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# An Analysis of the Organizational Patterns of North Carolina School Districts 

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## Academic Leadership Journal

## An Analysis of the Organizational Patterns of North Carolina School Districts

School system organization has been described as the skeleton that outlines the structure and determines the form of a school district. (Grove, 2002). Organizational charts are the manifestations of these skeletons. Some are simple; others are more complex - more like nervous systems than skeletons. Whatever metaphor is chosen, understanding the underlying organization of the complex multiple functions of a social group such as a school district is important. Our schools are being asked to educate our children in an ever-increasingly complex and global society. Surely the organization of a school district has an impact on how students are educated and how well they achieve curricular goals. With today's emphasis on accountability, the ability of the school district organization to help students achieve and meet testing goals is critical. But what is the best way to organize a school district? How do superintendents make the decisions needed to organize a district? This study is a necessary first step in determining this. In this study, we analyzed the organization of public school districts in the state of North Carolina. We were interested in the similarities and differences in the administrative structures driving these organizations serving children in a diverse geographical state. We addressed two questions:
(1) What organizational patterns are found in public school districts in North Carolina?
(2) How do organizational patterns differ in districts serving different numbers of students?

Organizational Structures of Schools
In 1980, Dalton wrote, "Organization structure may be considered the anatomy of the organization, providing a foundation within which the organization functions. Organization structure is believed to affect the behavior of organization members (p.49)." If one accepts this proposition that organizational structure is indeed the framework of an organized system of people giving form and foundation to their behaviors, beliefs, actions and the concomitant products of those beliefs, behaviors, actions, then natural questions to ask are "From what source, belief, theory or teaching did the organizational structure develop? Was it decided upon by a person or group or did it simply evolve over time?" Prior to investigating this important issue, it is critical to have an understanding of patterns currently in place. From this starting point, one can then move logically to the "how," "why" and "to what effect" questions which naturally follow. This provides a foundation for our first research question. According to Meyer (as cited in Shafritz, Ott, \& Jang, 2005, p. ix):

Organizations are self-consciously constructed and managed. This is a matter of definition since organizations are distinct from other social collectives precisely in that they are articulated and formalized. Organizations, thus, are theorized. And they are interdependent with theories that create them, but also arise from them. In other words, from real-world organizations academicians generate theories to explain them, and from these theories are spawned more real-world organizations. It is an often quoted but orphaned aphorism of organizational structure and effectiveness that every
organization is uniquely designed to yield exactly the results it is currently getting.
When we look at the literature on the organization of schools and school districts, we find definitions such as these to help us understand what an organization is but little about school district organizational structure itself. An understanding of school district organization must start with state laws concerning school districts. State legislatures with authority flowing from state constitutions have created a statewide system of public schools. In North Carolina, the state constitution provides for a uniform system of schools:
(1) General and uniform system: term. The General Assembly shall provide by taxation and otherwise for a general and uniform system of free public schools ... (2) Local responsibility. The General Assembly may assign to units of local government such responsibility for the financial support of the free public schools as it may deem appropriate. The governing boards of units of local government with financial responsibility for public education may use local revenues to add to or supplement any public school or post-secondary school program (Article IX).

The state legislature further carried out the North Carolina constitution's mandate to create a uniform system of schools:

A general and uniform system of free public schools shall be provided throughout the State, wherein equal opportunities shall be provided for all students, in accordance with the provisions of Article IX of the Constitution of North Carolina(§ 115C-1).

Article 5 of Chapter 115C gives local boards of education the power (except as reserved to some other official) to oversee schools in local counties and/or cities:

All powers and duties conferred and imposed by law respecting public schools, which are not expressly conferred and imposed upon some other official, are conferred and imposed upon local boards of education. Said boards of education shall have general control and supervision of all matters pertaining to the public schools in their respective administrative units and they shall enforce the school law in their respective units (§ 115C-36).

In section 115C-47 the powers and duties of local school boards are spelled out in forty-eight subsections that range from the duty to provide adequate school systems (duty one) to the duty to address exposure to diesel fumes ( duty 48). Within these duties, there is no specific mention of the power or duty of the board to prescribe the organization of the school systems over which they are given almost absolute authority. The closest that this list comes to this authority is duty 15 , which is the power to prescribe the duties of the superintendent consistent with section 115C-276. Section 115C-276 describes twenty duties of the superintendent ranging from the duty to carry out the rules and regulations of the board (duty one) to reporting DWI vehicle forfeiture (duty 20), but, again, the duty to organize the school system is not apparent (§115C-276).

The review of the literature sheds little light on this interesting phenomenon. Central Office and SiteBased Management, an Educator's Guide (Sewall, 1999),is typical of the depth of discussion given to school district organization in a way that is likely to produce the most effectiveness. Sewall breaks districts down into three sizes: Small (up to 1,999 students), Intermediate (2,000-10,000 students), and Large (above 10,000 students). She includes an organizational chart for each group in an "attempt to
show some of the ways in which superintendents have tried to share responsibilities within the school district organization in attempts to facilitate management and to increase available time for the superintendent to work with the board and to attend to community issues and other responsibilities"(p. 13).

The only textbook found specifically related to school system organization is The Superintendency Team, Organization and Administration of a School System's Central Staff by Edwin Fensch and Robert Wilson (1964). The Superintendency Team includes organizational charts very closely resembling those of Sewall, but it does go a step further in posing a number of questions a superintendent must answer in order to organize an effective school system.

What and how many assistants are needed?
How should the division of labor be made?
Which of the superintendent's responsibilities are proper for delegation?
What type of person works best in the lieutenancy position?
What skills does he need?
Where can he be found?
How does one coordinate the work of specialists?
How can efficiency be obtained and bureaucracy be avoided?
How can communication be maintained laterally as well as vertically?
How can the system minimize the impact of separation of teachers from the chief administrator?
How does the superintendent delegate his legal mandates?
How does this new arrangement affect his relationship with the governing body?
Precisely what is the superintendent's role under this arrangement; and what does he do?
Are the lieutenants' authority or advisory officers?
What are the best titles for the assistants? (p. 17-18)
While this information contributes to our understanding of school district organization, it does not give us the details we need to form a complete understanding.

Interestingly, the review of the literature reveals that much has been written since 1964 about school reorganization, but little about organization or reorganization at the district level and the impact of the district organizational structure on the core mission of every school district, learning. One of the few exceptions is a study by John Bohte published in the Public Administration Review, "School Bureaucracy and Student Performance at the Local Level" (2001). This study of 350 Texas school districts from 1991 to 1996, used the following independent variables: (1) two measures of
bureaucracy: (a) the percentage of central office administrators compared to full time district employees, and (b) the percentage of campus administrators compared to fulltime district administrators (p. 3); (2) environmental diversity variables: (a) the percentage of African-American students per district, (b) the percentage of Hispanic students per district, and (c) the percentage of low income students per district; (3) the final independent variable analyzed is district resources (p.3-4). The dependent variables are: (1) the measure of student performance from the Texas Assessment of Academic Skills (TASS), and (2) mean total Scholastic Aptitude Test scores for each district (p.2-3).

The results of Bohte's study revealed that across all grades, higher levels of bureaucracy were found to negatively affect student pass rates on standardized tests of reading, arithmetic, and writing as well as performance on the Scholastic Aptitude Test. A positive relationship was found between the percentage of teachers per district and the performance variables. This shows us there is a need to study and document the various organizational structures or levels of bureaucracy in another state.

One additional article emerged from the review of the literature, "Transforming New York City's Public Schools," written by Barbara Bartholomew and published in the May 2006 edition of Educational Leadership. In this article, Bartholomew, former New York City Department of Education Regional Director of School Improvement, describes the process which was used in the reorganization. For the purposes of this study one key idea can be gleaned from the article. Bartholomew notes that all the key players in the leadership team chosen by Mayor Bloomberg to design and implement the reforms came from outside the NYC school system. Bartholomew states, "It was clear from the start that the new organizational structure would consist of policy shapers and policy followers - them versus us. They the policy shapers - were nonunion, highly paid, and often short on education credentials" (p.62). This has implications for studying the "who" of district organization but again, an understanding of the organization itself must come first.

The literature has given us some understanding of issues related to school district organization such as the relationship between levels of bureaucracy and student pass rates on standardized tests, and considerations for guiding the organizing of district administration, especially for different size districts. The literature also has provided us with some understanding of exactly what an organization is. But because of the paucity of the literature it is apparent that little research has been conducted which focuses specifically on the two areas initially identified by the authors: (1) organizational patterns found in public school districts in North Carolina, (2) the number and distribution of the organizational patterns according to the size of the district.

## Method

## Setting and Participants

This qualitative study was conducted through the document analysis of public school district organizational charts. The charts were solicited from the 115 public school districts in North Carolina through email sent to superintendents. These 115 school districts encompass a variety of sizes, types (rural, suburban, and urban), and demographic profiles, providing potential sources of rich data. Follow up was done through phone calls.

Eighty-six district organizational charts were obtained for a return rate of $75 \%$. As these came from all geographical areas of the state as well as from small, medium, and large districts, and urban,
suburban, and rural districts, they were representative of the state. When data analysis began, seven charts had to be discarded because they were not suitable for this project. Two were merely lists of personnel rather than organizational charts; on the other five, the lines of report were not clear the way the charts were drawn. That left a total of 79 charts with which to work. This altered our return rate to 69\%.

## Data Analysis

To impose some order on the charts, they were at first sorted according to district size (number of students) using the following criteria: 0 - 999 students; 1000 - 4999 students; 5000 - 9999 students; $10,000-35,000$ students; and 35,000 or more students. These divisions allowed us to begin thinking about the districts in terms of size. We analyzed the charts and noted common features of them, such as the number of staff members under the superintendent, how many of these were instructional or noninstructional positions, how many layers of personnel there were between the superintendent and the principals, determining what the primary organizational divisions led by assistant superintendents, directors, and so forth were, and seeing who had direct supervision over the principals. These were features that emerged from the analysis and were thought to be factors important to understanding the organization of these districts. These were the primary factors that determined how the districts were represented on the charts. This initial, general, analysis was done primarily by one researcher, but was reviewed and agreed upon by the other researcher. A second analysis of the charts resulted in identification of topics to focus on. We decided to initially focus on the number of direct reports under the superintendent, whether principals were direct reports or not, the numbers of instructional and noninstructional personnel reporting to the superintendent, and the names of the positions that report to the superintendent. These features represented the chief characteristics upon which the charts seemed to be organized. In thinking about issues such as power and communication, we realized that these features would be responsible for determining the flow of power and communication in a district. We entered all this information into an Excel spreadsheet along with the number of students in each district and any other comments made when looking at the district charts. This information better acquainted us with each district and allowed us to make some initial comparisons. We then used district size categories as established by the National Center for Educational Statistics (National Center for Educational Statistics, 2002) to organize our data into three representative size categories: small (less than 2500 students), medium ( 2500 to 9999 students), and large (10,000 or more students). We found our study contained 11 small districts, 37 medium districts, and 31 large districts. We agreed that using established size categories was useful, so this information was also added to the spreadsheet.

Next, we conducted a third and deeper analysis of the charts to arrive at a system of classification for the districts. For purposes of anonymity, each chart was given an alphabetic code to identify it. The codes were assigned at random and ranged from A to BD. These were also added to the spreadsheet. The charts then were divided into groups according to the number of direct reports: group one had 0-3 direct reports, group two had 4-7 direct reports, and group three had 8 or more direct reports. Direct reports were defined as people who reported directly to the superintendent as shown by lines drawn straight from their position on the organizational chart to the superintendent's position on the chart.

In this final analysis, each chart was studied and then drawn on the computer, making it simpler, only going to one or two levels below the superintendent. Only those responsible for the primary mission of
the district were deemed important for the analysis. Public relations personnel, the district's attorney, clerical assistants to the superintendent, and so forth were not considered. The simplified charts were identified by the alphabetic codes. Commonalities and differences in who reported to the superintendent were considered, how the chart was organized, if principals were on the chart or not, and if so, where they were placed were the key elements scrutinized. If a chart was similar to one previously drawn, then its alphabetic code was simply added to the appropriate chart. Some simplified charts ended up with a long list of alphabetic codes, as many districts had the same type of chart. In this stage of the analysis, as well as in the sorting stage that followed, both researchers independently reviewed each district's chart and then the results were discussed and agreed upon by both researchers.

The simplified charts were sorted, the ones with commonalities being put together. Four groups resulted. These were labeled direct, simple filtered, complex filtered, and team. Charts in the direct group ( $n=74$ ) showed a direct link between the superintendents and their subordinates, such as assistant and associate superintendents, principals, directors, and coordinators. The two filtered groups ( $n=4$ ) displayed another organizational layer between the superintendents and their subordinates. The team group ( $\mathrm{n}=1$ ) did not show a hierarchical organization like the others, but rather a circular grouping indicating a different association between the superintendent and the subordinates. These were reviewed again, paying particular attention to (1) organization of the charts overall; (2) direct reports to the superintendent; (3) whether the principals were included or not, and if they were, where; and (4) the levels of complexity within the groups.

The direct group was large, representing 94\% of the districts, with districts of varied characteristics, and was re-sorted. This resulted in a sub-category in which the principals were a direct report to the superintendent ( direct with principals), a sub-category in which the principals were not a direct report or did not appear on the chart ( direct without principals), and a sub-category in which the principal appeared in a side report position on the chart ( direct principal on the side). A sub-category was also made for the few charts that fell into the direct report category but were unique in some way ( direct other). The resulting seven sub-categories were direct with principals, direct without principals, direct principal on the side, direct other, simple filtered, complex filtered, and team. These sub-categories were added to the Excel spreadsheet. Using the filter feature in Excel, we were able to easily determine how many districts use each of the type of organizational patterns we identified. This information was needed to answer our first research question. Using the filter feature again, we isolated each of the size categories (large, medium, and small) and then sorted by organizational subcategory. This enabled us to determine the number of organizational patterns used at the different district size levels needed to answer our second research question. The data were summarized on another worksheet in tabular form to facilitate finding patterns in the data. A secondary analysis was done on the charts by tabulating the number of organizational layers shown on the charts. Once the layers were counted and the charts sorted, this information was entered into Excel in tabular form for analysis. Based on negative perceptions of bureaucratic structures, this information became important to gain a fuller understanding of the charts and in understanding the answer to the second research question.

In summary, the analysis of the district organizational charts showed the charts could be divided into three main categories according to the relationship of the superintendents to their subordinates and to the position of the principals on the charts. Those three categories were direct, filtered, and team.

Further analysis resulted in the creation of sub-categories for the direct and filtered categories. Those were direct with principals, direct without principals, direct principal on the side, direct other, simple filtered, and complex filtered.

## Results

Our analysis of the districts' organizational charts resulted in the creation of seven groups which explained the relationship of the superintendents to their staff members and principals, notably those that are in a line of direct report to the superintendents. Four direct categories included a direct link between the superintendents and their subordinates. Two filtered categories displayed another organizational layer between the superintendents and their subordinates. A final category ( team) showed a non-hierarchical organization. In this section we describe these categories and the relationship between them and other district characteristics.

## Direct Categories

As noted above, the direct categories contained the largest number of districts ( $\mathrm{n}=74$ or $94 \%$ of the total). In this group, the relationship of the principals to the superintendent is an important one, and the position of the principals on the organizational chart seems to denote the relative importance of that relationship. In order to make that relationship clearer in describing these organizational patterns, we broke our original direct category into four separate sub-categories. The largest sub-category ( $n=43$ ) was the direct with principals.


Figure 1. A representative direct with principals organizational chart

In this group, the principal appears on the organizational chart as a direct report to the superintendent on the same level as assistant or associate superintendents, coordinators, and directors. The next largest subcategory ( $\mathrm{n}=20$ ) was the direct without principals.

In this group, a direct report relationship exists between the superintendent and subordinates, but the principal is not shown on the organizational chart at all.

In the third direct report sub-

category the principals are shown to the side of the superintendent on the chart, and this group is labeled as direct principals on the side.


Figure 3. A representative divect principal on the side organizational chart
$(n=7)$ This seems to indicate a unique relationship to the superintendent since this organizational chart position typically denotes a staff support position. However, an overall view of the chart indicates that the principals are in a position above that of directors, coordinators, and assistant or associate superintendents, indicating a shortened path of communication between principal and superintendent not to be filtered by the positions or people below. In the final sub-category, charts differ in some way from the other charts, enough to be put in their own group. These were labeled direct other.


Figure 4. The divect other organizational charts

This group's organizational charts were without the typical vertical or horizontal indices of position or authority. However, an overall view of the charts clearly indicates hierarchical levels of authority and superiority. This relationship exists between the superintendent and subordinates, and the principals are included on the charts. There were only four of these in our study. In three of these, the principal is shown in a direct line of report to assistant or associate superintendents and is a level below other subordinates on the chart. In the fourth direct other chart, the principal is shown on the same level as other subordinates (one level below the superintendent) and an assistant superintendent is shown in a side report to the superintendent.

## Filtered Categories

The two filtered sub-categories, simple filtered and complex filtered, by contrast, only accounted for four districts (5\%) of the total. In the filtered sub-categories, there is an organizational level between the superintendent and the subordinates that seems to filter information between the subordinates and the superintendent. This person was often designated as a deputy superintendent or an assistant or associate superintendent on the charts.


Figure 5. Representative simple filtered organizational charts

Of the three simple filtered organizational charts, two displayed the principals on the charts, and one did not. When the principals were included, they were on the same level as other subordinates, under the assistant or associate superintendent. Clearly in either situation, the principals would not have direct access to the superintendent like the principals on the direct with principals organizational charts.


Figure 6. A complex filtered organizational chart

The one district in the complex filtered sub-category illustrates a duality of authority. One line of authority extends down from the superintendent to the deputy superintendent for administrative services, who oversees the operational side of the district. There are four subordinates to the deputy superintendent (three associate superintendents and the Chief Technology Officer) and seven positions in a side report (four senior directors, one director, and two assistant superintendents). The other line of authority extends from the superintendent out to the right on the chart to six area superintendents and four staff positions (one senior director, one director, internal auditor, and executive administrative assistant).

The last category to be noted is the team


Figure 7. The team organizational chart
( $n=1$ ).
This organizational chart was circular rather than the typical vertical hierarchical, and included an associate superintendent and a direct line of report to principals. There was no hierarchy indicated as in the other organizational charts in this study. The superintendent is shown at the bottom of the circle with the principals directly across the circle. These two are joined by a line showing a direct report relationship. On either side of the superintendent are various directors, and coordinators. The personnel administrator is to the right of the superintendent and an associate superintendent is to the left. A smaller, secondary circle seems to indicate a sub-group relationship between the superintendent, the associate superintendent, and the personnel administrator in this medium-sized district.

Table 1 summarizes each of the categories of organizational structures found in the school districts in this study.

Table 1

Organizational Structures in North Carolina School Districts

| Category | Definition | Illustrative Features |
| :---: | :---: | :---: |
| Direct with principals | Chart shows direct link between the superintendent and subordinates; principals are shown on the chart. | Hierarchical <br> Principals are a direct report to the superintendent and are on the same level as other subordinates to the superintendent, one level below superintendent. |
| Direct without principals | Chart shows direct link between the superintendent and subordinates; principals are not shown on the chart. | Hierarchical <br> Subordinates such as directors, coordinators, and assistant or associate superintendents are shown one level below superintendent. |
| Direct with principals on the side | Chart shows direct link between the superintendent and subordinates; principals are shown on the chart in a side report to the superintendent. | Hierarchical <br> Subordinates such as directors, coordinators, and assistant or associate superintendents are shown one level below superintendent. Principals are shown in a side report to the superintendent above these subordinates. |
| Direct other | Subordinates such as directors, coordinators, and assistant or associate superintendents are shown one level below superintendent. but atypical horizontal and vertical lines of authority or power shown. | Hierarchical <br> May or may not include principals on the charts. |


| Simple filtered | Organizational layer <br> (assistant or associate <br> superintendent) exists <br> between the superintendent <br> and subordinates. |
| :--- | :--- |
| Complex filtered | Organizational layer <br> (assistant or associate <br> superintendent) exists <br> between the superintendent <br> and subordinates. <br> Duality of authority - chart <br> shows side reports also to <br> other subordinates. |
| Team | Circular format |

## Hierarchical

May or may not include principals on the chart. If they are included, they are on the same level as other subordinates to the assistant or associate superintendent.

## Hierarchical

Area superintendents are a side report to superintendent (instructional ). Deputy superintendent has subordinates in charge of administrative services (noninstructional).

Not hierarchical

Relations between Categories and Other District Features
In this section, we describe relationships between organizational patterns and district size. We report how districts with different numbers of students evidence different organizational structures.

## Large Districts

In the large districts ( $n=31$ ), those with more than 10,000 students, the most commonly found subcategory was that of direct with principals ( $n=15$ ). In this sub-category, the number of students ranged from 10,658 to 30,136 . The next most commonly found sub-category was that of direct without principals ( $n=10$ ). The largest district in this sub-category had 116,190 students, and the smallest had 10,699 students. Two districts were found in the direct other sub-category and the direct principals on the side sub-category, and one district each was found in the simple filtered and the complex filtered sub-categories. The districts in the direct other sub-category had 19,503 and 21,125 students respectively, and the districts in the direct principals on the side sub-category had 17,917 and 31,125 students respectively. The simple filtered district had 12,189 students, and the complex filtered district had 113,417 students. In the 15 large districts, 29 out of the 31 districts were categorized as direct and only two as filtered. There was a large range in the number of students found in these districts, and this range of students (i.e., district size) is shown in the different sub-categories also. It is interesting to note that the two largest districts, having 116,910 and 113,417 students respectively, fall under two different sub-categories. The first is categorized as direct with principals and second as complex filtered. These two districts are much larger than the next district of 66,203 students. Conversely, the two smallest districts in the large district category, 10,658 students, and 10,699 students, also have different organizational patterns. The first is classified as direct with principals and the second as direct without principals.

## Medium Districts

The medium districts are those with 2500 to 9999 students. Our study contained 37 districts in this size group, the most districts in any single size group. Like the large districts, the most common subcategory in this group was that of direct with principals $(n=18)$. The districts in this group ranged in size from 2769 students to 9804 students. The next most common sub-category was direct without principals ( $n=10$ ). These districts ranged in size from 2952 to 9763 students, similar in size to that of the direct p sub-category. The direct principals on the side sub-category was the next largest group with five districts ranging in size from 6689 students to 9540 students. The direct other sub-category contained two districts of 5829 students and 8112 students each. The medium districts also had one district in the simple filtered sub-category, which contained 3830 students. The last category to be found in this group was the team category. It only contained one district and this district had 2785 students. As with the large districts, the two districts with the most students in the medium district group, 9763 students and 9804 students each, have different organizational patterns. The first is in the direct without principals category and the second is in the direct with principals category.

## Small Districts

The small districts, comprising 11 districts in our study, contained less than 2500 students. Ten of these were found to be in the direct with principals sub-category and one was found to be in the simple filtered sub-category. In the direct with principals sub-category, the size range of the districts was from 664 students to 2492 students. The size of the one district in the simple filtered sub-category was 2429 students. The district with the largest number of students in the small district category, 2492 students, and the smallest number of students, 664 students, had the same organizational design of direct with principals.

## Organizational Levels

Sorting the charts by the number of organizational levels revealed from one to six levels shown in the 79 charts studied in this project. The largest number of districts showed three levels on their charts ( $\mathrm{n}=36$ ) followed by those districts with two levels ( $\mathrm{n}=27$ ). This accounts for $46 \%$ and $34 \%$ of the districts respectively, or a total of $80 \%$ of the districts. One district had six levels and two districts had one level. So as the charts differ in their organizational structure, so do the charts also differ in complexity.

## Organizational Patterns

To answer our first research question, "What organizational patterns are found in public school districts in North Carolina?" we found seven different organizational pattern groups in three categories in the 79 North Carolina public school districts studied in this project. The 31 school districts in the large district group were found to have six different pattern groups as were the 37 districts in the medium district group. Interestingly, two of the organizational pattern groups contained only one district each.

Figure 8


Figure 8. The distribution of school district organizational patterns in North Carolina.
Examining the graph in Figure 8, it is evident the complex filtered organizational pattern is found only in the large district group and the team organizational pattern is found only in the medium district group. The small district group, which only contained 11 districts, contained only two different organizational patterns. The graph clearly shows the answer to our second research question, "How do the number and distribution of the organizational patterns differ according to the size of the district?" In all three district size groups, the direct with principals organizational pattern was the most prevalent. As noted earlier in this paper, more districts were categorized as direct ( $n=74$ ) than filtered ( $n=4$ ) or team ( $n=1$ ). The direct with principals, direct other, direct principals on the side, and simple filtered organizational patterns were found only in the large and medium district groups. The team organizational pattern was found only in the medium district group, and the complex filtered organizational pattern was found only in the large district group. In both of these cases, there was only one instance of each of these patterns. At least one of the filtered organizational patterns was found in each size group and at least one of the direct organizational patterns was also found in each of the large, medium, and small district groups. The largest organizational pattern is that of direct with principals ( $n=43$ ), in which the principals are in a direct report relationship under the superintendent. This accounts for $54 \%$ of the districts studied in our project, and is the most prominent organizational pattern in North Carolina.

## Discussion

We began this study with the purposes of determining the organizational patterns of public school
districts of North Carolina, and examining how the patterns vary based on the size of the district. We spent significant time debating whether to use the word "scheme" or "pattern" to describe organizations. We consciously decided to use pattern rather than scheme. We concluded that a scheme connotes a purposeful plan behind the organization. A pattern, on the other hand, does not denote a conscious plan, but it does not eliminate it either. As well, pattern allows room to at least consider that an evolutionary process was in play. At this stage of this research, it is not possible to determine which is more accurate.

The conclusions which follow are arranged with the intent of looking at the organization in light of the typical positions of authority, power, responsibility and communication. Implications for practice and recommendations for further research are made.

## Districts

It was immediately clear that there are multiple organizational patterns currently in place in the state of North Carolina, and specific messages of power, authority, and communication channels are indicated by the published plans that we reviewed The draftsmen of the published plans seem not to understand the difference between line and staff positions since, for a number of districts, principals were placed on the chart in a typical staff support position when clearly principals are line positions and as such are directly responsible for the product (learning and achievement) and services (counseling, college placement, etc.) for which the district is held responsible by statute or policy. In other places positions such as legal services, administrative assistants, curriculum and instructional support, are clearly shown in line positions on the charts. Therefore, we conclude that most of the organizational charts that we reviewed were primarily about communication channels and power, rather than defined levels of authority. The direct with principals sub-category (principals reporting directly to superintendent) was the dominant pattern regardless of size of the district (refer to Figure 1); this pattern represented 54\% of all the patterns. Noticeably, other districts prefer to filter information and power, emphasizing a bureaucratic, policy-focused approach to authority and decision-making but the filtered pattern only accounts for $5 \%$ of the districts. Bureaucracy is not used here pejoratively, but in its purer sense as Max Weber defined it as a system of fixed and official jurisdictional areas governed by rules, and a system of super-and subordinates where upper levels supervise lower levels (as cited in Shafritz, Ott, \& Jang, 2005, p.73). Given the general negative perceptions of bureaucracy and the results of Bohte's study of the effects of district bureaucracy in Texas on student achievement, this study points out that for better or worse, bureaucracy is alive and well in the school districts of North Carolina in 2007. The effects of these bureaucracies as well as the other patterns must wait for further research to establish a correlation between organizational pattern and organizational results. Although organizations in other arenas are moving to flatter organizational patterns (Rajan \& Wulf, 2002), many North Carolina School districts have not felt or responded to these pressures. Multilevel organizations (three levels or more) were found in $80 \%$ of the districts reviewed. One certainly should ask, "Are flatter organizations an appropriate model for schools systems?" Although we can argue that placing those in authority for the learning of children closer to those who measure the organizational efforts in daily experiences of their children would be a positive step for school districts, the patterns in place today indicate that the overwhelming majority of districts in North Carolina either have not considered this idea or have rejected it as reflected in their organizational charts. The why and the how districts were organized as they are (Do organizational patterns directly relate to the stated beliefs, vision, and mission of the district?), must be considered in further research.

Superintendents are shown at the head of every district organizational chart except one, the team pattern. Certainly this is not surprising. As we reviewed the data, it was interesting to take a look at those positions closest to the superintendent. On $72 \%$ of the charts it was the principals. In $25 \%$ of the cases this level was solely the purview of district level personnel. When there was no one direct link between the principal and central office staff positions, the intended power or authority of the principal in relation to these intermediate positions is unclear.

That superintendents in North Carolina have the authority to determine the organizational structure of the district they lead is simply not clear from a review of North Carolina Statutes. Whether or not the organizational pattern of the district was decided upon by the superintendent must await further research.

Principals
We found that school principals, frequently but not always, occupy a position of considerable importance in relation to the superintendent in most North Carolina districts, as 56 districts have the principals directly reporting to the superintendent. This shows that the relationship between the superintendent and the principal is an important one, and that superintendents recognize that importance. Because the primary mission of any school district is student achievement, this places the leaders who are closer to students in closer proximity to the superintendent. Presumably, this is a way for superintendents to keep a closer eye on student achievement. Whether this position in the hierarchy is based on planning, tradition, or for purposes of communication is not clear and should be the subject of further research.

District-level Staff
The levels between the superintendent and the school personnel again indicate a potential lack of understanding of the role of district staff personnel to support the mission of the district at the school level. Especially in today's environment where the school is the site of accountability (Elmore, 2000), the ability of the district level staff personnel to support the line personnel at the school level is more critical than at any other time in the history of the profession in the United States. The organizational charts show what should be support people clearly in line positions. How does this affect the work of the district? What impact does this have on student achievement? Again, the answers to these questions must await further research. At this point in our research, however, this should indicate that careful thought should be given to where and how these district-level staff positions are placed on the organizational chart, as this placement reflects their role in the district.

Final Thoughts
At the very beginning of this project, we were more interested in the how and why of district organization but we knew that understanding the basic organizational patterns was the first step before any other work could legitimately be undertaken. The basis of our work was limited to North Carolina Districts primarily due to its diversity in district sizes, in student populations, and in geographical areas. We recognize that the laws governing the public schools of North Carolina are unique to North Carolina; however, we are convinced that our data and conclusions in this study lend an important understanding
to the work of school districts far beyond the boundaries of this state.

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