category.



Hillcrest High School (Bureaucratic: High Grid, Low Group)

Cultural Awareness Questionnaire Results

Fourteen percent of Hillcrest's 74 faculty members responded to the cultural awareness questionnaire. At my request, the principal forwarded an email from me to his teachers, explaining the study and asking them to follow the link to take the online survey or to request a paper copy. Additionally, I gave the principal paper copies of letters to teachers requesting their participation on the online survey and asked her to hand them out to teachers; however, no further responses were received.

Grid Questions

Based on total numbers of responses overall, 69 responses were in the high grid category; 32 responses were in the low grid category. The responses most closely associated with a high grid environment were:

Item #1: Authority structures are centralized.

Item #2: Job responsibilities are well defined.

Item #3: Individual teachers have no autonomy in textbook selection.

Item #4: Individual teachers have little autonomy in generating their educational goals.

Item #7: Teachers obtain instructional resources through administrative allocation.

Item #8: Instruction is not personalized for each student.

Item #10: Hiring decisions are made without teacher input.

Item #11: Class schedules are determined without teacher input.

Item #12: Rules and procedures are numerous.

Two responses were associated with a low grid environment:

Item #5: Individual teachers have full autonomy in choosing instructional methods/strategies.

Item #9: Individual teachers are motivated by intrinsic/self-defined interests.

Group Questions

Based on total numbers of responses overall, 48 responses were in the high group category; 56 responses were in the low group category. The responses most closely associated with a high group environment were:

Item #4: Teaching and learning are planned/organized around group goals/interests.

Item #5: Teaching performance is evaluated according to group goals, priorities, and criteria.

Item #7: Curricular goals are generated collaboratively.

Item #9: Instructional resources are controlled / owned collaboratively.

Item #10: People hold much allegiance/loyalty to the school.

Seven responses were associated with a low group environment:

Item #1: Chain of command is individual teachers working alone.

Item #2: Educators' socialization and work are separate/dichotomous activities.

Item #3: Extrinsic rewards primarily benefit the individual.

Item #6: Teachers work in isolation toward goals and objectives.

Item #8: Communication flows primarily through individual, informal networks.

Item #11: Responsibilities of teachers and administrators are ambiguous / fragmented with no accountability.

Item #12: Most decisions are made privately by factions or independent verdict.

The questionnaire responses to items used in this survey followed a continuum from 1 to 8, which measured dimensions of grid and group used in this typology. Of the twelve grid items on the *Cultural Awareness* questionnaire, nine were high grid, two were low grid, and one was in the center based on averages of scores along the continuum. Out of the twelve group items on the *Cultural Awareness* questionnaire, five were high group, and seven were low group based on averages of scores along the continuum. Therefore, based on the results of the *Cultural Awareness* questionnaire, the initial grid and group category for Hillcrest High School was Bureaucratic (High grid, Low group). Subsequent data gathered also supported this categorization.

Cultural Preference Questionnaire Results

Grid Questions

Based on total numbers of responses overall, 13 responses were in the high grid category; 28 responses were in the low grid category. The response most closely associated with a high grid environment was:

Item #2: I prefer a work atmosphere where my role(s) is/are specialized / explicit job descriptions.

Eleven responses were associated with a low grid environment:

Item #1: I prefer a work atmosphere where authority structures are decentralized / non-hierarchical.

Item #3: I prefer a work atmosphere where teachers have full autonomy in textbook selection.

Item #4: I prefer a work atmosphere where individual teachers have full autonomy in generating their educational goals.

Item #5: I prefer a work atmosphere where individual teachers have full autonomy in choosing instructional methods / strategies.

Item #6: I prefer a teaching and learning atmosphere where students are encouraged to participate / take ownership of their education.

Item #7: I prefer a work atmosphere where teachers obtain instructional resources through individual competition / negotiation.

Item #8: I prefer a teaching and learning atmosphere where instruction is individualized / personalized for each student.

Item #9: I am motivated by intrinsic / self-defined interests.

Item#10: I prefer a work atmosphere where hiring decisions are decentralized / controlled by teachers.

Item #11: I prefer a work atmosphere where class schedules are determined through individual teacher negotiation.

Item #12: I prefer a work atmosphere where rules and procedures are few / implicit.

Group Questions

Based on total numbers of responses overall, 40 responses were in the high group category; 4 responses were in the low group category. The responses most closely associated with a high group environment were:

Item #1: I prefer a work atmosphere where instructional activities are initiated / planned by all educators working collaboratively.

Item #2: I prefer a work atmosphere where socialization and work are incorporated / united activities.

Item #3: I prefer a work atmosphere where intrinsic rewards primarily benefit everyone at the school site.

Item #4: I prefer a work atmosphere where teaching and learning are planned / organized around group goals / interests.

Item #6: I prefer a work atmosphere where members collaboratively toward goals and objectives.

Item #7: I prefer a work atmosphere where curricular goals are generated collaboratively.

Item #8: I prefer a work atmosphere where communication flows primarily through corporate, formal networks.

Item #9: I prefer a work atmosphere where educators and students have much allegiance / loyalty to the school.

Item #10: I prefer a work atmosphere where responsibilities of teachers and administrators are clear / communal with much accountability.

Item #11: I prefer a work atmosphere where most decisions are made corporately by consensus or group approval.

Item #12: I prefer a work atmosphere where most decisions are made corporately by consensus or group approval.

Only one response was most closely associated with a low group environment:

Item #5: I prefer a work atmosphere where performance is evaluated according to individual teacher goals, priorities, and criteria.

The questionnaire responses to items used in this survey followed a continuum from 1 to 8, which measured dimensions of grid and group used in this typology. Of the twelve grid items on the *Cultural Preference* questionnaire, one was high grid, and eleven were low grid, based on averages of scores along the continuum. Out of the 12 group items on the *Cultural Preference* questionnaire, eleven were high group, and one was low group, based on averages of scores along the continuum. Data from the *Cultural Preference* questionnaire was used to generate a grid and group preference for each individual teacher. These categorizations were used to determine the matches for the multiple regression analysis.

The Stage

Grid Considerations

Hillcrest High School seems to be suffering from somewhat of an identity crisis. People have traditionally viewed it mostly as a small school with small town values; however, since they are located in a growing community, the school in turn has grown in enrollment, putting them in a class with schools that are accustomed to having a large-school identity. Aspects of both high and low grid, as well as high and low group are evident in the school. Overall, however, the school shows mainly evidences of being a high grid, low group culture.

Hillcrest High School serves only tenth through twelfth grades, although the junior high with the eighth and ninth is located just next door and shares some facilities. This division serves to separate younger from older students, and apparently also separates teachers who have a more independent, secondary focus from the junior high teachers, who more closely resemble elementary teachers in terms of social organization.

Displays in the office and hall area are very structured. Rather than the usual mix of sports, academic and elective exhibits in the trophy case, the three separate windows are designated for the classes: tenth, eleventh, and twelfth. Within the main office, large shadow boxes containing uniforms or jackets from four separate school activities hang on the wall. Classrooms are connected by long intersecting halls.

Teachers are organized by departments, and department heads meet with the principal monthly. A professional development committee composed of faculty members from several disciplines has the responsibility for planning and recommending topics for professional development. District level administrators have the responsibility of working with the committee to design professional development for the school. So far, that responsibility has not been given to the principal or assistant principals.

Group Considerations

Although the Hillcrest High School building is easy to find, with signage that is easy to read from a distance and a welcoming courtyard, the actual entrance hall is much less welcoming. The first sign one sees through the entrance warns visitors that they must check in at the main office; however, once inside the front doors, it is not immediately apparent where the main office is located. The entrance hall is small and decorated only by a few student pictures and a black direction board that is similar to those found in medical or business offices.

The main office is located off the small entrance hall. The furnishings are comfortable, but very low-key in terms of color and decoration. Two secretaries sit behind tall wooden counters. Overall, the atmosphere is more business-like than

welcoming. Stained ceiling tiles and the low-key gray décor give an impression of being a low group environment.

The halls, in contrast to the office, are very bright, well lit, and wide. I was not able to observe hallway traffic when students were in the halls; however, I imagine they would not be very congested due to their size.

The school website states that the school is “Built on Tradition”; however, there is little tradition presented on the website. There is no history of the school, nor are mottos or emblems listed. Apparently, to access most of the school information, visitors must be registered as students or parents with usernames and passwords. These factors are all indications of a low group culture.

The Cast

Grid Considerations

The principal at Hillcrest has been an administrator at that school for 10 years-five as an assistant principal and five as the head principal. She is the second principal at the school in the past 10 years. She is a very friendly person, and she does not want to be seen by her faculty as a micro-manager, which indicates a degree of low-grid culture, although based on questionnaire results and other observations, Hillcrest functions as a high grid school. This is another example of the school’s dual identity, as described by the principal. She also has a very hands-off approach to professional development, which has historically been her role. In the past, administrators have just walked around visiting various sessions and saying “hi and welcome back.”

Teachers’ roles in the schools are described in board policy in terms of functionality, rather than personal qualities. In keeping with a high grid environment,

high school teachers are organized into departments by subject area and they prefer professional development that is targeted to their subject. When more than one topic is offered, teachers choose which sessions they want to attend. Administrators do not know where their teachers are going for professional development, which could be seen as a sign of low grid or another indication of strict adherence to role expectations, which is associated with high grid. The new assistant superintendent is seeking to change this laissez faire approach on the part of the principals and wants them to assume more of the responsibility of organizing and overseeing professional development. If implemented, these changes should increase the grid considerations for the school environment by adding to the power and authority of the principal.

Scheduling of professional development follows a prescribed hierarchy. Teachers submit their desires to a professional development committee composed of other faculty. The principal gives the head of this committee time at regularly scheduled faculty meetings to speak to the teachers about their plans. This committee then reports directly to the assistant superintendent, who has the responsibility of planning with the committee and scheduling speakers. The principal has no responsibility or input into this process, and she never meets with the faculty committee. In the past, the professional development committee and assistant superintendent worked closely as a separate faction through meetings held at the assistant superintendent's home a few blocks from the school.

Group Considerations

The longevity of the principal at the school should add to a sense of stability, which is characteristic of high group environments (Harris, 2005). However, she views

the secondary teachers as being more isolated and independent than the elementary or junior high faculty. While the junior high teachers are motivated by group fun-type activities and gimmicks, the high school teachers want to get what they need from professional development and get out. They do not want to participate in activities that waste their time or in team-building activities. The principal describes them as being "loners," "a little more critical and serious by nature, and "data-driven." They expect substance in their professional development presentations, and they want the content to be relevant to their particular subject area. These attitudes and descriptions are indicative of a low group environment.

The teachers enjoy meeting with same-subject teachers from the junior high to discuss new ideas, methods, and problem solving strategies, but even then, certain teachers feel isolated if they are they only teacher for a particular level of a subject, such as advanced placement courses. Due to their smaller size in relation to other schools in their class, they have only one teacher per subject for advanced placement classes, and, according to the principal, those teachers feel they do not have anyone they can relate to on a professional level.

Students at Hillcrest are influenced by opposing cultures. Several schools from very small surrounding communities feed into Hillcrest, and those students feel that this school is very large. Local students feel that their high school is very small, and most of them live within a few miles of a major metropolitan area, with the cultural opportunities and expectations associated with big cities. These cultural conflicts between small town–big city contribute to a weaker group environment among the student body.

The Plot

Grid Considerations

Professional development is addressed on several pages of the Hillcrest district website. According to the website, most staff development activities are submitted, planned and presented by local staff. Other website links describe in detail a complex chart of needs and goals, a system of required points, and roles of the professional development committee and the school/site committee. Although much of the responsibility for professional development lies in the hands of faculty, rather than administrators, the highly defined responsibilities of those committees indicate a high grid environment where role expectations, rules, and procedures are clearly defined (Harris, 2005).

A staff development day is held at the beginning of each year; teachers may choose which sessions they want to attend. Other opportunities for professional development are offered during the summer; however, teachers are required to accumulate a specified number of points (hours) within the year. Some sessions are presented by outside speakers who are scheduled and paid for at the district administration level.

The principal's role in professional development is limited to giving the faculty staff development representative an opportunity to address faculty meetings and to solicit their input on professional development needs. Those needs are submitted to her for a signature, but the actual decision making and oversight is done by district administrators working with the faculty committees.

The carefully circumscribed path from teachers to district administrators indicates a high grid environment.

Group Considerations

Although teachers have a great deal of collective input into professional development needs, the main district goals for professional development-increasing student test scores, closing achievement gaps among student subgroups, increasing graduation rates, and decreasing college remediation rates-are more focused on individual student's performance. Teachers feel the increased pressure for their students to perform well on the state tests, since failure to do so may now affect their students' ability to receive a high school diploma. Individual teachers are held accountable for the success of students in their classes, and they are taking that responsibility quite seriously. Core curriculum courses now take priority. Pressure is placed on teachers individually, rather than as a group, which contributes to a low group environment. Teachers are required to accumulate some of their professional development points from sessions outside of the school system, thus fostering individual interests and meeting individual, rather than group needs. A focus on meeting individual needs and interests, rather than those of the group as a whole, is a further indication of a low group culture (Harris, 2005).

A recent topic of professional development was training in use of a software program that allows teachers to access student test scores throughout their school careers. They can pinpoint an individual student's strengths and weakness that may have been indicated several years prior. The focus of this training is on individual teachers working with individual students, rather than larger group dynamics, which tends to reinforce a low group culture.

Teachers started meeting in PLCs this year, after participating in training last summer and early this year to prepare them to work successfully in these groups. Meetings are held by departments with junior and senior high teachers to discuss benchmarks, assessments, new teaching methods, and problem solving. Since the meetings are limited by subject area, but not school site, vertical curriculum alignment does occur during those times. Topics are chosen by the groups. The principal is really not aware of what they discuss; therefore, there is not a sense of cohesiveness or direction among all the departments as to their topics. Each department appears to "do its own thing" without much oversight from the administrators. This lack of a common theme or direction is a further indication of a low group culture.

The Time

Grid Considerations

Hillcrest is organized according to a trimester schedule, with three 12-week grading periods per school year; however, the district is considering returning to a traditional semester schedule. One of the main reasons for making this change is to eliminate one of the state testing windows; schools in a trimester schedule are required to have two sessions for state tests, rather than one at the end of the year for semester schools.

A day for professional development is set aside at the beginning of the school year and again once in January. The first day appears to be more of a "welcome back from summer," rather than a highly directed session. Having specific days dedicated for professional development is associated with a high grid culture.

Group Considerations

The current trimester schedule creates a problem for the PLC meetings because it is difficult to find enough time in the school day for the groups to meet. If they change to a different schedule, they plan to include a consistent time for the PLCs to meet.

Teachers are allowed to schedule their own individual professional development to meet the required alternative points, which would indicate a lower group culture.

Professional Development Strategies and Results

Teachers at Hillcrest have a great deal of input to professional development. They make direct recommendations to a staff development representative, who meets with other faculty committee members and the assistant superintendent. Teachers want relevant, goals-directed, topics that meet their personal and departmental needs. Improving student test scores and increasing student performance are strong motivators for the teachers; they feel a personal responsibility to help students achieve and want professional development strategies that will help them accomplish those goals. Teachers may choose from a variety of topics presented on the beginning of school professional development day. Speakers are brought in from outside as well as within the district.

Most of the professional development at Hillcrest High School is focused on increasing test scores in the core academic areas to help students meet new graduation requirements based on passing a certain number of the state tests. Based on students' End-of-Instruction tests scores for 2007-2008, these strategies may not be working as well as was hoped, since students' scores showed a loss of 3% in the number of students proficient in both English II and Algebra I. Scores were 72% and 75%, respectively. However, all testing benchmarks for all student groups were met, and the district Academic

Performance Index (API) score was slightly below the state average for regular education students.

The professional development strategies used at Hillcrest most closely resemble those recommended for a Collectivist (Low Grid, Low Group) environment, based on Harris' (2005) descriptions of recommended professional development strategies for school cultures. However, it is noted that Hillcrest appears to be a Bureaucratic (High Grid, Low Group) culture, which is the direct opposite. A complete listing of recommended strategies for all four cultures may be found in Table 2 (p. 14). The Collectivist professional strategies that I found to be most apparent at Hillcrest were the following:

- Focus on both individual and group needs
- Teachers seen as a team of equally important individuals
- Equitable and pertinent content
- Planning by a collective group of teachers
- Teaching and learning seen in the overall context of local school community, teacher's individual needs and experiences, and students' educational needs
- Multiple learning opportunities within authentic pertinent activities such as problem solving, inquiry, study groups, and mentoring of new teachers
- Includes reciprocal processes, leadership-team development, and collaborative planning.

Summary

In summary, Hillcrest is a structured environment with specific expectations for various roles within the community. Expectations for professional development are

explicitly defined at the district level. Roles and responsibilities for teachers, faculty leaders, and administrators are assigned and followed. However, within this structure, teachers have freedom to offer input and to choose which professional development sessions they will attend, without a great deal of oversight. Professional development topics are geared toward increasing tests scores and keeping students involved in school. Although there are some indications of low grid, the data generally indicate that Hillcrest's culture falls into the High Grid category.

Although there are both high and low group indicators due in part to a big school-little school dichotomy, Hillcrest is basically a low group environment. The school body is a mixture of local students and students from several feeder schools located in small towns in the surrounding area. This mixed grouping is complicated by the fact that the city is located less than 10 miles from a major metropolitan area, which impacts the local families, their values, and the local economy. Teachers tend to organize by departments; some feel isolated because they are the only teacher for a particular subject. The teachers are also independent and prefer not to have their time wasted by team-building activities. Individually, they feel pressure for their students to be successful on high-stakes state tests. PLC meetings are a new innovation at Hillcrest and are helping departments continue professional development in small groups, but their work is focused on departmental goals, rather than overall school goals. These observations are indicative of a Low Group environment.

Based on responses to the *Cultural Awareness Tool* and further investigation and observation, Hillcrest High School appears to be in a Bureaucratic (High Grid, Low Group) school culture. However, their professional development strategies most closely

resemble those of a Collectivist environment, which is the direct opposite. Therefore, a mismatch between the school culture and its professional development program implementation is evident.

Furthermore, of the 5 % of Hillcrest teachers who responded to the *Cultural Preference Tool*, 75% prefer a Collectivist culture, and 25% prefer a Corporate culture. The very small response rate to this questionnaire makes it difficult to make accurate assumptions about the relationship between teachers' preferred culture and the school culture or professional development strategies at this school. Since Hillcrest's professional development strategies are best suited for a Collectivist culture, it can be said that for the 5% who responded, 75% of the teachers' cultural preference matched the implementation of professional development at the school. The average of teachers' overall satisfaction was 6.5 on a scale of 1 to 8, which was the highest average in the schools studied. This finding is supported by the regression analysis, which indicated that a match between teachers' preferred culture and professional development strategies has a significant effect on their satisfaction with professional development.

Figure 7 illustrates the grid and group typology of specific characteristics of Hillcrest High School. Figure 8 illustrates the typology for implementation of professional development strategies at Hillcrest.

Figure 7. Hillcrest High School grid and group typology for school culture.

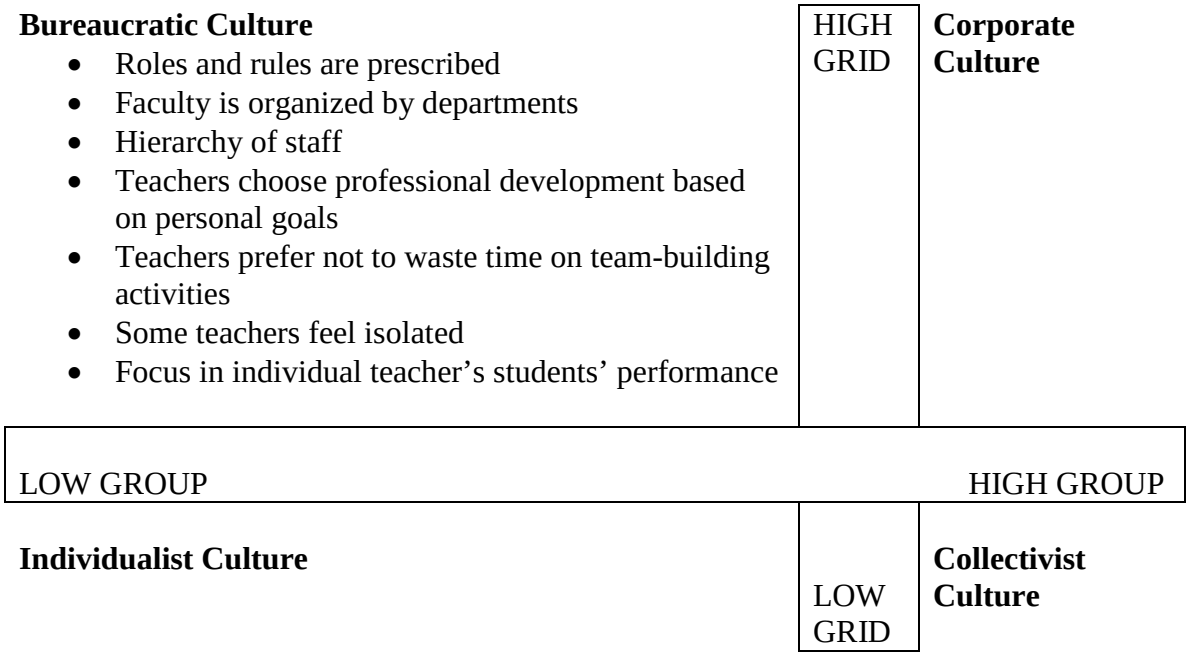
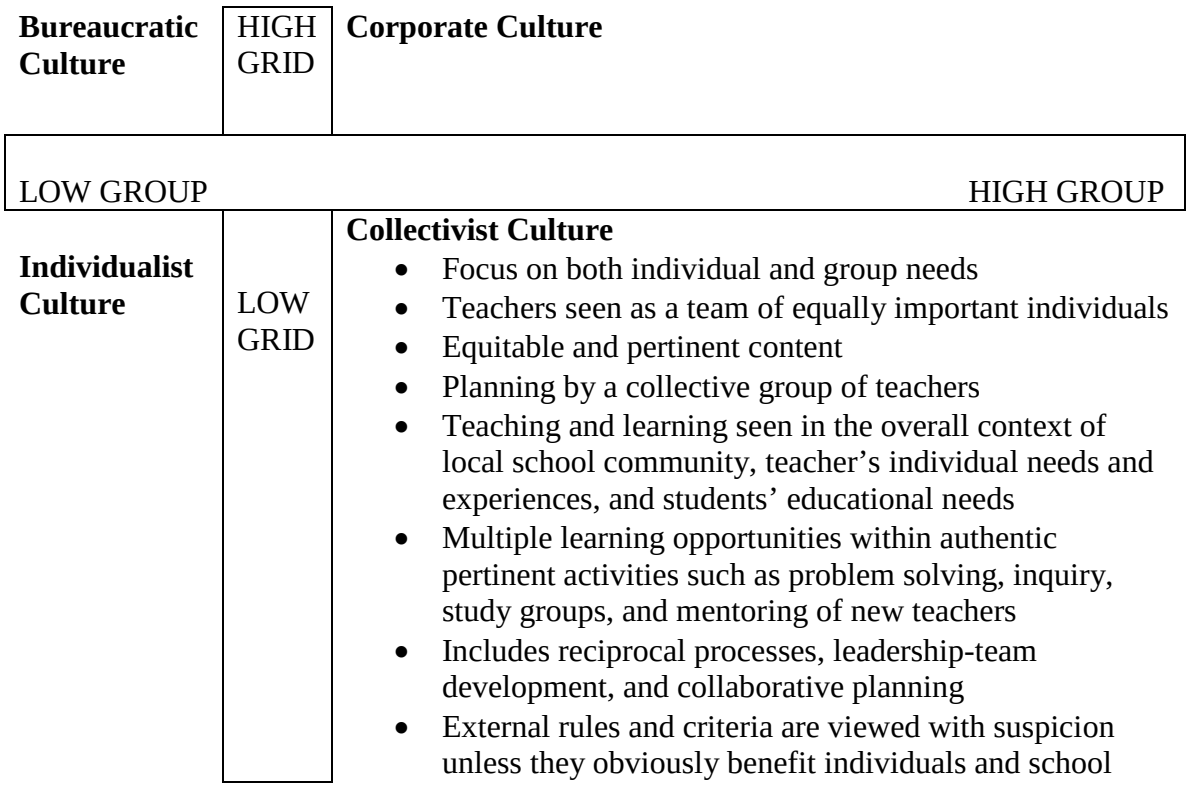


Figure 8. Hillcrest High School professional development strategies associated with characteristics of a particular grid and group category.



Plainfield High School (Bureaucratic: High Grid, Low Group)

Cultural Awareness Questionnaire Results

Seven percent of Plainfield's 111 faculty members responded to the cultural awareness questionnaire. A second request to the principal to resend the teacher participation request via email did not result in any valid responses.

Grid Questions

Based on total numbers of responses overall, 44 responses were in the high grid category; 35 responses were in the low grid category. The responses most closely associated with a high grid environment were:

Item #1: Authority structures are centralized.

Item #2: Job responsibilities are well defined.

Item #3: Individual teachers have no autonomy in textbook selection.

Item #4: Individual teachers have no autonomy in generating their educational goals.

Item #7: Teachers obtain instructional resources through administrative allocation.

Item #8: Instruction is not personalized for each student.

Item #10: Hiring decisions are made without teacher input.

Item #11: Class schedules are determined without teacher input.

Item #12: Rules and procedures are numerous.

Two responses were associated with a low grid environment:

Item #3: Individual teachers have full autonomy in textbook selection.

Item #9: Individual teachers are motivated by intrinsic / self-defined interests.

Group Questions

Based on total numbers of responses overall, 35 responses were in the high group category; 44 responses were in the low group category. The responses most closely associated with a high group environment were:

Item #4: Teaching and learning are planned / organized around group goals/interests.

Item #5: Teaching performance is evaluated according to group goals, priorities, and criteria.

Item #7: Curricular goals are generated collaboratively.

Item #9: Instructional resources are controlled / owned collaboratively.

Item #10: People hold much allegiance / loyalty to the school.

The responses most closely associated with a low group environment were:

Item #1: Chain of command is individual teachers working alone.

Item #2: Educators' socialization and work are separate / dichotomous activities.

Item #3: Extrinsic rewards primarily benefit the individual.

Item #6: Teachers work in isolation toward goals and objectives.

Item #8: Communication flows primarily through individual, informal networks.

Item #11: Responsibilities of teachers and administrators are ambiguous / fragmented with no accountability.

Item #12: Most decisions are made privately by factions or independent verdict.

The questionnaire responses to items used in this survey followed a continuum from 1 to 8, which measured dimensions of grid and group used in this typology. Of the

twelve grid items on the *Cultural Awareness* questionnaire, nine were high grid, two were low grid, and one was in the center based on averages of scores along the continuum. Of the twelve group items on the *Cultural Awareness* questionnaire, five were high group, and seven were low group based on averages of scores along the continuum. Therefore, based on the results of the *Cultural Awareness* questionnaire, the initial grid and group category for Plainfield High School was Bureaucratic (High grid, Low group). Subsequent data gathered also supported this categorization.

Cultural Preference Questionnaire Results

Grid Questions

Based on total numbers of responses overall, 73 responses were in the high grid category; 96 responses were in the low grid category. The responses most closely associated with a high grid environment were:

Item #1: I prefer a work atmosphere where authority structures are centralized / hierarchical.

Item #2: I prefer a work atmosphere where my role(s) is / are specialized / explicit job descriptions.

Item #7: I prefer a work atmosphere where teachers obtain instructional resources through individual competition / negotiation.

Item #10: I prefer a work atmosphere where hiring decisions are centralized / controlled by administrator(s).

Item #11: I prefer a work atmosphere where class schedules are determined through institutional rules / routines.

Item #12: I prefer a work atmosphere where rules and procedures are numerous / explicit.

Six questions were associated with a low grid environment:

Item #3: I prefer a work atmosphere where teachers have full autonomy in textbook selection.

Item #4: I prefer a work atmosphere where individual teachers have full autonomy in generating their educational goals.

Item #5: I prefer a work atmosphere where individual teachers have full autonomy in choosing instructional methods / strategies.

Item #6: I prefer a teaching and learning atmosphere where students are encouraged to participate / take ownership of their education.

Item #8: I prefer a teaching and learning atmosphere where instruction is individualized / personalized for each student.

Item #9: I am motivated by intrinsic / self-defined interests.

Group Questions:

Based on total numbers of responses overall, 131 responses were in the high group category; 36 responses were in the low group category. Based on averages of responses, 11 responses were associated with a high group environment:

Item #1: I prefer a work atmosphere where instructional activities are initiated / planned by all educators working collaboratively.

Item #2: I prefer a work atmosphere where socialization and work are incorporated / united activities.

Item #3: I prefer a work atmosphere where intrinsic rewards primarily benefit everyone at the school site.

Item #4: I prefer a work atmosphere where teaching and learning are planned / organized around group goals / interests.

Item #6: I prefer a work atmosphere where members collaboratively toward goals and objectives.

Item #7: I prefer a work atmosphere where curricular goals are generated collaboratively.

Item #8: I prefer a work atmosphere where communication flows primarily through corporate, formal networks.

Item #9: I prefer a work atmosphere where educators and students have much allegiance / loyalty to the school.

Item #10: I prefer a work atmosphere where responsibilities of teachers and administrators are clear / communal with much accountability.

Item #11: I prefer a work atmosphere where most decisions are made corporately by consensus or group approval.

Item #12: I prefer a work atmosphere where most decisions are made corporately by consensus or group approval.

One response was associated with a low group environment:

Item #5: I prefer a work atmosphere where performance is evaluated according to individual teacher goals, priorities, and criteria.

The questionnaire responses to items used in this survey followed a continuum from 1 to 8, which measured dimensions of grid and group used in this typology. Of the

12 grid items on the *Cultural Preference* questionnaire, 6 were high grid, and 6 were low grid, based on averages of scores along the continuum. Of the 12 group items on the *Cultural Preference* questionnaire, 11 were high group, and 1 was low group, based on averages of scores along the continuum. Data from the *Cultural Preference* questionnaire was used to generate a grid and group preference for each individual teacher. These categorizations were used to determine the matches for the multiple regression analysis.

The Stage

Grid Considerations

For a first time visitor, the high school and its main office were difficult to find. The school is located off the main road in an older residential area, and the main office is in a building situated in the center of a large complex of buildings that were not well-marked. The main classroom buildings are designated by their direction from the central, main office building. Portable buildings line the perimeter of the block. ROTC, which is a highly structured activity, has a separate portable classroom designed for its use. The overall space seems congested with buildings, which is associated with a strong grid environment; however, the number of buildings in the classroom section and wide open areas in other parts of the block make it difficult to keep track of all the students, which would be a low grid characteristic.

The main office has a large bay window at the front; however, the office areas are dark and seem closed in due to the dark wood and brick used in this area of the building. A strong indication of a high grid culture is the organization of the secretaries. Each of the three secretaries sits behind a counter under a sign specifying which of the three classes to which she is assigned. Identical file cabinets are located behind each

secretary's desk. Separate offices for each administrator open off a dark hall behind the secretary area.

Teachers are organized by departments; most classes for each subject are located in the same area. However, some classes, such as math and social studies, are scattered in more than one building. A different administrator is assigned to head each core department; however, the administrator may not have expertise in the subject of the department.

As would be expected in a high grid culture, there is a strong degree of structure in the organization of the grade levels. Ninth grade students are completely segregated in their own building; however, some are bussed to the main high school complex for electives, such as ROTC. Most of the tenth grade classes are located in the same building in an effort to create a separate community for them; eleventh and twelfth grades are mixed.

Group Considerations

Curtains are sometimes used for privacy on interior classroom walls; however, in some cases they were mismatched or torn. Classroom hallways were generally drab, painted a light gray with few decorations other than some student flyers. In contrast, however, some of the classrooms appear to be brightly painted and decorated. This would serve to make the individual classrooms more appealing than the large group areas of the halls, but would also contribute to a low group culture.

The facilities associated with sports and music appear to be newer and well-maintained; however, some of the classroom buildings are in need of paint or are painted drab colors. This may indicate that the school's priorities are on sports and music, rather

than academics. Landscaping is minimal, particularly around the classrooms. Signs on the fieldhouse indicate identification with the school and its mascot. In contrast, the old gymnasium, which is a dark gray and black block building located at the entrance to the main driveway, is somewhat foreboding. A lower degree of maintenance is associated with a low group environment (Harris, 2005).

The school website is attractive and provides detailed and important information from the counselors' office. The page for activities displays only a few pictures of students with no captions. In contrast, the athletics page contains links to 15 different sports and displays an assortment of team pictures, which would further indicate an emphasis on sports as opposed to other groups. The home page has a box at the bottom for "Notes from the Principal," but it is empty. In fact, I could not find the names or information about the administrative staff anywhere on the web site, until I located a copy of the front page of the student handbook. Based on the website, open communication with students and parents seems limited to a few specific groups, which would be expected in a low group culture.

The Cast

Grid Considerations

Plainfield administration consists of one head principal and three assistant principals. All but one taught or served in other administrative capacities at Plainfield prior to their current position. Although their power is positional, which is associated with a high grid culture, some of their influence may also be based on the history they have with the current faculty.

Teachers may also have prescribed roles and expectation besides their teaching duties. They are expected to serve as presenters for professional development if they have expertise in a particular area. In turn, they expect professional development to be relevant and immediately applicable to their situations.

Group Considerations

Although teachers are organized by departments, not all classes for a department are located in the same building, which limits contact among subject area teachers and leads to a lower group culture. In terms of professional development, they value topics that are beneficial and meaningful to them as individuals, rather than those that are focused on group or school goals.

The Plot

Grid Considerations

A central office administrator is heavily involved as a resource person for professional development; however, the high school has its own professional development committee. The committee is comprised of one administrator and three teachers from different areas, both core and elective subjects. As would be expected in a high grid environment, there is a specified process for determining the topics for professional development. Teachers provide input through departmental surveys to the professional development committee. This input is generally based on subject-specific topics the teachers would like to know more about. After receiving input, the committee consults with the head principal and then considers the cost and what will give teachers the opportunities to learn things that will help them in their individual classrooms. Presenters may be within the district or outside speakers. This year, the school brought in

a speaker, and then scheduled follow-up sessions for professional development days throughout the year. Elementary teachers may also request training on topics that can be presented by a high school teacher. Topics that are of a more general nature are usually open to high school, ninth grade, and middle school teachers.

Group Considerations

Plainfield faculty apparently do not meet in PLCs as such; however, departmental meetings may have some of the same functions and goals as PLCs. Teachers within subject areas at different grade levels meet occasionally for training on a topic that is of particular interest to them; however, these meetings are not for the purpose of vertical curriculum alignment.

The Time

Grid Considerations

Plainfield school district operates on a semester schedule. Professional development days are scheduled throughout the year according to a district-wide calendar.

Group Considerations

After consulting the district calendar, teachers may request extra professional training on a topic that is of interest to them. This training usually involves presentations by in-district personnel. Calendars presented on the website tend to focus on athletic activities, rather than the whole school group.

Professional Development Strategies and Results

Teachers at Hillcrest have input into professional development according to a pre-determined hierarchy. Through departmental surveys, they make suggestions to the high

school professional development committee. This committee first consults with the head principal, and then determines the cost involved and what type training would best meet the teachers' expressed needs. Teachers prefer topics that are relevant and have immediate application to their classroom situations. Needs are based more on departmental issues rather than school-wide goals, which is an indication of the low group culture. Speakers are brought in from outside; however, teachers are also asked to present on topics about which they have specific knowledge or training. Teachers at Plainfield do not participate in PLC meetings; however, departmental meetings with an administrator may achieve some of the same functions and goals.

Most of the professional development at Plainfield High School is focused on helping teachers meet their students' academic needs. Students' academic progress can be measured by their scores on state tests. Based on students' End-of-Instruction tests scores for 2007-2008, their strategies are successful, since students' scores showed a gain of 14% in the number of students proficient in English II and a gain of in the number of students proficient in 7% Algebra I. Scores were 83% and 87%, respectively. All testing benchmarks for all student groups were met, and the district Academic Performance Index (API) score was above the state average for regular education students.

The professional development strategies used at Plainfield most closely resemble those recommended for a Corporate (High Grid, High Group) environment, based on Harris' (2005) descriptions of recommended professional development strategies for school cultures. However, it is noted that Plainfield appears to be a Bureaucratic (High Grid, Low Group) culture. A complete listing of recommended strategies for all four

cultures may be found in Table 2 (p. 14). The Corporate professional development strategies that I found to be most apparent at Plainfield were the following:

- Planning by representative committee that reports to the principal, who ensures that activities meet group needs
- Group participation to set goals and discuss
- Content combines group-focused goals, activities, and rewards with abundant training resources
- Meaningful intellectual, social, and emotional engagement with ideas and materials
- Emphasis on the interdependence and enhancement of all members of the educational community.

Summary

In summary, Plainfield is a structured environment with specific expectations for various roles within the community. Roles and responsibilities for teachers, faculty leaders, and administrators are assigned and followed. However, within this structure, teachers have freedom to offer input and to participate in leading professional development for the teachers at the high school and lower grades. Professional development topics are geared toward meeting departmental and individual teacher's needs and goals. The data and observations generally indicate that Plainfield's culture falls into the High Grid category.

Although there is evidence of both high and low group indicators on the questionnaire and from observations, Hillcrest is basically a low group environment. Maintenance of school facilities indicates a higher priority on sports and music than academics, although planned new school construction and remodeling of the classroom

areas should eliminate most of these discrepancies. The school website supports the importance of athletics at the school and indicates a lack of desire for communication between visitors to the website and the administrative staff. Teachers tend to work and seek training according to their departments; however, some may feel isolated because they are not located near the rest of the department's teachers. Departmental meetings replace PLCs, and requests for professional development generally focus on departmental goals, rather than overall school goals. These observations are indicative of a Low Group environment.

Based on responses to the *Cultural Awareness Tool* and further investigation and observation, Plainfield High School appears to be a Bureaucratic (High Grid, Low Group) school culture. However, their professional development strategies most closely resemble those of a Corporate culture. Therefore, a mismatch between the school culture and its professional development program implementation is evident.

Furthermore, of the Plainfield teachers who responded to the *Cultural Preference Tool*, 75% prefer a Collectivist culture, and 25% prefer a Corporate culture. Since Plainfield's professional development strategies are best suited for a Corporate culture, only 25% of the teachers' preferred culture matches the professional development strategies at the school. The average of teachers' overall satisfaction was 5.6, higher than an average score of 4 on a scale of 1 to 8. It is also noted that since Plainfield represents an overall Bureaucratic culture, none of the teachers there are working in the type of culture they prefer.

Figure 9 illustrates the grid and group typology of specific characteristics of Plainfield High School. Figure 10 illustrates the typology for implementation of professional development at Plainfield.

Figure 9. Plainfield High School grid and group typology for school culture.

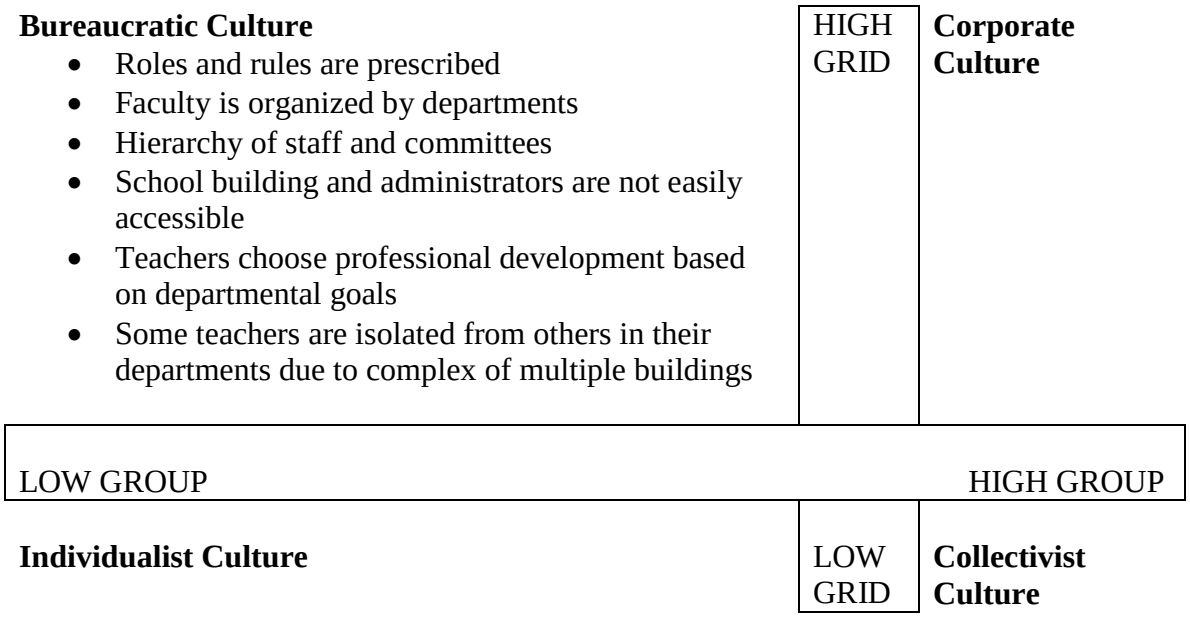
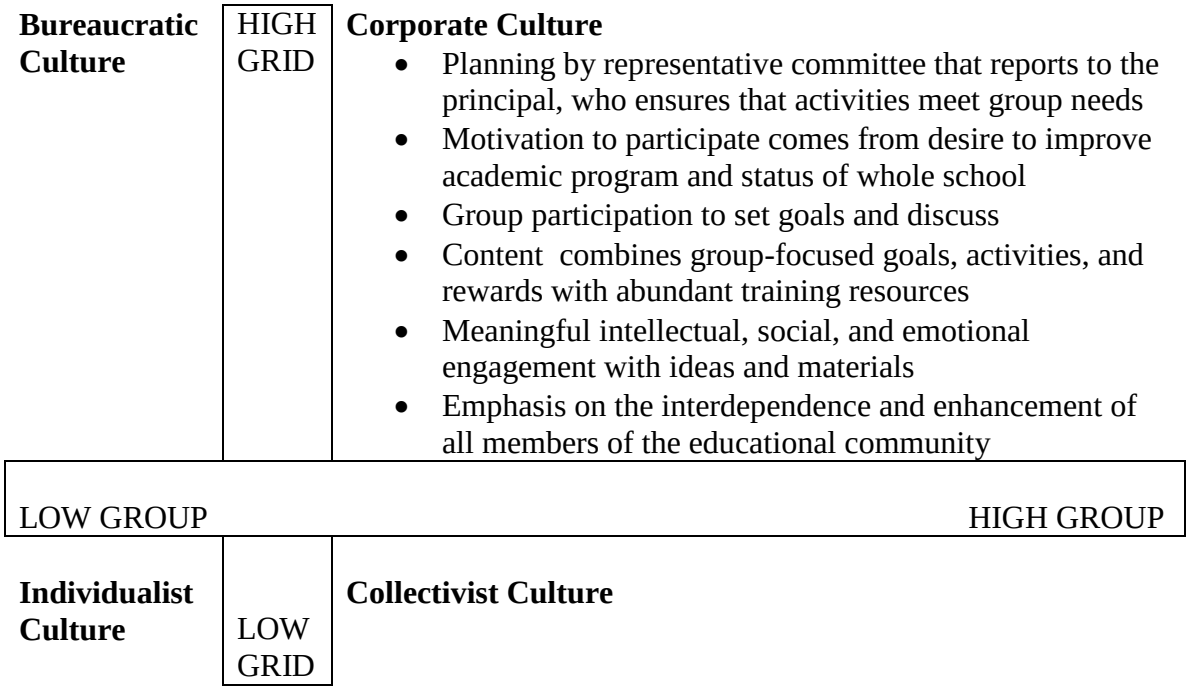


Figure 10. Plainfield High School professional development strategies associated with characteristics of a particular grid and group category.



Comparison

Corporate Schools

Both Riverside and Lakefront High Schools were examples of Corporate cultures, based on Harris (2005) descriptions of Grid and Group school cultures. In this environment, schools show indications of both high grid and high group characteristics.

Grid Characteristics

Both schools exhibited a high degree of structure in terms of roles and responsibilities of administrators and faculty. Although teachers have input to decisions regarding professional development needs, the main decision as to format and content are made at higher administrative levels. Administrators at both schools were promoted from within the organization, which increases the possibility that previous roles and regulations will continue due to the administrators' prior familiarity with them. Teachers are expected to participate in departmental PLCs according to a prescribed schedule, and the topics are expected to focus on overall school goals, rather than teachers' individual interests. Both schools operate according to set schedules for the day, month, and year, with professional development days designated prior to the beginning of the year.

Student expectations at Riverside were more highly regulated than at Lakefront. Riverside restricts students' movement in the halls during class periods; Lakefront allows students greater freedom in the building during class periods. Both schools have class periods that are longer than one hour.

Group Characteristics

One of the most obvious signs of a high group environment for both schools is the importance of history and tradition within the school and community. Riverside honors previous graduates in terms of photographs, exhibits, and awards, and the school facility is open to use by the community. Lakefront's architecture reflects that of the community during its early development in the first half of the 20th century. It maintains and honors monuments and references to past administrators and students.

Although both schools' teachers are organized within departments, Riverside's departments are referred to as "teams" and their department heads as "team leaders." Lakefront's departments are not designated as teams, but identification with each particular department is still quite strong.

The websites of both schools appear to have a strong commitment to open communication with visitors from all members of the educational community. Lakefront also uses other methods of technology to provide information to the community, such as a local television channel program and frequent media announcements.

Professional Development Characteristics

While both schools appear to be Corporate in nature, both exhibit characteristics of a Bureaucratic environment in terms of their professional development strategies. Format and content of professional development are mostly made at an administrative level between principals and district administrators, with some input from teachers in terms of surveys. Topics are generally focused on meeting state and national requirements, and on increasing student test scores. Teachers at Lakefront are also encouraged to pursue individual interests throughout the year by offering them monetary incentives. Elective teachers at Riverside are allowed to go outside the district for training

if it is related to their subject areas. In both cases, however, explicit documentation is required.

Bureaucratic Schools

Both Hillcrest and Plainfield High Schools were examples of Bureaucratic cultures, based on Harris (2005) descriptions of Grid and Group school cultures. In this environment, schools show indications of high grid and low group characteristics.

Grid Characteristics

Both schools exhibited a high degree of structure in terms of roles and responsibilities of administrators and faculty. Administrators' duties are assigned in terms of what they are and are not in charge of, such as departments and classes. At Plainfield, principals are assigned to chair certain departments; at Hillcrest, principals do not interfere with the professional development process. Buildings at both campuses are explicitly designated in terms of function and students. Both schools operate according to set schedules for the day, month, and year, with professional development days designated prior to the beginning of the year.

Students are divided in terms of classes and building assignments at both schools.

Group Characteristics

Both schools exhibited characteristics of low group environments, although neither was strongly low group on survey responses or based on observations. Indications of both low and high group were present.

The overall atmosphere of the Plainfield campus was not welcoming. Some buildings were in need of paint or painted drab colors; hallways were also somewhat uninviting. Few banners or signs promoting students' awards and achievements were

present in the halls at either school. Pictures, awards, and artifacts associated with former students were not prominently displayed at either school.

The websites of both schools provided somewhat limited information. The Hillcrest website presented some pictures and information of student groups, but most information required a parent or student password to login. The Plainfield website contained detailed information from the counselors, especially regarding senior requirements and opportunities; however information from or about the administrators was nonexistent.

Some of the teachers at both schools are separated from each other in terms of subjects taught or location on the campus; however, both schools utilize departments that are organized according to subject area. PLCs are a new innovation at Hillcrest; they were not in evidence at Plainfield.

Professional Development Characteristics

While both schools appear to be Bureaucratic in nature, they exhibit characteristics of different environments in terms of their professional development strategies. Hillcrest appears to use strategies most closely associated with a Collectivist environment, while Plainfield's strategies conform more to a Corporate culture.

At Hillcrest, decisions of format and content for professional development are mostly made by a representative committee of teachers from the entire district, based on desires and concerns from each individual school site. This committee works with a district administrator to develop the overall plan; site administrators are completely left out of the process of planning and oversight. At the high school level, topics are generally focused on increasing student test scores and meeting departmental needs. The initial

professional development session is more of a “welcome back” meeting; after that teachers are allowed freedom in terms of which sessions they will attend.

At Plainfield, teachers have more input into the content of professional development, and teachers are expected to give presentations in their areas of expertise. A district administrator provides resources as needed for professional development, however he does not decide on the topics that will be presented.

Teachers’ Cultural Preferences and Satisfaction with Professional Development

The majority (62%) of the teachers’ preferences fell in the Collectivist category (high grid, high group). A smaller percentage (37%) preferred a Corporate (low grid, high group) environment. Only one person (2%) preferred an Individualist (low grid, low group) environment, and no teachers preferred a Bureaucratic (high grid, low group) environment. It is noted that although none of the teachers indicated a preference for a Bureaucratic environment, two of the schools exhibited that type of culture. In addition, the majority of the teachers preferred a Collectivist environment; however, none of the four schools indicated having a Collectivist culture, although one school was using professional development strategies most closely associated with that type of culture. Table 14 summarizes the data for teachers’ preferred culture.

Table 14

Percentages of Teachers’ Preferred Cultures (N = 60)

School Culture	**Individualist**	**Bureaucratic**	**Corporate**	**Collectivist**	**High Grid**	**High Group**
Percent Preferring	2 %	0 %	37 %	62 %	37 %	98 %

In general, teachers were satisfied with the professional development at their school. Table 15 summarizes the average degree of satisfaction with professional development.

Table 15

Teachers' Average Degree of Satisfaction with Professional Development

(1 = low, 8 = high)

	Riverside	Lakefront	Hillcrest	Plainfield
Avg. Degree Of Satisfaction	4.8	4.8	6.5	5.6

Multiple Regression Analysis

There were no matches between the school culture and professional development strategies; therefore, it was meaningless to include these matches as an independent variable in the multiple regression equation. The regression analysis then contained one independent variable, a match between teachers' preferred culture and their schools' professional development strategies, and one dependent variable, teachers' satisfaction with professional development. According to the value of R squared, seven percent of the teachers' satisfaction with professional development was predicted by a match between teachers' preferred school culture and the type of professional development strategies used at their school. While this is not an extremely high percentage, the F value indicates that this result is significant at the .05 level, but not at the .01 level [$F_{1,58} = 4.647$; $p<.05$]. Therefore, a match between a teacher's preferred school culture and the professional development strategies associated with that type of culture has a significant effect on the teacher's satisfaction with professional development.

Summary

Based on information gathered from questionnaire responses from teachers and observation and interview data, four high schools' cultures were categorized according to grid and group characteristics. Two of the schools met the characteristics for the Corporate (high grid, high group) category, and two of the schools appeared to be in the Bureaucratic (high grid, low group) category. Professional development strategies did not match the overall school culture for any of the schools.

A multiple regression analysis was used to examine the relationship between teachers' preferred school environment and their satisfaction with the professional development at their school. Results indicate that a match between teachers' preferred school culture and the professional development strategies used at the school has a significant effect on teachers' satisfaction with professional development.

CHAPTER VI

SUMMARY, FINDINGS AND DISCUSSION, LIMITATIONS, AND RECOMMENDATIONS

Summary

Professional development plays a crucial role in meeting the current educational standards for accountability and student learning. To develop the sophisticated teaching methods necessary to help students learn the more complex and analytical skills they will need in the future, "education systems must offer more effective professional learning than has traditionally been available" (Darling-Hammond & Richardson, 2009, p. 46). Therefore, a need exists for administrators to examine current practices in professional development to determine whether they are meeting their teachers' needs and the government's requirements for effective and high-quality professional development for teachers.

Today, there are more professional workshops, teacher resources, and development opportunities than at any time in educational history (Harris, 2005). However, the professional development strategies schools choose do not always have the desired effects on teachers' practice (Center for Development and Learning, 2000; Knight, 2000). Teachers often find this required training to be beneficial and satisfactory in varying degrees (O'Connor & Ertmer, 2003; Porter, Garet, Desimone, Yoon, & Birman, 2000), and some studies indicate that professional development does not always lead to academic improvement (Center for Development and Learning, 2000; Guskey & Sparks, 1996; Huffman, Thomas, & Lawrenz, 2003; Willis, 2002).

Suggestions and programs for improving professional development abound. Some educators continue to use traditional models of professional development, such as before or after school workshops, guest speakers, and prepackaged programs, while others see a need for professional development to move from a traditional in-service training model to a renewal model, which is more collaborative and relevant (Corcoran, 1995; DuFour, Eaker, & DuFour, 2005; Easton, 2004; Heller, 2004; Keller, 2005; Kelly & McDiarmid, 2002; Robb, 2000; Sykes, 1996).

One reason for the variety of professional development programs in schools and their degree of effectiveness may be explained through cultural theory. For instance, Douglas' (1982) Typology of Grid and Group provides a lens through which professional development and school culture can be explained.

This framework describes organizations in terms of two dimensions: 1) grid-roles, rules, and procedures, and 2) group-collective relationships and corporate membership. The degree to which grid and group operate within an organization can be placed along a two-way continuum, from high to low. These continua, in turn, define four distinct prototypes of cultures: Individualist (low grid, low group), Bureaucratic (high grid, low group), Corporate (high grid, high group), and Collectivist (low grid, high group) (Douglas, 1982; Harris, 2005).

For this study, the Typology of Grid and Group provided the framework through which professional development programs in four secondary schools were analyzed and explained. The four chosen schools' professional development strategies were analyzed according to Harris' (2005) descriptions of successful professional development strategies for the four cultures. The study posited that participating teachers' satisfaction

with professional development might be affected by the school's culture and type of professional development strategy chosen by the school.

The purpose of this study was to determine the interrelationships, if any, between school culture and teachers' satisfaction with professional development. This included an exploration of school culture by conducting a qualitative pre-ethnography to narrow the population of secondary schools that were originally chose for study down to four and to explain the context of those four purposefully selected secondary schools. Information gathered was used to determine the school culture and the type of professional development that these schools offered in terms of a grid and group framework. Participating teachers from the four secondary schools were then surveyed to determine their preferred type of school culture and their degrees of satisfaction with professional development received within their schools. This information was used to examine the effect of school culture and professional development strategies on teacher satisfaction with professional development.

The following research questions were addressed:

1. What is the cultural environment of each of the schools studied?
2. How is professional development characterized in the schools under study?
3. What are the teachers' preferences for organizational culture in their school?
4. To what extent are teachers satisfied with professional development in their school?
5. What difference, if any, does school context make on teacher satisfaction with professional development, according to two null hypotheses?

- H_{o1}: A match between school context and professional development strategies makes no difference on teacher satisfaction with professional development.

- H_{o2}: A match between teacher preferred school culture and school professional development strategies makes no difference on teacher satisfaction with professional development.

Findings and Discussion

What is the cultural environment of each of the schools studied?

Each school's cultural environment was determined based on teachers' responses to an online questionnaire and to observations and interviews conducted at each school site and online. The schools' cultural environments were categorized based on Harris' (2005) descriptions of the four types of grid and group school culture, which he describes as follows:

- Individualist (low grid and low group),
- Bureaucratic (high grid and low group),
- Corporate (high grid and high group), and
- Collectivist (low grid and low group).

According to the data collected, two schools, Riverside and Lakefront, were in the Corporate category while the others, Hillcrest and Plainfield, were in the Bureaucratic category. These two schools were chosen because of the researcher's desire to study a pair of schools from each of two different school cultures. The Bureaucratic and Corporate categories were chosen because no schools were identified in the pre-ethnography as being in the Individualist or Collectivist categories.

Based on Douglas' (1982) and Harris' (2005) descriptions of a Corporate (high grid and group) culture, the following characteristics of that culture were evident at both Riverside and Lakefront high schools:

- a culture dominated by roles and rules
- regulation of personal interactions according to explicit internal classifications that restrain personal autonomy
- decision-making at the administrative and school board levels
- many role distinctions among teachers and staff
- organization of teachers into departments in which teachers work in isolation
- specific membership criteria with insider/outsider distinctions
- explicit pressures that influence group relationships
- survival of the group takes precedence over survival of its individual members
- group interactions, allegiances, and membership criteria that seek to perpetuate the school
- traditions and norms are perpetuated
- symbols of the school are often prominently displayed.

At both Riverview and Lakefront schools, roles and rules were explicitly understood and followed by administrators and teachers. Most of the decisions regarding professional development were made at the administrative level, with some input from teachers in the initial planning stages. Teachers at Lakefront had very little input into the content of professional development after submitting a needs assessment; Riverview teachers were allowed somewhat more input through surveys. Departmental Professional Learning Communities were used extensively at both schools; meetings were isolated by departments. History and tradition were very important at both schools, with evidence of strong ties to the community and the past as evidenced through architecture, awards,

alumni involvement, and website content. Group participation and success were encouraged and celebrated.

Hillcrest and Plainfield High Schools were determined to be Bureaucratic (high grid / low group) cultures, with evidence of the following characteristics that are associated with Bureaucratic environments, as described by Douglas (1982) and Harris (2005):

- a culture dominated by roles and rules
- regulation of personal interactions according to explicit internal classifications that restrain personal autonomy
- decision-making at the administrative and school board levels
- many role distinctions among teachers and staff
- organization of teachers into departments in which teachers work in isolation
- individual interests are valued above collective goals
- pressure for group-oriented activities and relationships is usually weak
- groups and subgroups focus on short term projects rather than long-term organizational goals, and allegiance to the larger group fluctuates
- strong traditions are usually absent.

Role distinctions in Hillcrest and Plainfield schools were well-defined, and teachers were organized by departments. In contrast to the other schools studied, control of professional development at Hillcrest was given to the teachers, with little to no input or oversight from principals; however, this was due in part to this responsibility not being part of the principals' assigned roles. Professional Learning Communities were just beginning at Hillcrest and not found at Plainfield. Teachers were somewhat physically

isolated at Plainfield, and tended to be isolated according to subject matter and overall attitude at Hillcrest. Perhaps due to the effects of growing community populations, neither school showed strong evidence of the influences of tradition and past history. Some student groups received more publicity than others. Neither website contained a great deal of information that indicated a strong commitment to communication with the outside community, as well as with students and parents.

How is professional development characterized in the schools under study?

Harris (2005) categorized professional development strategies by those associated with each type of school culture. These categorizations were used to determine the type of professional development found at each school. It is noted that none of the school cultures matched the typical typology for professional development strategies used. Specific characteristics of professional development strategies for each school are categorized according to their matching cultures in Table 16.

Table 16

Cultural Environment and Categorization of Professional Development Strategies Associated with Cultural Environments

	Cultural Environment	Characteristics of Prof Dev Strategies According to Culture
Riverside	Corporate (high grid, high group)	Bureaucratic (high grid, low group) • Preliminary needs assessment, planning, and recommendations to principal by committee • Principal takes major role in process • Activities enhance and protect teachers' roles and responsibilities and correspond to teachers' specialties • External state or national standards help guide activities

Lakefront	Corporate (high grid, high group)	Bureaucratic (high grid, low group) • Preliminary needs assessment, planning, and recommendations to principal by committee • Principal takes major role in process • Activities enhance and protect teachers' roles and responsibilities and correspond to teachers' specialties • External state or national standards help guide activities
	Culture	Prof Dev Strategies
Hillcrest	Bureaucratic (high grid, low group)	Collectivist Culture (low grid, high group) • Focus on both individual and group needs • Teachers seen as a team of equally important individuals • Equitable and pertinent content • Planning by a collective group of teachers • Teaching and learning seen in the overall context of local school community, teacher's individual needs and experiences, and students' educational needs • Multiple learning opportunities within authentic pertinent activities such as problem solving, inquiry, study groups, and mentoring of new teachers • Includes reciprocal processes, leadership-team development, and collaborative planning • External rules and criteria are viewed with suspicion unless they obviously benefit individuals and school
Plainfield	Bureaucratic (high grid, low group)	Corporate Culture (high grid, high group) • Planning by representative committee that reports to the principal, who ensures that activities meet group needs • Motivation to participate comes from desire to

	improve academic program and status of whole school • Group participation to set goals and discuss • Content combines group-focused goals, activities, and rewards with abundant training resources • Meaningful intellectual, social, and emotional engagement with ideas and materials • Emphasis on the interdependence and enhancement of all members of the educational community

What are the teachers' preferences for organizational culture in their school?

The majority (62%) of the teachers' preferences fell into the Collectivist category (high grid, high group). A smaller percentage (37%) preferred a Corporate (low grid, high group) culture. Only one person (1%) preferred an Individualist (low grid, low group) culture, and no teachers preferred a Bureaucratic (high grid, low group) culture. Although none of the teachers indicated a preference for a Bureaucratic culture, two of the schools were determined to exhibit that type of culture. In addition, the majority of the teachers preferred a Collectivist culture; however, none of the schools indicated having a Collectivist culture, although one school was using professional development strategies most closely associated with that type of culture.

Teachers' preferences seem to indicate that almost all of the teachers studied preferred a high group environment. Maybe, since teachers need to have good interpersonal skills and because they deal with people all day, they may appreciate identification with the group of people with whom they work. Teachers in schools whose professional development strategies were associated with high group cultures reported higher average degrees of satisfaction with professional development than those in

schools whose professional development strategies were associated with low group cultures. Furthermore, most (about 67%) preferred a low grid culture, which may indicate a desire to work more independently and have more control over their environment and work.

To what extent are teachers satisfied with professional development in their school?

Teachers were satisfied to an above average degree with professional development at all schools. Average responses ranged from 4.8 to 6.5 on a scale from 1 to 8. The two schools with lower average responses (4.8) implemented professional development strategies that most closely resembled a Bureaucratic (high grid, low group) culture. The next highest satisfaction score (5.6) came from a school whose professional development strategies most closely resembled a Corporate (high grid, high group) culture. The highest satisfaction score (6.5) came from a school whose professional development strategies most closely resembled a Collectivist (low grid, high group) culture, although the number of responses represented a small proportion (5%) of the overall faculty. Ten percent of the responses were at the highest end of the scale, with a score of 8; responses at the lowest end of the scale were 5 %, with a score of 1. Appendix D lists the quantities of high and low responses to each question for each school. This study was not concerned with specific factors that make up a determination of satisfaction, but rather with an overall global determination; therefore, only one response on the questionnaire asked for an actual measure of satisfaction with professional development.

What difference, if any, does school context make on teacher satisfaction with professional development?

The answer to this question was based on two null hypotheses:

- H_{o1}: A match between school context and professional development strategies makes no difference on teacher satisfaction with professional development.

There were no matches between the school contexts and professional development strategies for any of the four schools in this study. Therefore, there were insufficient data to accept or reject the null hypothesis. It is noted that in some schools, there was still a high degree of satisfaction with professional development when the professional development strategies and school culture did not match. This could be an area for further study.

- H_{o2}: A match between teacher preferred school culture and school professional development strategies makes no difference on teacher satisfaction with professional development.

Based on the multiple regression results, a match between teachers' preferred culture and that of the professional development strategies used at the school in which they work is a significant factor ($p < .05$) in determining their degree of satisfaction with professional development, accounting for 7% of the degree of satisfaction. Therefore, the null hypothesis is rejected. This finding provides evidence that teachers are more satisfied with professional development if the strategies match those of the school culture they prefer.

These results could help guide administrators who are trying to maximize the impact of professional development at their schools. Based on these findings, an administrator should increase the chances of teachers' satisfaction with professional

development by first assessing the teachers' preferred school culture and then implementing professional development strategies that match those preferences.

Limitations

This study was limited to four high schools with more than 35 teachers, with only one high school per district. Some of the schools had a small number of teachers who responded to the questionnaires. Furthermore, the researcher was more familiar with two of the schools than with the others. Therefore, some of the information from the first two schools was obtained from first hand experience, while information from the remaining two schools was by observation and interpretation only. It is possible that a higher degree of familiarity with two of the schools may have biased the researcher or led to greater insight into the environments of those schools than others.

Recommendations

Benefits

Practice

The results of this study provide administrators and developers of professional development for secondary schools information about the relationship of school culture to desirable professional development strategies. Administrators generally want to get the most from their time and money devoted to professional development. Based on the results of this study, it is advisable for them to consider whether the strategies they are using reflect the cultural preferences of their teachers. Since most of the teachers reported a preference for a low grid and high group culture, administrators should consider professional development strategies that allow for more teacher interaction with each other and more input and control in the planning and implementation processes. Although

administrators have to look at the big picture of overall school needs and government requirements, they would be wise to pay attention to the teachers' opinions regarding the topics and format of professional development that would meet their current needs most fully. Additionally, if teachers have choices in the professional development sessions they will attend, they may be more satisfied if the content and format of the session is more unstructured and allows for more group interaction. Finally, it may be beneficial for administrators and teachers to examine their school's specific culture to understand the functioning of the school and their roles as participants in the educational community.

Theory

This study provides further application to Douglas' (1982) Grid and Group Typology by extending its use to the area of professional development in secondary schools. Previously, this typology was used to describe and analyze cultures in terms of cultural bias in a variety of settings, including schools (Balenseifen, 2004; Chitapong, 2005; Harris, 2005; Kanaly, 2000; and Murer, 2002), implementation of instructional technology in schools (Spitzer, 2003; Stansberry, 2001; Stansberry & Harris, 2005), and roles of teachers and learners (Lingenfelter & Lingenfelter, 2003).

Furthermore, this study supports Harris' (2005) grid and group categorizations of school cultures in relation to teacher satisfaction with professional development. Harris' categorizations of professional development strategies according to grid and group cultures were evident in the operation of the schools, and the strategies were easily and closely identified with specific cultures, although they were not the same as the school cultures. The regression analysis indicated that a match between teachers' preferred

school environment and the actual school environment was predictive of their satisfaction with professional development at their schools to a significant extent.

Research

According to Guskey (2003), there is a need for research that provides "clear descriptions of important contextual elements" (p. 750) of professional development to insure steady progress toward improvement of its quality. This study provides such descriptions in terms of grid and group characteristics. The significance of the use of grid and group to categorize secondary school environments supports the value of further research in the areas of professional development and secondary schools using this lens. The importance of professional development in education's current environment of high accountability accentuates the need for reliable research into all of its various aspects. In an educational culture that calls for research-based strategies, certainly areas such as the effect of overall school environment as a contextual element bear further study.

Further Research

This study included only a limited number of schools, based on location, size, and school culture. Extension of this research to other grade levels, such as elementary, could expand understanding of cultures in those contexts. In addition, studying high schools in larger school districts and other states should add to the understanding of professional development in terms of the school culture.

In terms of the actual survey, expanding the number of responses regarding teachers' satisfaction with professional development to include multiple criteria would add to the understanding of that aspect. The survey could also be used to examine other aspects of teachers' practice and experience.

Since professional development is of little use unless it is applied, it would also be important to study whether teachers apply what they have learned in professional development and what results they achieve from that application. Likewise, another study could extend the results of this one to determine whether teachers' implementation of professional development is related to the teachers' degree of satisfaction with the professional development.

REFERENCES

107th Congress. (2002.) *The Elementary and Secondary Education Act (The No Child Left Behind Act of 2001).* Washington, DC: 107th Congress. Retrieved September 21, 2003 from http://www.ed.gov/legislation/ESEA02/pg1.html

Abdal-Haqq, I. (1996). *Making time for teacher professional development.* (Report No. EDO-SP-95-4). Washington, DC: ERIC Clearinghouse on Teaching and Teacher Education. (ERIC Document Reproduction Service No. ED400259)

Balenseifen, D. W. (2004). A grid and group review of selected superintendents' tenure: Four case studies (Doctoral dissertation, Oklahoma State University, 2004). *Dissertation Abstracts International, 65* (12), 4405A.

Center for Development and Learning. (2000). *Improving teacher, improving learning: Linking professional development to improved student achievement*. Covington, LA: Center for Development and Learning. (ERIC Document Reproduction Service No. ED455226).

Chitapong, P. (2005). A grid and group explanation of teachers' attitudes toward in-service professional development practices in selected schools in Thailand. (Doctoral dissertation, Oklahoma State University, 2005). *Dissertation Abstracts International, 66* (02), 419A.

Corcoran, T. B. (1995). *Helping teachers teach well: Transforming professional development.* New Brunswick, NJ: Consortium for Policy Research in Education. (ERIC Document Reproduction Service No. ED467272).

Cotton, K. (2003). *Principals and student achievement: What the research says.* Alexandria, VA: Association for Supervision and Curriculum Development.

Creswell, J.W. (2003). *Research design –qualitative, quantitative, and mixed methods approaches*. Thousand Oaks, CA: Sage Publications.

Crotty, M. (1998). *The foundations of social research: Meaning and perspective in the research process.* Thousand Oaks, CA: Sage Publications.

Darling-Hammond, L., & McLaughlin, M. W. (1995). Policies that support professional development in an era of reform. *Phi Delta Kappan, 76*(8), 597-605.

Darling-Hammond, L., & Richardson, N. (2009). Teacher learning: What matters? *Educational Leadership, 66*(5), 46-53.

Davis, T. (1993). *Implementation pitfalls.* (audio file excerpted from the video series *Collaborations in education: Creating a professional development school*). Chicago: North Central Regional Educational Laboratory. Retrieved July 12, 2006, from http://www.ncrel.org/sdrs/areas/isssues/educatrs/profdevl/pd200.htm

De Bevoise, W. (1982). Collegiality may be the password to effective inservice program. *R & D Perspective.* DC: National Institution of Education. (ERIC Document Reproduction Service No. ED221943)

Developing highly qualified teachers. (2005, July). *T H E Journal, 32*(12), 22.

Dilworth, M. E., & Imig, D. G. (1995, Winter). Professional teacher development. *The ERIC Review, 3*(3), 5-11.

Douglas, M. (1982). *In the active voice.* London: Routledge & Kegan Paul.

Douglas, M. (1989). Culture and collective action. In M Freilich (Ed.), *The relevance of culture.* New York: Bergin and Garvey.

Douglas, M. (1992). *Risk and blame: Essays in cultural theory.* Boston: Routledge Kegan Paul.

Douglas, M., and Wildavsky, A. (1982). *Risk and culture: An essay on the selection of technical and environmental dangers.* Berkeley: University of California Press.

DuFour, R., & Eaker, R. (1998). *Professional learning communities at work: Best practices for enhancing student achievement.* Alexandria, VA: Association for Supervision and Curriculum Development.

DuFour, R., Eaker, R., & Dufour, R. (Eds.). (2005). *On common ground.* Bloomington, IN: National Educational Service.

Easton, L. B. (Ed.). (2004). *Powerful designs for professional learning*. Oxford, OH: National Staff Development Council.

Feuer, M. J., Towne, L, & Shavelson R. J. (2002). Scientific culture and educational research. *Educational researcher, 31*(8), 4-14.

Glickman, C., D. (2002). *Leadership for learning: How to help teachers succeed.* Alexandria, VA: Association for Supervision and Curriculum Development.

Gross, J.L., & Rayner, S. (1985). *Measuring culture: A paradigm for the analysis of social organization.* New York: Columbia University Press.

Guskey, T. R. (2002). Does it make a difference? *Educational Leadership, 59*(6), 45-52.

Guskey, T. R. (2002). Professional development and teacher change. *Teachers and Teaching: theory and practice, 8*(3/4), 381-391.

Guskey, T. R. (2003). What makes professional development effective?. *Phi Delta Kappan, 84*(10), 748-750.

Guskey, T. R. & Sparks, D. (1996) Exploring the relationship between staff development and improvements in student learning, *Journal of Staff Development, 17*(4), 34-38.

Hanson, W. B., Creswell, J. W., Plano-Clark, V. L., Petska, K. S., & Creswell, J. D. (2005). Mixed methods research designs in counseling psychology. *Journal of Counseling Psychology, 52*(2), 224-235.

Harris, E. L. (1995). Toward a grid and group interpretation of school culture. *Journal of School Leadership, 5*(6), 617-646.

Harris, E. L. (2005). *Key strategies to improve schools: How to apply them contextually.* Lanham, MD: Rowman & Littlefield Education.

Heller, D. A. (2004). *Teachers wanted: Attracting and retaining good teachers.* Alexandria, VA: Association for Supervision and Curriculum Development.

Huffman, D., Thomas, K., & Lawrenz, F. (2003). Relationship between professional development, teachers' instructional practices, and the achievement of students in science and mathematics. *School Science & Mathematics, 103*(8), 378-387.

Kanaly, B. L. (2000). A grid and group interpretation of newcomers' voice in the decision making process in selected elementary schools. (Doctoral dissertation,

Oklahoma State University, 2000). *Dissertation Abstracts International, 62* (01), 39A.

Keller, B. (2005, July). *Education Week, 24*(43), 22-24.

Kelly, P. P., & McDiarmid, G. W. (2002). *Professional development under KERA: Teachers' Decisions & Dilemmas.* Paper presented at the annual meeting of the American Educational Research Association, New Orleans, LA. (ERIC Document Reproduction Service No. ED467272).

Knight, J. (2000, April). *Another damn thing we've got to do: Teacher perceptions of professional development.* Paper presented at the annual meeting of the American Educational Research Association, New Orleans, LA. (ERIC Document Reproduction Service No. ED444969).

Knowles, M. S. (1980). *The modern practice of adult education: From pedagogy to Andragogy* (2nd ed.). New York: Cambridge Books.

Lingenfelter, J. E., & Lingenfelter, S. G. (2003). *Teaching cross-culturally: An incarnational model for learning and teaching.* Grand Rapids, MI: Baker Academic.

Little, J. W. (1993). Teachers' professional development in a climate of educational reform. *Educational Evaluation and Policy Analysis, 15*(2), 129-151.

Marzano, R. J., (2003). *What works in schools: Translating research into action.* Alexandria, VA: Association for Supervision and Curriculum Development.

Merriam, S. B., & Caffarella, R. S. (1999). *Learning in adulthood: A comprehensive guide* (2nd ed.). San Francisco: Jossey-Bass.

Murer, J. (2002). Mentoring of female faculty in higher education: An explanatory case study using Mary Douglas's grid/group typology. (Doctoral dissertation, Oklahoma State University, 2002). *Dissertation Abstracts International, 64* (02), 424A.

McBride, B., (2004, June). Data-driven instructional methods: 'One strategy fits all' doesn't work in real classrooms. *T H E Journal, 31*(11), 38-40.

National Center for Education Statistics. (2009). Retrieved February, 15, 2009 from http://nces.ed.gov/globallocator/

National Staff Development Council. (2001). *NSDC's standards for staff development (Revised 2001).* Retrieved June 26, 2007, from http://www.nsdc.org/standards/index.cfm?printPage=1&

National Staff Development Council. (2007, June 26). *About the standards.* Retrieved June 26, 2007, from http://www.nsdc.org/standards/about/index.cfm?printPage=1&

New teacher-to-teacher lessons. (2004, December). *District Administration, 40*(12), 13.

O'Connor, D. L., & Ertmer, P. A. (2003). *Today's coaches prepare tomorrow's mentors: Sustaining the results of professional development.* (Report No. SP041809). Conference presentation at Purdue University, West Lafayette, IN. (ERIC Document Reproduction Service No. ED482676).

Pedhazur, E. J. (1997). *Multiple regression in behavioral research: Explanation and prediction* (3rd ed.). New York: Harcourt Brace College Publishers.

Porter, A. C., Garet, M. S., Desimone, L., Yoon, K. S., & Birman, B. F. (2000). *Does professional development change teaching practice: Results from a three-year*

study. Washington, DC: American Institutes for Research in the Behavioral Sciences. (ERIC Document Reproduction Service No. ED455227).

Richardson, V. (1998, September). How teachers change: What will lead to change that most benefits student learning? *Focus on Basics: Connecting Research and Practice, 2*(C), 1-32. Retrieved July 12, 2006, from http://www.ncsall.net/?id=395

Richardson, V. (2003). The dilemmas of professional development. *Phi Delta Kappan, 84*(5), 401.

Robb, L. (2000). *Redefining Staff Development: A Collaborative Model for Teachers and Administrators.* Portsmouth, NH: Heinemann.

Rossman, G. B., & Rallis, S. F. (2003). *Learning in the field* (2nd ed.). Thousand Oaks, CA: Sage Publications.

Scherer, M. (2002). Job one. *Education Leadership, 59*(6), 5-10.

Schwerin, T. G., Botti, J., Dauksys, C., Low, R., Myers, R., Slattery, W. (2006). *Journal of Geoscience Education, 54*(3), 215-222.

Spitzer, B. (2004). Public school teacher use of instructional technology from an organizational culture perspective: An explanatory case study of two middle schools (Doctoral dissertation, Oklahoma State University, 2004). *Dissertation abstracts International, 65* (07), p. 2574. (AAT No. 3138318)

Stansberry, S. (2001). A grid and group description of higher education faculty preferences toward instructional technology use (Doctoral dissertation, Oklahoma State University, 2001). *Dissertation abstracts International, 62* (11), 3751. (AAT No. 3033601)

Stansberry, S. & Harris, E. (2005). Understanding the interrelationship of instructional technology use and organizational culture: a case study of a veterinary medical college. *Journal of Vet Med Education, 32* (1), 31-37.

Sykes, G. (1996). Reform of and as professional development. *Phi Delta Kappan, 77*(7), 464-468.

Thompson, M., Ellis, R., & Wildavsky, A. (1990). *Cultural theory.* Boulder: Westview Press.

Turchi, L., Johnson, D., Owens, D. D., Montgomery, D. (2002). The impact of accountability on the professional development of teachers: Preliminary evidence from case studies in six Southern states. Paper presented at the annual meeting of the American Educational Research Association, New Orleans, LA. (ERIC Document Reproduction Service No. ED469948).

U. S. Department of Education. (1994). National education goals. *Goals 2000.* Retrieved June 25, 2007 from http://www.ed.gov/legislation/GOALS2000/TheAct/sec102.html

U. S. Department of Education. (1995). *Professional development for teachers: The critical classroom difference*. Retrieved June 25, 2007 from http://www.ed.gov/PressReleases/03-1995/profdevt.html

U. S. Department of Education. (2001). Building bridges: The mission and principles of professional development. Retrieved April 14, 2005 from http://www.ed.gov/G2K/bridge.html

Warmack-Capes, D. (2005, March/April). Online professional development courses for teachers. *Media & Methods, 4*(5), 18-19.

Wetherill, K., Burton, G., Calhoun, D., & Thomas, C. C. (2001/2002). Redefining professional career development in the twenty-first century: A systemic approach. *High School Journal, 85*(2), 54-67.

Willis, S. (2002). Creating a knowledge base for teaching. *Education Leadership, 59*(6), 6-12.

APPENDIXES

APPENDIX A

GRID/GROUP TYPOLOGY QUESTIONNAIRES

Grid and Group Cultural Awareness Tool

Grid and Group Cultural Awareness Tool

Please enter the name of your school site:

Total years of service at this school site:

INSTRUCTIONS

Below are 24 items. Each item reflects a continuum from 1 to 8. For each item, read the entire item and choose the statement that you think best represents your **school site** (i.e., *not the school district*). Then, on the continuum, mark the button that represents the degree to which that statement applies to your **school site** (i.e., *not the school district*).

There are no "good" or "bad" responses to these items. The numbers 1and 8 represent extremes along a continuum, with numbers 2-7 providing a continuous scale between the two extremes. For example, if the statement were:

In my school we drink: Weak Coffee (1).....Strong Coffee (8), the strength of the coffee could be indicated along the continuum of 1 through 8; however, one answer would not be better than another.

GRID CONSIDERATIONS

1. Authority structures are:

Decentralized/ non-hierarchical	1	2	3	4	5	6	7	8	Centralized/ hierarchical

2. Job responsibilities are:

	1	2	3	4	5	6	7	8	
Ill-defined	☐	☐	☐	☐	☐	☐	☐	☐	Well defined

3. Individual teachers have:

	1	2	3	4	5	6	7	8	
Full autonomy in textbook selection	☐	☐	☐	☐	☐	☐	☐	☐	No autonomy in textbook selection

4. Individual teachers have:

	1	2	3	4	5	6	7	8	
Full autonomy in generating their educational goals	☐	☐	☐	☐	☐	☐	☐	☐	No autonomy in generating their educational goals

5. Individual teachers have:

	1	2	3	4	5	6	7	8	
Full autonomy in choosing instructional methods/strategies	☐	☐	☐	☐	☐	☐	☐	☐	No autonomy in choosing instructional methods/strategies

6. Students are:

	1	2	3	4	5	6	7	8	
Encouraged to participate/take ownership of their education	☐	☐	☐	☐	☐	☐	☐	☐	Discouraged from participating/taking ownership of their education

7. Teachers obtain instructional resources through:

	1	2	3	4	5	6	7	8	
Individual negotiation	☐	☐	☐	☐	☐	☐	☐	☐	Administrative allocation

8. Instruction is:

	1	2	3	4	5	6	7	8	
Personalized for each student	☐	☐	☐	☐	☐	☐	☐	☐	Not personalized for each student

9. Individual teachers are motivated by:

	1	2	3	4	5	6	7	8	
Intrinsic/self-defined interests	☐	☐	☐	☐	☐	☐	☐	☐	Extrinsic/institutional rewards

10. Hiring decision are made:

With teacher input	☐	☐	☐	☐	☐	☐	☐	☐	Without teacher input

	1	2	3	4	5	6	7	8	
11. Class schedules are determined through:									
With teacher input	☐	☐	☐	☐	☐	☐	☐	☐	Without teacher input
12. Rules and procedures are:									
Few	◉	☐	☐	☐	☐	☐	☐	☐	Numerous

GROUP CONSIDERATIONS

	1	2	3	4	5	6	7	8	
1. Chain of command is:									
Individual teachers working alone	☐	☐	☐	☐	☐	☐	☐	☐	All educators working collaboratively
2. Educators' socialization and work are:									
Separate/dichotomous activities	☐	☐	☐	☐	☐	☐	☐	☐	Incorporated/united activities
3. Extrinsic rewards primarily benefit:									
The individual	☐	☐	☐	☐	☐	☐	☐	☐	Everyone at the school site
4. Teaching and learning are planned/organized around:									
Individual teacher goals/interests	☐	☐	☐	☐	☐	☐	☐	☐	Group goals/interests
5. Teaching performance is evaluated according to:									
Individual teacher goals, priorities, and criteria	☐	☐	☐	☐	☐	☐	☐	☐	Group goals, priorities, and criteria
6. Teachers work:									
In isolation toward goals and objectives	☐	☐	☐	☐	☐	☐	☐	☐	Collaboratively toward goals and objectives

7. Curricular goals are generated:

Individually	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5	☐ 6	☐ 7	☐ 8	Collaboratively

8. Communication flows primarily through:

Individual, informal networks	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5	☐ 6	☐ 7	☐ 8	Corporate, formal networks

9. Instructional resources are controlled/owned:

Individually	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5	☐ 6	☐ 7	☐ 8	Collaboratively

10. People hold:

No allegiance/loyalty to the school	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5	☐ 6	☐ 7	☐ 8	Much allegiance/loyalty to the school

11. Responsibilities of teachers and administrators are:

Ambiguous/fragmented with no accountability	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5	☐ 6	☐ 7	☐ 8	Clear/communal with much accountability

12. Most decisions are made:

Privately by factions or independent verdict	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5	☐ 6	☐ 7	☐ 8	Corporately by consensus or group approval

Submit Form | Reset Form

Grid and Group Cultural Preference Tool

Please enter the name of your school site:

Total years of service at this school site:

INSTRUCTIONS

Below are 25 items. Each item reflects a continuum from 1 to 8. For each item, read the entire item and choose the statement that you think best represents your **school site** (i.e., *not the school district*). Then, on the continuum, mark the button that represents the degree to which that statement applies to your **school site** (i.e., *not the school district*).

There are no "good" or "bad" responses to these items. The numbers 1and 8 represent extremes along a continuum, with numbers 2-7 providing a continuous scale between the two extremes. For example, if the statement were:

In my school we drink: Weak Coffee (1).....Strong Coffee (8), the strength of the coffee could be indicated along the continuum of 1 through 8; however, one answer would not be better than another.

GRID CONSIDERATIONS

1. I prefer a work atmosphere where authority structures are:

Decentralized/ non-hierarchical	1	2	3	4	5	6	7	8	Centralized/ hierarchical

2. I prefer a work atmosphere where my role(s) is/are:

Non-specialized / no explicit job descriptions	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5	☐ 6	☐ 7	☐ 8	Specialized / explicit job descriptions

3. I prefer a work atmosphere where teachers have:

Full autonomy in textbook selection	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5	☐ 6	☐ 7	☐ 8	No autonomy in textbook selection

4. I prefer a work atmosphere where individual teachers have:

Full autonomy in generating their educational goals	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5	☐ 6	☐ 7	☐ 8	No autonomy in generating their educational goals

5. I prefer a work atmosphere where individual teachers have:

Full autonomy in choosing instructional methods/strategies	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5	☐ 6	☐ 7	☐ 8	No autonomy in choosing instructional methods/strategies

6. I prefer a teaching and learning atmosphere where students are:

Encouraged to participate/take ownership of their education	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5	☐ 6	☐ 7	☐ 8	Discouraged from participating/taking ownership of their education

7. I prefer a work atmosphere where teachers obtain instructional resources (i.e., technology, manipulatives, materials, tools) through:

Individual competition / negotiation	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5	☐ 6	☐ 7	☐ 8	Administrative allocation

8. I prefer a teaching and learning atmosphere where instruction is:

Individualized / personalized for each student	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5	☐ 6	☐ 7	☐ 8	Not individualized / personalized for each student

9. I am motivated by:

Intrinsic / self-defined interests	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5	☐ 6	☐ 7	☐ 8	Extrinsic / institutional rewards

10. I prefer a work atmosphere where hiring decision are:

Decentralized / controlled by teachers	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5	☐ 6	☐ 7	☐ 8	Centralized / controlled by administrator(s)

11. I prefer a work atmosphere where class schedules are determined through:

Individual teacher negotiation	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5	☐ 6	☐ 7	☐ 8	Institutional rules / routines

12. I prefer a work atmosphere where rules and procedures are:

Few / implicit	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5	☐ 6	☐ 7	☐ 8	Numerous / explicit

GROUP CONSIDERATIONS

1. I prefer a work atmosphere where instructional activities are initiated / planned by::

Individual teachers working alone	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5	☐ 6	☐ 7	☐ 8	All educators working collaboratively

2. I prefer a work atmosphere where socialization and work are:

Separate / dichotomous activities	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5	☐ 6	☐ 7	☐ 8	Incorporated / united activities

3. I prefer a work atmosphere where intrinsic rewards primarily benefit:

The individual	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5	☐ 6	☐ 7	☐ 8	Everyone at the school site

4. I prefer a work atmosphere where teaching and learning are planned / organized around:

Individual teacher goals/interests	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5	☐ 6	☐ 7	☐ 8	Group goals / interests

5. I prefer a work atmosphere where performance is evaluated according to:

Individual teacher goals, priorities, and criteria	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5	☐ 6	☐ 7	☐ 8	Group goals, priorities, and criteria

6. I prefer a work atmosphere where members work:

In isolation toward goals and objectives	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5	☐ 6	☐ 7	☐ 8	Collaboratively toward goals and objectives

7. I prefer a work atmosphere where curricular goals are generated:

Individually	1	2	3	4	5	6	7	8	Collaboratively

8. I prefer a work atmosphere where communication flows primarily through:

Individual, informal networks	1	2	3	4	5	6	7	8	Corporate, formal networks

9. I prefer a work atmosphere where instructional resources are controlled / owned:

Individually	1	2	3	4	5	6	7	8	Collaboratively

10. I prefer a work atmosphere where educators and students have:

No allegiance / loyalty to the school	1	2	3	4	5	6	7	8	Much allegiance / loyalty to the school

11. I prefer a work atmosphere where responsibilities of teachers and administrators are:

Ambiguous / fragmented with no accountability	1	2	3	4	5	6	7	8	Clear / communal with much accountability

12. I prefer a work atmosphere where most decisions are made:

Privately by factions or independent verdict	1	2	3	4	5	6	7	8	Corporately by consensus or group approval

13. Please indicate your degree of satisfaction with professional development offered at your site:

Extremely Dissatisfied	1	2	3	4	5	6	7	8	Extremely Satisfied

Submit Form | Reset Form

APPENDIX B

GRID AND GROUP TEMPLATE

GRID	**Bureaucratic / Authoritarian**				**Corporate / Hierarchist**				
8									
7									
6									
5									
4									
3									
2									
1									
0	1	2	3	4	5	6	7	8	**GROUP**

Individualistic / individualism **Collectivist / Egalitarianism**

APPENDIX C

Protocol Questions for Administrators

1. How long have you been an administrator at this school?
2. How many times has administration changed at this school in the past ten years?
3. Who decides on the content and format of your professional development?
4. Describe professional development at your school.
5. How are instructional materials obtained or assigned at your school?
6. How is information communicated to/from your teachers?
7. How are teachers involved in school activities?

APPENDIX D

QUESTIONAIRE RESULTS BY SCHOOL

Cultural Awareness

R = Riverside; L = Lakefront; H = Hillcrest; P = Plainfield

QUESTION	R Total	L Total	H Total	P Total
GRID				
Authority structures are decentralized / non-hierarchical. (Low Grid)	0	4	1	1
Authority structures are centralized / hierarchical (High Grid)	8	28	8	7
2				
Job responsibilities are ill-defined. (Low Grid)	1	2	3	1
Job responsibilities are well defined. (High Grid)	9	31	5	5
3				
Individual teachers have full autonomy in textbook selection. (Low Grid)	5	15	3	6
Individual teachers have no autonomy in textbook selection. (High Grid)	5	19	3	1
4				
Individual teachers have full autonomy in generating their educational goals. (Low Grid)	3	11	2	4
Individual teachers have no autonomy in generating their educational goals. (High Grid)	7	21	6	1
5				
Individual teachers have full autonomy in choosing instructional methods / strategies. (Low Grid)	6	21	6	7
Individual teachers have no autonomy in choosing instructional methods / strategies. (High Grid)	4	13	4	1
6				
Students are encouraged to participate / take ownership of their education. (Low Grid)	7	22	4	5
Students are discouraged from participating / taking ownership of their education. (High Grid)	4	12	3	2
7				
Teachers obtain instructional resources through individual negotiation. (Low Grid)	0	7	2	2
Teachers obtain instructional resources through administrative allocation. (High Grid)	10	20	7	5
8				
Instruction is personalized for each student. (Low Grid)	1	3	0	0
Instruction is not personalized for each student. (High	7	21	7	5

Grid)				
9	**R**	**L**	**H**	**P**
Individual teachers are motivated by intrinsic / self-defined interests. (Low Grid)	4	21	8	5
Individual teachers are motivated by extrinsic / institutional rewards. (High Grid)	4	10	1	0
10				
Hiring decisions are made with teacher input. (Low Grid)	1	6	1	1
Hiring decisions are made without teacher input. (High Grid)	7	26	9	6
11				
Class schedules are determined with teacher input. (Low Grid)	6	12	2	1
Class schedules are determined without teacher input. (High Grid)	4	19	8	7
12				
Rules and procedures are few. (Low Grid)	1	3	0	2
Rules and procedures are numerous. (High Grid)	8	28	8	4
GROUP				
Chain of command is individual teachers working alone. (Low Group)	1	5	4	4
Chain of command is all educators working collaboratively. (High Group)	10	28	4	3
2				
Educators' socialization and work are separate / dichotomous activities. (Low Group)	3	13	6	3
Educators' socialization and work are incorporated / united activities. (High Group)	5	17	3	3
3				
Extrinsic rewards primarily benefit the individual. (Low Group)	4	17	8	2
Extrinsic rewards primarily benefit everyone at the school site. (High Group)	6	12	2	4
4				
Teaching and learning are planned / organized around individual teacher goals / interests. (Low Group)	0	3	2	5
Teaching and learning are planned / organized around group goals / interests. (High Group)	8	28	7	2
5				
Teaching performance is evaluated according to individual teacher goals, priorities, and criteria. (Low Group)	1	12	3	6
Teaching performance is evaluated according to group goals, priorities, and criteria. (High Group)	6	20	4	0

6	**R**	**L**	**H**	**P**
Teachers work in isolation toward goals and objectives. (Low Group)	0	4	5	5
Teachers work collaboratively toward goals and objectives. (High Group)	8	27	4	3
7				
Curricular goals are generated individually. (Low Group)	0	4	3	2
Curricular goals are generated collaboratively. (High Group)	10	31	5	5
8				
Communication flows primarily through individual, informal networks. (Low Group)	1	8	5	4
Communication flows primarily through corporate, formal networks. (High Group)	7	18	4	2
9				
Instructional resources are controlled / owned individually. (Low Group)	2	7	4	2
Instructional resources are controlled / owned collaboratively. (High Group)	8	21	5	3
10				
People hold no allegiance / loyalty to the school. (Low Group)	0	7	4	1
People hold much allegiance / loyalty to the school. (High Group)	10	23	4	5
11				
Responsibilities of teachers and administrators are ambiguous / fragmented with no accountability. (Low Group)	1	10	5	5
Responsibilities of teachers and administrators are clear / communal with much accountability. (High Group)	8	21	3	3
12				
Most decisions are made privately by factions or independent verdict. (Low Group)	4	15	7	5
Most decisions are made corporately by consensus or group approval. (High Group)	5	10	3	2

R = Riverside; L = Lakefront; H = Hillcrest; P = Plainfield

QUESTION	R Total	L Total	H Total	P Total
GRID				
I prefer a work atmosphere where authority structures are decentralized / non-hierarchical. (Low Grid)	1	4	2	2
I prefer a work atmosphere where authority structures are centralized / hierarchical. (High Grid)	7	22	1	12
2				
I prefer a work atmosphere where my role(s) is/are non-specialized / no explicit job descriptions (Low Grid)	0	4	0	0
I prefer a work atmosphere where my role(s) is/are specialized / explicit job descriptions (High Grid)	9	24	4	15
3				
I prefer a work atmosphere where teachers have full autonomy in textbook selection. (Low Grid)	8	23	2	14
I prefer a work atmosphere where teachers have no autonomy in textbook selection. (High Grid)	0	3	0	1
4				
I prefer a work atmosphere where individual teachers have full autonomy in generating their educational goals. (Low Grid)	5	15	2	12
I prefer a work atmosphere where individual teachers have no autonomy in generating their educational goals. (High Grid)	2	7	1	2
5				
I prefer a work atmosphere where individual teachers have full autonomy in choosing instructional methods / strategies. (Low Grid)	9	26	3	15
I prefer a work atmosphere where individual teachers have no autonomy in choosing instructional methods/strategies. (High Grid)	0	2	1	1
6				
I prefer a teaching and learning atmosphere where students are encouraged to participate / take ownership of their education. (Low Grid)	9	28	4	15
I prefer a teaching and learning atmosphere where students are discouraged from participating / taking ownership of their education. (High Grid)	0	2	0	0
7				
I prefer a work atmosphere where teachers obtain instructional resources through individual competition / negotiation. (Low Grid)	0	4	2	3

I prefer a work atmosphere where teachers obtain instructional resources through individual competition / negotiation. (High Grid)	8	21	1	9
8	**R**	**L**	**H**	**P**
I prefer a teaching and learning atmosphere where instruction is individualized / personalized for each student. (Low Grid)	6	16	3	7
I prefer a teaching and learning atmosphere where instruction is not individualized / personalized for each student. (High Grid)	1	6	1	7
9				
I am motivated by intrinsic / self-defined interests. (Low Grid)	4	18	3	13
I am motivated by extrinsic / institutional rewards. (High Grid)	3	8	1	1
10				
I prefer a work atmosphere where hiring decisions are decentralized / controlled by teachers. (Low Grid)	2	7	2	7
I prefer a work atmosphere where hiring decisions are centralized / controlled by administrator(s). (High Grid)	7	10	1	6
11				
I prefer a work atmosphere where class schedules are determined through individual teacher negotiation. (Low Grid)	4	11	2	5
I prefer a work atmosphere where class schedules are determined through institutional rules / routines. (High Grid)	5	10	1	8
12				
I prefer a work atmosphere where rules and procedures are few / implicit. (Low Grid)	5	11	3	3
I prefer a work atmosphere where rules and procedures are numerous / explicit. (High Grid)	2	7	1	11
GROUP				
I prefer a work atmosphere where instructional activities are initiated / planned by individual teachers working alone. (Low Group)	0	3	0	4
I prefer a work atmosphere where instructional activities are initiated / planned by all educators working collaboratively. (High Group)	8	24	4	10
2				
I prefer a work atmosphere where socialization and work are separate / dichotomous activities. (Low Group)	1	5	0	4
I prefer a work atmosphere where socialization and work are incorporated / united activities. (High Group)	8	20	2	11

3	**R**	**L**	**H**	**P**
I prefer a work atmosphere where intrinsic rewards primarily benefit the individual. (Low Group)	3	3	0	4
I prefer a work atmosphere where intrinsic rewards primarily benefit everyone at the school site. (High Group)	7	24	4	9
4				
I prefer a work atmosphere where teaching and learning are planned / organized around individual teacher goals / interests. (Low Group)	1	1	0	1
I prefer a work atmosphere where teaching and learning are planned / organized around group goals / interests. (High Group)	8	23	3	11
5				
I prefer a work atmosphere where performance is evaluated according to individual teacher goals, priorities, and criteria. (Low Group)	3	6	3	11
I prefer a work atmosphere where performance is evaluated according to group goals, priorities, and criteria. (High Group)	6	22	1	1
6				
I prefer a work atmosphere where members work in isolation toward goals and objectives. (Low Group)	1	0	0	3
I prefer a work atmosphere where members collaboratively toward goals and objectives. (High Group)	9	29	4	12
7				
I prefer a work atmosphere where curricular goals are generated individually. (Low Group)	1	1	0	2
I prefer a work atmosphere where curricular goals are generated collaboratively. (High Group)	9	27	4	12
8				
I prefer a work atmosphere where communication flows primarily through individual, informal networks. (Low Group)	3	4	1	4
I prefer a work atmosphere where communication flows primarily through corporate, formal networks. (High Group)	7	21	3	9
9				
I prefer a work atmosphere where instructional resources are controlled / owned individually. (Low Group)	3	4	0	3
I prefer a work atmosphere where instructional resources are controlled / owned collaboratively. (High Group)	7	24	3	12

10	**R**	**L**	**H**	**P**
I prefer a work atmosphere where educators and students have no allegiance / loyalty to the school. (Low Group)	0	0	0	0
I prefer a work atmosphere where educators and students have much allegiance / loyalty to the school. (High Group)	10	30	4	16
11				
I prefer a work atmosphere where responsibilities of teachers and administrators are ambiguous / fragmented with no accountability. (Low Group)	0	0	0	0
I prefer a work atmosphere where responsibilities of teachers and administrators are clear / communal with much accountability. (High Group)	10	30	4	16
12				
I prefer a work atmosphere where most decisions are made privately by factions or independent verdict. (Low Group)	0	0	0	0
I prefer a work atmosphere where most decisions are made corporately by consensus or group approval. (High Group)	10	29	4	12
	Avg. score	Avg. score	Avg. score	Avg. score
Please indicate your degree of satisfaction with professional development offered at your site (Extremely Dissatisfied...Extremely Satisfied)				

APPENDIX E

Oklahoma State University Institutional Review Board

Date:	Monday, April 07, 2008
IRB Application No	ED0851
Proposal Title:	A Grid and Group Explanation of Teachers' Perceptions of Professional Development
Reviewed and Processed as:	Expedited

Status Recommended by Reviewer(s): Approved Protocol Expires: 4/6/2009

Principal Investigator(s):

Julia R. Smith
15 Sherman Lane
Ponca City, OK 74604

Edward Harris
308 Willard
Stillwater, OK 74078

The IRB application referenced above has been approved. It is the judgment of the reviewers that the rights and welfare of individuals who may be asked to participate in this study will be respected, and that the research will be conducted in a manner consistent with the IRB requirements as outlined in section 45 CFR 46.

[X] The final versions of any printed recruitment, consent and assent documents bearing the IRB approval stamp are attached to this letter. These are the versions that must be used during the study.

As Principal Investigator, it is your responsibility to do the following:

1. Conduct this study exactly as it has been approved. Any modifications to the research protocol must be submitted with the appropriate signatures for IRB approval.
2. Submit a request for continuation if the study extends beyond the approval period of one calendar year. This continuation must receive IRB review and approval before the research can continue.
3. Report any adverse events to the IRB Chair promptly. Adverse events are those which are unanticipated and impact the subjects during the course of this research; and
4. Notify the IRB office in writing when your research project is complete.

Please note that approved protocols are subject to monitoring by the IRB and that the IRB office has the authority to inspect research records associated with this protocol at any time. If you have questions about the IRB procedures or need any assistance from the Board, please contact Beth McTernan in 219 Cordell North (phone: 405-744-5700, beth.mcternan@okstate.edu).

Sincerely,

Sheila Kennison, Chair
Institutional Review Board

VITA

Julia Ream White Smith

Candidate for the Degree of

Doctor of Education

Dissertation: A GRID AND GROUP EXPLANATION OF TEACHERS' PERCEPTIONS OF PROFESSIONAL DEVELOPMENT

Major Field: Education Administration

Biographical:

Personal Data: Born in Blackwell, Oklahoma on July 26, 1950, daughter of Leonard and Frances White.

Education: Graduated from Blackwell High School, Blackwell, Oklahoma in 1968; received Bachelor of Arts degree in Mathematics from Oklahoma State University, Stillwater, Oklahoma in May, 1973. Received Master of Education in Educational Administration, Curriculum, and Supervision at the University of Oklahoma in July, 2001. Completed the requirements for the Doctor of Education in Education Administration at Oklahoma State University, Stillwater, Oklahoma in July, 2009.

Experience: Employed as a secondary teacher of mathematics, Western Heights Junior High School, Oklahoma City, Oklahoma, 1973-1976; employed as a secondary teacher of mathematics and English in an alternative school program and junior high school, Ponca City Public Schools, Ponca City, Oklahoma, 1996-2000; employed as the Coordinator of an alternative high school program for teen mothers, Ponca City Public Schools, Ponca City, Oklahoma, 2000-present.

Professional Memberships: Phi Kappa Phi, Association for Supervision and Curriculum Development.

Name: Julia Ream White Smith Date of Degree: July, 2009

Institution: Oklahoma State University Location: Stillwater, Oklahoma

Title of Study: A GRID AND GROUP EXPLANATION OF TEACHERS' PERCEPTIONS OF PROFESSIONAL DEVELOPMENT

Pages in Study: 262 Candidate for the Degree of Doctor of Education

Major Field: Education Administration

Scope and Method of Study: The purpose of this inductive study was to use Mary Douglas' (1982) Typology of Grid and Group to explain the relationship between the organizational cultures of four Midwestern high schools and their teachers' satisfaction with professional development practices. Harris' (2005) description of school culture and associated professional development strategies, which are based on Douglas' typology, was also used to determine the types of professional development strategies used at each school.

Findings and Conclusions: When planning professional development strategies for a high school, understanding the organizational culture can increase teachers' satisfaction with that professional development. Mary Douglas' grid and group typology and Ed Harris' descriptions of school contexts in terms of this grid and group typology were used to examine the cultures and professional development strategies of four Midwestern high schools. Degrees of grid and group were used to categorize actual school cultures, teachers' preferred school cultures, and professional development strategies into one of four school culture prototypes: Individualist (low grid, low group), Bureaucratic (high grid, low group), Corporate (high grid, high group), and Collectivist (low grid, high group). Based on these criteria, two of the schools were determined to be Corporate, and two were Bureaucratic. The Corporate schools indicated a high degree of organization according to roles and regulations. They also exhibited strong influences from history and tradition and had strong ties to their communities. The Bureaucratic schools also showed strong designations of roles and regulations, but there was less indication of a reliance on history, tradition, and identification with the school as a whole. A regression study was used to analyze the effect of a match between teachers' preferred culture and the professional development at their school on their overall satisfaction with the professional development. Results indicated that 7% of the satisfaction was due to the match, which was significant ($p < .05$). This study has implications for school site and district administrators, professional development planners, departmental leaders, and teachers.

ADVISER'S APPROVAL: Dr. Ed Harris