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Pamela D. Tucker  
*University of Virginia*

Cheryl B. Henig  
*University of Virginia*

Michael J. Salmonowicz  
*University of Virginia*

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# Learning Outcomes of an Educational Leadership Cohort Program

**Pamela D. Tucker, Cheryl B. Henig,  
and Michael J. Salmonowicz**

Over the past three decades, demands on public schools have increased dramatically with a direct impact on the expectations of principals. Not only are principals called upon by constituents to address and respond to the need for increased accountability and higher academic standards, but they are also challenged to meet the special needs of exceptional students and maintain safe and secure learning environments (Bottoms & O'Neill, 2001; Institute for Educational Leadership, 2000). The central role of the principal in school improvement was established in the effective schools research of the 1970s and 1980s (Edmonds, 1979; Frederickson & Edmonds, 1979), which substantiated the importance of principals' contributions to instructional effectiveness. More recent research (Hallinger & Heck, 1998; Leithwood & Jantzi, 1999) has continued to support the critical role of the principal, and the current context of accountability creates an even greater urgency for highly effective school leadership (Duke, Grogan, Tucker & Heinecke, 2003).

The evidence that principals make a substantial difference in improving schools and increasing student learning has been described repeatedly in case studies of schools that succeed despite challenging demographics (Educational Research Service, 2000; The Charles A. Dana Center, 2000). A recently released meta-analysis by the Mid-continent Research for Education and Learning (McREL) research lab has found a "substantial relationship between leadership and student achievement" (Waters, Marzano & McNulty, 2003, p. 3), amounting to an average effect size of .25. They reported that this translates into a difference of ten percentile points in mean student achievement based on effective school leadership practices.

Policymakers have recognized this key role of school principals in facilitating school reform efforts and have generated numerous reports recommending better recruitment, pre-service preparation, and in-service professional development to enhance both the quality and quantity of promising school leaders (Bottoms & O'Neill, 2001; Institute for Educational Leadership, 2000; National Association of State Boards of Education, 1999; National Staff Development Council, 2001). Preparation programs, in particular, have come under attack for being irrelevant and outdated in both the curriculum and how the curriculum is delivered (Bottoms & O'Neill, 2001; Levine, 2005; Murphy,

2002; Thomas B. Fordham Foundation, 2003). Recommendations for changes in curriculum include greater rigor and coherence, but more specifically a heavier emphasis on curriculum and instruction, understanding and use of data to improve instruction, communication skills, and the change process. In addition, there is a push for greater flexibility in program delivery and more integrated field-based experiences to anchor theory and research in practice (Bottoms & O'Neill, 2001). At the national level, efforts like the National Commission on the Advancement of Educational Leadership Preparation reflect both recognition of the problems in traditional preparation programs and an effort to bring about broad-based change (Young & Petersen, 2002).

Against this backdrop of mushrooming expectations for principals and a critical assessment of the value offered by university-based preparation programs (Haller, Brent, & McNamara, 1997), school districts across the country are experiencing shortages of high quality administrative candidates in the midst of "baby boom" principal retirements (Fenwick, 2000). Virginia school districts, like districts across the country, have enlisted the assistance of university educational leadership faculty to work in concert with them to create preparation programs to develop talent from within their organizations to meet current and future administrator needs.

As described by Grogan & Roberson (2002), a customized cohort program was developed by university professors and superintendents from three large school systems in an effort to meet the shortage problem and create a more dynamic and germane program. Together they jointly planned course content with two of the superintendents teaching courses within the program and other school leaders providing a variety of invited presentations. The goal was to create a highly selective and yet richly diverse learning environment for "an intact community of learners" (Browne-Ferrigno & Muth, 2003, p. 622). Based on the input of superintendents, courses were more focused on issues of accountability, student achievement, data-driven decisionmaking, and diversity. Internships were made an integral part of the leadership academies run by each of the school districts. Expertise within the three school districts was utilized to complement the more research-based and theoretical orientation of the university faculty and thus highlight the intersection of practice and theory. The synergy of this cooperative program was viewed as a promising approach to ensuring program relevancy and responsiveness to the field (Grogan & Roberson, 2002).

## **Cohorts as a Tool for Leadership Preparation**

While cohorts typically have been undertaken as an efficient means of program delivery (Browne-Ferrigno & Muth, 2003), they have been found to have unexpectedly positive outcomes for students which has prompted research in this area during the past ten years. The research has supported the affective and cognitive benefits of cohorts in leadership preparation (Browne-Ferrigno, 2001; Herbert & Reynolds, 1998; Scribner & Donaldson, 2001; Yerkes, Basom, Barnett & Norris, 1995), and many programs now use them to enhance program effectiveness as well as efficiency (Barnett, Basom, Yerkes & Norris, 2000). Browne-Ferrigno and Muth (2003) have noted numerous limitations of the existing research, however, including limited empirical investigations, typically small sample sizes, the self-reported nature of data collection, and the lack of evidence on the long-term effects on professional practice. In addition, Scribner and Donaldson (2001) noted that research has focused on the inputs and outputs of cohorts as if they were "black boxes" instead of complex social entities that have

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**Pamela D. Tucker is Associate Professor of Educational Administration at the University of Virginia. Cheryl B. Henig is Program Coordinator for Administration and Supervision at the University of Virginia. Michael Salmonowicz is a doctoral student in Educational Administration at the University of Virginia.**

noteworthy effects on learning that demand further study and analysis to “reap the full instructional and learning benefits” (Donaldson & Scribner, 2003, p. 663).

Despite these limitations in the research, there is a striking consistency in the reports by students of positive program outcomes. Cohorts seem to “foster strong interpersonal relationships, create caring learning climates, and support students’ sense of competence and well-being” (Browne-Ferrigno & Muth, 2003, p. 623). Students have also cited as benefits enhanced knowledge and understanding (Norris, Barnett, Basom & Yerkes, 1997) and improved academic performance (Hill, 1995). Hebert and Reynolds (1998) found greater learning by students in cohorts as compared to those in typical self-determined programs. These outcomes are to be expected given that cohort designs take into account adults’ desire to “grow and learn with others” and “count on others as resources in their learning” (Basom, 2002, p. 33).

### **Rationale for the Examination of Learning Outcomes for a Cohort Program**

The purpose of this study was twofold. The immediate objective was to collect survey data from students, both before and after program delivery, to assess the effectiveness of the field-responsive curriculum developed for this cohort. The second purpose was to pilot an approach to program evaluation on a tightly controlled basis to begin the process of documenting “direct learning outcomes” (Orr, 2003). For both purposes, the survey solicited detailed information from students regarding the aspects of school leadership that they viewed as most important to their development and the extent to which they thought they were prepared to fulfill these functions.

#### *Cohort Assessment*

As noted above, cohort programs have notable benefits. Students and faculty members have reported support, friendship, and collaboration as significant components of the cohort experience (Barnett et al., 2000; Milstein, 1993; Twale & Kochan, 2000) that lead to the creation of professional learning communities for students during their programs and beyond as they enter the profession (Barnett & Muse, 1993; Milstein, 1993; Hill, 1995). Drawbacks have also been identified, including limited flexibility in course sequence (Barnett, Basom, Yerkes & Norris, 2000; Teitel, 1997), balancing coursework with full-time employment (Barnett et al., 2000), poor group dynamics (Barnett et al., 2000; Teitel, 1997), and tension in courses that include non-cohort students (Hill, 1995; Teitel, 1997).

Much of the research published prior to 2000 focused primarily on faculty perceptions of the value of cohort programs with little data collected from students on the advantages and disadvantages, both in terms of content and processes (Barnett et al., 2000). To address the absence of student voices, this study was designed to focus heavily on the content of the program and attempted to assess changes in students’ perceptions of their own preparation to undertake widely recognized administrative tasks (DiPaola & Tschannen-Moran, 2001). Likewise, other studies since 2000 have attended to student perceptions of cohort programs (e.g., Scribner & Donaldson, 2001; Twale & Kochan, 2000; Whitaker, King & Vogel, 2004). Specifically, Scribner and Donaldson (2001) have addressed group dynamics and the types of learning that occur within a cohort.

#### *Pilot for Program Evaluation*

A second, but related, goal was to gather evidence as to whether the program enhanced the skills of prospective principals to lead change in schools and increase student learning (Haller, Brent & McNamara, 1997). A recent publication by the organization representing university-based preparation programs, the University Council for Educational Administration (UCEA), cited nine studies dealing with the assessment of educational leadership programs (Murphy & Vriesenga, 2004); eight of the studies used self-evaluation as the sole method of program assessment, while one used a combination of self-evaluation and “field application projects” (p. 80). To date, the majority of educational administration program evaluation has been conducted using self-evaluations of overall program effectiveness from either students or faculty (McCarthy, 1999). Though a popular method of assessment, it has been observed that “testimonials are not sufficient to conclude that particular preparation program features have merit” (McCarthy, 1999, p. 133). This criticism should be considered, however, in the context that “no evaluation design has been created that gives us definitive answers about the effects of leadership preparation” (Chenoweth, Carr & Ruhl, 2002, p. 27).

While a professional dialogue has begun about how to improve the evaluation of preparation programs (Orr, 2003), there are major measurement and methodological issues to resolve. Questions abound as to the appropriate impact measures (e.g., learning outcomes, leadership effectiveness), data collection strategies (e.g., surveys, observations, student achievement data), data sources (e.g., participants, superiors), and so on (Orr, 2003). The gold standard for evaluation of preparation programs would be tangible evidence of school improvement where graduates serve as leaders; however, groundwork must be laid first in terms of more basic information about program content and processes (Barnett et al., 2000). The methodology utilized in this study was intended to provide a baseline measure of functional skill development (one type of learning outcome) by using pre- and post-program measures of self-reported levels of preparation to complete administrative tasks. Changes in individual perceptions of administrative preparation were analyzed for statistically significant growth after post-program data were received.

### **Data Sources and Methods**

#### *Participants*

All 27 students in the cohort program were invited to respond to the program surveys. Twenty-one students responded to the pre-program survey, and 19 responded to the post-program survey. Of the 19 respondents who provided information on the pre- and post-program surveys, all were teachers at the beginning of the program; seven (37%) were male, and 12 (63%) were female. Sixteen (84%) were aged 24-44 years old; three (16%) were African-American, and 16 (84%) were Caucasian. For most of the participants, their highest degree (74%) was a bachelor’s degree prior to beginning the program. Close to half of the students (42%) had 9 or more years of experience with 2 having more than 20 years of experience. More than one-third (37%) planned to pursue an assistant principalship in the next 5 years while others planned to pursue principalships at various levels or central office positions.

### *Instrumentation*

While we acknowledge the limitations of self-evaluation as a method of assessment as noted by Murphy & Vriesenga (2004), we have sought to improve upon past self-evaluation instruments in 4 ways. First, we used Virginia licensure standards as a basis for our survey questions. The licensure standards are closely aligned with the Interstate School Leaders Licensure Consortium (ISLLC) standards, which were adopted by Virginia in 1996. Second, we took a value-added approach, using our instrument to measure both pre- and post-program perceptions. Third, our survey gathered specific, detailed information in a structured manner. Administrative duties were categorized into four subgroups and then separated into specific tasks; within this framework, participants were asked to rate the importance of the task and their level of preparation for the tasks. Fourth, our survey was focused on specific learning outcomes, not global benefits or drawbacks of the program.

Using survey methodology, this study explored the perceptions of students in the 18-month cohort program at the beginning and end of the preparation program regarding: (a) the importance of key administrative tasks; (b) their preparation to fulfill key administrative tasks; and (c) the advantages and disadvantages of a cohort delivery format. A slightly modified version was used for collecting data at the end of the program. Survey items were based on the work of DiPaola and Tschannen-Moran (2001) in a statewide study of Virginia principals. One section of their survey focused on the administrative functions principals viewed as significant to their work and their perceived professional development needs in these areas. A slightly modified list of items was used to assess our cohort participants' perceptions of important aspects of the principalship and how prepared they perceived themselves to be in fulfilling these tasks.

Forty-four items were rated for importance using a 3-point Likert scale of "not important" (1) to "highly important" (3), and the same items were rated for level of preparation using a 4-point Likert scale of "none" (0) to "high" (3). The 44 items were grouped into 4 clusters: (a) Planning and Instructional Leadership; (b) Organizational Management; (c) Communication; and (d) Professionalism. In addition to basic demographic questions, 3 open-ended questions were asked about cohort participants' goals as future principals and the advantages and disadvantages of the cohort delivery model.

Survey data are considered an excellent means to "produce statistics – that is quantitative or numerical descriptions of some aspects of the study population" (Fowler, 1993, p. 1). In this case, survey data elucidated student perceptions on the learning outcomes of the cohort preparation program. Our response rate was 70% with 19 of the 27 participants responding to both the pre- and post-program surveys. Given that a 60% response rate is considered satisfactory for generalizability (Glatthorn, 1998), we are fairly confident of the results.

### *Data Analysis*

Two types of analyses were used to answer the primary research questions of perceived importance of administrative tasks and level of preparation due to program participation. Descriptive statistics were used to summarize students' perceptions of the importance of administrative tasks before and after program participation, and their perceived levels of preparation to perform the administrative tasks. These perceptions were compared to those of seated principals. Second, to characterize the changes in students' perceived levels of administrative preparation, paired t-tests were used to identify statistically significant differences between pre- and post-program responses.

For perceptual data on the importance of administrative tasks, the percentage of responses in each category ("not important," "important," and "highly important") was calculated. The 10 tasks rated as highly important by cohort participants were identified and compared to the percentage of seated principals who rated the same tasks as highly important. Analogous percentages of responses in post-program data were compared to the pre-program data to determine if participant perceptions of importance changed at the end of the program.

In order to determine if there were statistically significant differences in perceived preparation levels before and after the program, paired t-tests were performed for each of the 4 categories of administrative tasks. The paired t-test is the preferred analysis when posttest scores are compared with pretest scores (Hopkins, Hopkins & Glass, 1997). Pre-program and post-program subscores for each of the 4 clusters--"Planning and Instructional Leadership" (survey items 1-18), Organizational Management (survey items 19-32), Communication (survey items 33-40), and Professionalism (survey items 41-44)--were compared using paired t-tests. SPSS and Excel computer programs were utilized for statistical analyses. Statistical significance was determined at the  $p < .05$  level. Open-ended responses regarding the cohort delivery format were analyzed for common themes based on student perceptions before and after program delivery.

### **Findings**

The findings are organized by perceptions of participants at the beginning and end of the cohort experience in terms of the importance of various administrative functions and the participants' preparation to perform them. The responses of cohort participants are contrasted with those of seated principals at both the beginning and end of the program. Lastly, comparisons of pre- and post-program perceptions of preparation are made in the last section of the findings.

#### *Beginning of the Program*

At the beginning of the program, a majority of cohort participants ( $N = 21$ ) perceived 29 of the 44 (66%) administrative functions as "highly important" in the survey results and demonstrated little ability to differentiate between "important" and "highly important." Administrative tasks receiving the largest number of "highly important" ratings were: (a) data-driven decisionmaking (Mean = 2.90); (b) dealing with child abuse and neglect (Mean = 2.86); and (c) networking and collaborating with peers (Mean = 2.86). Table 1 lists the ten administrative tasks that were rated as "highly important" by the largest percentage of cohort participants.

These results differ markedly from those of a similar study conducted in 2001 with seated principals in Virginia (DiPaola & Tschannen-Moran, 2001). Seated principals identified as the 3 top ranked administrative tasks: (a) student achievement on standardized tests; (b) curriculum alignment with state standards; and (c) effective use of instructional time. In addition, only 4 out of the 44 (9%) administrative functions were rated as "highly important" by a majority of the seated principals, indicating a greater ability to better distinguish levels of importance.

A majority of cohort participants reported that they had "average" to "high" preparation to perform 38 of the 44 (86%) administrative tasks listed in the survey. Table 2 summarizes the level of preparation that cohort participants reported for the 10 administrative tasks that were rated by the most participants as "highly important." Given that students were just beginning their preparation program, it was assumed that they felt prepared for these tasks based on their teaching experiences, as exemplified by the high ratings in the areas of

**Table 1**  
**Percentage of Cohort Participants who Rated These Administrative Tasks as the Top Ten Highly Important Tasks at the Beginning of the Program Compared to Sitting Principals**

<b>Administrative Tasks</b>	<b>Percentage of Cohort Participants who Rated Item Highly Important (%)</b>	<b>Percentage of Principals who Rated Item Highly Important (%)</b>
Data-driven decision making	90.5 (Mean = 2.90)	44.0
Networking and collaborating with peers	90.5 (Mean = 2.86)	35.0
Dealing with child abuse and neglect	90.5 (Mean = 2.86)	23.0
Managing stress	85.0 (Mean = 2.85)	36.0
Building an effective administration team	81.0 (Mean = 2.81)	36.0
Enhancing my leadership skills	80.0 (Mean = 2.85)	35.0
Improving staff morale	76.2 (Mean = 2.76)	45.0
Budgeting and resource allocation	76.2 (Mean = 2.76)	26.0
Working with families	76.2 (Mean = 0.86)	43.0
Curriculum alignment with Standards of Learning	76.2 (Mean = 2.76)	58.0

N varied from 19 to 21.

curriculum alignment, networking and collaborating with peers, and working with families.

Although cohort participants reported strong levels of preparation, a “high” level of preparation was reported by a majority of the cohort in only one area out of the 44, “working with families” (Mean = 2.48). It could be surmised that they have gained extensive experience in this area based on their years of teaching in the classroom. Other reported areas of moderate preparation, “curriculum alignment with SOL” (Mean = 2.33) and “networking and collaborating with peers” (Mean = 2.30), likewise reflected activities that are expected of classroom teachers as well as school administrators.

Open-ended questions about the cohort program suggested that students were pleased with the program’s convenience in terms of location and schedule, collegiality and close relationships, and the relevance of course content and experiences. Almost every respondent commented on the personal relationships that supported the learning experience. This finding was consistent with multiple studies on cohort groups (Barnett et al., 2000; Cordeiro, Krueger, Parks, Restine & Wilson, 1993; Hill, 1995; Twale & Kochan, 2000). The involvement of key educational leaders from each of their school systems in the classes and the opportunity to network with other future school leaders from neighboring districts were also viewed as advantages of how the program was delivered. The primary concerns of the cohort

participants were the heavy course requirements; the struggle to balance family, work and courses; and the infrequent contact with professors due to once-a-month weekend courses.

*End of the Program*

At the end of the program, a majority of responding cohort participants (N = 19) perceived 39 of the 44 (89%) administrative functions as “highly important” in the survey results. Administrative tasks receiving the largest number of “highly important” ratings were: (a) data-driven decision making” (Mean = 3.00); (b) student achievement on standardized tests/Standard of Learning (Mean = 2.89); (c) building an effective administrative team (Mean = 2.89); (d) “teacher evaluation to improve instruction” (Mean = 2.89); and (e) managing stress (Mean = 2.89). Table 3 lists the 10 administrative tasks that were rated by the most cohort participants as “highly important.” Four of these items overlapped with those rated by the seated principals: (a) student achievement on standardized tests/Standards of Learning; (b) “standardized test analysis; (c) special educational law and implementation; and (d) data-driven decisionmaking. While the perceptions of participants at the end of the program are more consistent with those of seated principals in the state (DiPaola & Tschannen-Moran, 2001), there remained substantial differences. Cohort participants viewed even more of the administrative functions as “highly important” and

**Table 2**  
**Percentage of Cohort Participants who Reported Indicated Levels of Preparation to Fulfill the Administrative Tasks Ranked as Highly Important at the Beginning of the Program**

<i>Administrative Tasks</i>	<i>Level of Preparation (%)</i>			
	<i>None</i>	<i>Low</i>	<i>Average</i>	<i>High</i>
Data-driven decision making (Mean = 1.86)	4.8	23.8	52.4	19.0
Networking and collaborating with peers (Mean = 2.30)	0.0	10.0	45.0	45.0
Dealing with child abuse and neglect (Mean = 1.33)	19.0	33.3	38.1	9.5
Managing stress (Mean = 1.90)	5.0	20.0	55.0	20.0
Building an effective administration team (Mean = 1.62)	14.3	23.8	47.6	14.3
Enhancing my leadership skills (Mean = 2.30)	0.0	5.0	60.0	35.0
Improving staff morale (Mean = 1.95)	9.5	19.0	38.1	33.3
Budgeting and resource allocation (Mean = 1.71)	14.3	28.6	38.1	19.0
Working with families (Mean = 2.48)	0.0	19.0	19.0	61.9
Curriculum alignment with Standards of Learning (Mean = 2.33)	4.8	0.0	52.4	42.9

N varied from 19 to 21.

thus did not improve in their ability to differentiate the importance level of various tasks.

A majority of cohort participants reported a “high” level of preparation to perform 6 of the top 10 administrative tasks they indicated were “highly important” at the end of the program, as compared to a “high” level of preparation to perform only 1 of the top 10 most important administrative tasks at the beginning of the program. Table 4 summarizes the level of preparation that cohort participants reported for the 10 administrative tasks that were rated by the most participants as “highly important.” Overall, a majority of students rated themselves as having a “high” level of preparation to perform 15 administrative tasks as compared to a “high” level of preparation to perform only 3 tasks at the beginning of the program.

At the end of the program, students perceived themselves as having a “high” level of preparation in 34% of the administrative tasks. Specifically, they reported a “high” level of preparation as follows:

- 44% of the tasks under Planning and Instructional Leadership (Mean = 2.47);
- 7% of the tasks under Organizational Management (Mean = 2.28);
- 38% of the tasks under “Communication” (Mean = 2.43);
- 75% of the tasks under “Professionalism” (Mean = 2.58).

Even more impressive was the finding that a majority of cohort participants reported “high” levels of preparation in 7 out of the 10 (70%) tasks rated as most important by seated principals in the DiPaola and Tschannen-Moran study (2001).

Open-ended questions were asked again at the end of the program about the benefits and drawbacks of the cohort format, and students most frequently cited the program design, location of course delivery, and collegial relationships as benefits. While instructors and quality of program garnered some attention, convenience, flexibility, and network-

ing possibilities seemed to be more important. The concerns of the cohort participants voiced at the beginning of the program diminished over time, but some participants continued to have difficulty balancing work, school, and home lives. Their advice to future participants was to “be prepared for a lot of hard work” and “budget your time.”

In addition to the descriptive statistics and qualitative information provided above, paired t-tests were used to compare the pre- and post-program subscores for preparation in the tasks listed under Planning and Instructional Leadership, Organizational Management, Communication, and Professionalism. Results were statistically significant in all four comparisons as shown in Table 5.

### Conclusions

This study was intended to measure self-reported “direct learning outcomes” of students in a leadership preparation cohort program based on a list of recognized competencies for practicing administrators and to further the current discussion on the evaluation of educational leadership preparation programs. Despite initial perceptions of cohort participants that they had high levels of preparation on many administrative tasks, perceptions did shift over the course of the program and statistically significant differences were found in their perceived levels of preparation for administrative work.

One of the surprising findings from the pre-program survey results was the level of confidence the cohort members had in their preparation to fulfill many administrative tasks. One possible hypothesis is that the results actually reflect the purposeful selection process that was used to identify members of the cohort. Prior to the start of the program, division superintendents were asked to identify exemplary teachers who had leadership potential as program candidates. The identified teachers were expected to exhibit strong instructional skills and an interest in serving as school principals. It is assumed, therefore,

**Table 3**  
**Percentage of Cohort Participants who Rated These Administrative Tasks as the Top Ten Highly Important Tasks at the End of the Program Compared to Sitting Principals**

<b>Administrative Tasks</b>	<b>Percentage of Cohort Participants who Rated Item Highly Important (%)</b>	<b>Percentage of Principals who Rated Item Highly Important (%)</b>
Data-driven decision making	100.0 (Mean = 3.00)	44.0
Student achievement on standardized tests/Standards of Learning	89.5 (Mean = 2.89)	60.1
Teacher evaluation to improve instruction	89.5 (Mean = 2.89)	50.3
Building an effective administrative team	89.5 (Mean = 2.89)	35.6
Managing stress	89.5 (Mean = 2.89)	36.1
Special educational law and implementation	84.2 (Mean = 2.84)	45.9
Working with families	84.2 (Mean = 2.84)	43.1
Enhancing my leadership skills	84.2 (Mean = 2.84)	35.1
Personal time management	84.2 (Mean = 2.84)	31.1
Strategic planning/Goal setting <sup>1</sup>	78.9 (Mean = 2.79)	37.3

N = 19

<sup>1</sup>Six administrative tasks were tied for 10th place.

that these teachers had high levels of self-efficacy, that their students performed well, and that colleagues and leaders noticed their impact at the classroom and school level. It could be assumed that these teachers already had assumed teacher leadership roles within their schools and indeed had experience with various administrative tasks.

Despite the level of confidence reported by participants in their preparation to perform various administrative tasks early in the program, it increased markedly during the course of the program. While a majority of participants reported being highly prepared to perform 3 administrative tasks at the beginning of the program, most reported being highly prepared to do 15 administrative tasks by the end of the program. Shifts also occurred in the “none” and “low” categories of preparation such that no one reported either of these levels of preparation for most administrative tasks by the end of the program.

There were slight shifts in what cohort participants viewed as the 10 most important administrative tasks over the course of the program. At the end of the program, issues of accountability and student achievement were more prominent, which was consistent with the focus of the superintendents who helped to shape the program (Grogan & Roberson, 2002). The top 10 list of administrative tasks also more closely mirrored that of seated principals. While “enhancing my leadership skills” continued to be rated as one of the top 10

most important tasks (Mean = 2.84), 80% of the students felt “highly prepared” in the area by the end of the program.

Overall, they reported a perceived enhancement of their preparation to fulfill key administrative tasks, and t-test results confirmed this perception. Statistically significant differences in the level of perceived preparation to perform the 4 major categories of administrative tasks were reported by participants ( $p < .05$ ). A majority of participants noted the highest levels of preparation in the categories of Professionalism (Mean = 2.58), followed by Planning and Instructional Leadership (Mean = 2.47) and Communication (Mean = 2.43). The lowest percentages of participants reporting “high” levels of preparation were in the area of Organizational Management (Mean = 2.28). A majority of participants reported “average” levels of preparation in all but one task in this category, Budgeting and Resource Allocation, for which a majority rated a “high” level of preparation (Mean = 2.58). Administrative tasks in this area could be considered more experiential than those in other areas and included functions such as non-academic student behavior, staff evaluation and documentation for promotion/dismissal, and management and supervision of support staff. Although all of the students in the cohort were involved in internships, this finding suggests the need for more highly developed and extensive internships.

**Table 4**  
**Percentage of Cohort Participants who Reported Indicated Levels of Preparation to Fulfill the Administrative Tasks Ranked as Highly Important at the End of the Program**

<b>Administrative Tasks</b>	<b>Level of Preparation (%)</b>			
	<b>None</b>	<b>Low</b>	<b>Average</b>	<b>High</b>
Data-driven decision making (Mean = 2.84)	0.0	0.0	15.8	84.2
Student achievement on standardized tests/Standards of Learning (Mean = 2.74)	0.0	0.0	26.3	73.7
Teacher evaluation to improve instruction (Mean = 2.68)	0.0	0.0	31.6	68.4
Building an effective administrative team (Mean = 2.42)	0.0	0.0	57.9	42.1
Managing stress (Mean = 2.16)	5.3	5.3	57.9	31.6
Special educational law and implementation (Mean = 2.42)	0.0	0.0	57.9	42.1
Working with families (Mean = 2.53)	0.0	5.3	36.9	57.9
Enhancing my leadership skills (Mean = 2.79)	0.0	5.3	10.5	84.2
Personal time management (Mean = 2.63)	0.0	0.0	36.9	63.2
Strategic planning/Goal setting (Mean = 2.42)	0.0	5.3	47.4	47.4

N = 19

**Table 5**  
**Paired t-tests for Pre- and Post-Program Subscores for Preparation in the Four Major Categories of Administrative Tasks**

<b>Categories of Administrative Tasks</b>	<b>t</b>	<b>df</b>	<b>Significance (2-tailed)</b>	<b>Pre- and Post-Means</b>
Planning and Instructional Leadership	8.516	16	.000	1.84 / 2.47
Organizational Management	4.303	15	.001	1.71 / 2.28
Communication	3.301	16	.005	1.90 / 2.43
Professionalism	4.067	17	.001	2.11 / 2.58

In terms of program evaluation, this approach of using pre- and post-program survey data seems to merit further consideration as a means of measuring direct learning outcomes. There were notable shifts in the perceptions of program participants over the 18-month program both in terms of what was important from an administrative perspective and the students' assessment of their own levels of preparation to fulfill various tasks. The data drawn from such a survey can offer both a value-added determination of the program effectiveness and a point of comparison with field-based norms for seated principals. In addition, comparisons might be made with highly successful principals in today's context to determine how they allocate their time and energies to these various administrative tasks and use these as benchmarks for the development of highly qualified administrative candidates. More detailed and specific data on the learning outcomes of students in preparation programs, such as these, are needed to both demonstrate the value of leadership preparation and to fuel further improvement.

#### **Implications for Further Research**

This study served two purposes: one was cohort program evaluation; and the second was a methodological exploration of the measurement of "student learning outcomes." The outcomes were based on self-reported assessments of preparation for identified administrative tasks as well as student perceptions of the cohort experience. It was found that the members of the cohort reported statistically different ratings for their level of preparation after participation in the leadership development program. This finding was encouraging from a program perspective, but the study offered little in the way of opening up the "black box" described by Donaldson and Scribner (2003). Nothing is known of the curricular or instructional elements that contributed to the sense of improved knowledge and skills. In fact, the pre- and post-assessments did not match the program content, but rather the state licensure regulations. Further research, therefore, is needed to address the curricular and instructional aspects of leadership development from multiple perspectives.

Unanswered questions from the perspective of the cohort participants include:

- Why did students perceive themselves to be better prepared in the domains of professionalism and instructional leadership?
- What specific aspects of the program advanced student learning?
- What factors contributed to, or challenged, levels of preparation in identified administrative tasks prior to the cohort experience?
- Why do aspiring principals have different perceptions of the most important administrative tasks than those of seated principals?
- Given the differences in the roles of assistant principal and principal, to what extent do leadership development programs, specifically the cohort experience, prepare participants for the assistant principalship, the principalship, or for both?

Anecdotal data suggest that since their graduation in January 2004, at least half of the cohort participants are in formal leadership positions, all of whom have successfully managed serious school issues. Empirical studies tracking students' success in attaining leadership positions, as well as assessments by supervisors, and tangible evidence of school improvement and impact on leadership practice are needed to validate these anecdotal data and to make program evaluation more authentic and rigorous as discussed by Orr (2003).

Another question suggested by the findings in this study is the role of the internship in the overall sense of preparation by the student. The overarching question suggested by the above discussion might be: Is there a difference in learning outcomes of participants based on delivery model, program content, or characteristics of the internship? Additional comparisons of leadership development program delivery models are, therefore, in order. A mixed between-within design would be the most appropriate approach for such studies. According to Lomax (2001), this design combines the benefits of the one-factor repeated measures analysis with that of two-factor fixed-effects models. In the current study, the within-subject repeated measure might be learning outcome variables (factors), such as student or supervisor perception of preparation, assessed both before and after the leadership development program. An additional within-subject repeated measure might be pre-test and post-test scores on a leadership assessment instrument, such as the *School Leaders Licensure Assessment*, currently used in Virginia and a number of other states for state endorsement (Educational Testing Service, 2005). Choices for the between-groups variable could be the delivery model (cohort vs. other), participant selection criteria, program content, or characteristics of internship experience.

While the ultimate goal in program evaluation will be to measure the impact of our graduates on a variety of school improvement indicators, for the present, this initial effort to capture student perceptions in a pre- and post-program survey design promises to provide at least one perspective on program effectiveness. The survey questions go beyond the typical satisfaction ratings and attempt to tease apart the level of preparation on a carefully constructed set of administrative tasks that were developed in concert with seated principals (DiPaola & Tschannen-Moran, 2001). Such an approach offers a possible first step on the journey to evaluating the ultimate purpose of our preparation programs, producing school leaders capable of fundamental school improvement.

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