The Characteristics of High School Department Chairs: A National Perspective

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Department chairs occupy a potentially important leadership position in high schools, yet little is known about them, particularly with regard to who they are and how they compare to other high school teachers. This is surprising given growing expectations for distributed leadership practice in schools. In this study, I utilize a national dataset to provide a large-scale look at the characteristics of department chairs. Additionally, I provide insight into the characteristics of chairs that appear to be important to their serving in the position.

Keywords: department chairs, high schools, school leadership

There is growing recognition in both the theoretical and empirical literature that leadership is often carried out by multiple school members in both formal and informal positions (Gronn, 2000, 2002; Heller & Firestone, 1995; Leithwood et al., 2007; Ritchie & Woods, 2007; Spillane, 2005; Spillane, Halverson, & Diamond, 2001, 2004; Spillane & Healey, 2010). In their study of 100 elementary schools, for example, Camburn, Rowan, and Taylor (2003) found that leadership functions were distributed across up to seven positions in each school. At the high school level, Flores and Roberts' (2008) case study of three mathematics departments revealed that principals shared instructional leadership roles with department chairs.

The expectation and need for distributed leadership in schools appears to stem at least in part from the complex and ever-increasing array of responsibilities associated with the principalship (IEL, 2000; Knapp, Copland, & Talbert, 2003; Murphy et al., 2007; Swaffield & MacBeath, 2009). In a 2005 meta-analysis, Marzano, Waters, and McNulty identified 21 responsibilities associated with effective principals. As they and others have argued, the job of the principal has become too big and complex for one person to perform effectively (Harris, 2007; Harris & Spillane, 2008; IEL, 2000).

Among principalships, the high school principalship is viewed as being particularly challenging due to the generally larger size and organizational complexity of high schools compared to elementary schools (Copland & Boatright, 2006; Siskin, 1997). Academic departments emerged with the establishment of larger high schools during the district consolidation movement so that principals could enable others to assume some administrative and supervisory roles (Kidd, 1965; Zepeda & Kruskamp, 2007). Departments remain central to the formal organizational system in high schools (Copland & Boatright, 2006; Little, 1993; Siskin, 1994, 1997; Siskin & Little, 1995). Indeed, Siskin and Little (1995) described academic departments as "a fundamental feature, and a highly stable structure, of secondary schooling" (p. 16). Perhaps even more important than providing organizational and administrative structure,

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departments have been identified as the critical space in which high school teachers interact and develop their professional identities and skills (Bennett, Woods, Wise, & Newton, 2007; Siskin, 1994; Siskin & Little, 1995). Moreover, Copland and Boatright (2006) suggested that the department structure in high schools might be viewed as a "powerful lever for change" (p. 7) given the generally limited subject expertise of individual school leaders compared to the expert knowledge typically found within each department.

Department chairs occupy a formal and unique position within the departmental structure. Situated between school administrators and teachers, the chair position has been cited as a leadership opportunity within high schools (Bliss, Fahrney, & Steffy, 1995; Jarvis, 2008; Louis & Miles, 1990; Siskin, 1997; Weller, 2001; Worner & Brown, 1993). Yet, in contrast to the attention paid to school principals, scholars and policymakers have paid scant attention to department chairs. As a result, relatively little is known about those who hold the position or about the actual roles that department chairs currently play in U.S. schools. Studies from other countries, most notably England, reveal that the significance of, and expectations for, the position have expanded during the past several years with the push toward greater accountability and distributed forms of leadership (Adey, 2000; Bennett et al., 2007; Brown, Boyle, & Boyle, 2000; Brown & Rutherford, 1998; de Lima, 2008; Glover, Miller, Gambling, Gough, & Johnson, 1999; Poultney, 2007; Turner, 1996). Given similar educational trends here in the U.S., a better understanding of department chairs in this country seems warranted.

In this study, I utilize a national dataset to provide a look at the professional and background characteristics of department chairs in U.S. high schools. In addition, I examine what characteristics of teachers are associated with holding a chair position. My results contribute core information about this potentially important but largely overlooked formal secondary leadership position. After all, the number of department chairs likely exceeds the number of principals and assistant principals combined in many high schools, making this group the most prevalent form of school-based leadership in those schools in the U.S.

Background

Though existing studies regarding department chairs in U.S. high schools span several decades, most are small case studies that together offer a limited and now somewhat dated view of the position. Even so, it is important to consider what is known about the position from those studies as well as studies from other countries where more recent research has been conducted. Taken together, the literature provides some insight into what chair positions look like in terms of the structural characteristics of the position. Moreover, it addresses, albeit in a limited and largely inferential way, what department chairs do or should do in their position. The literature is surprisingly silent, though, on a fundamental prior question, namely, who are department chairs? In this section, I review each of these strands of research in turn.

Structural Characteristics of Chair Positions

In their multi-state survey in the 1960s, Manlove and Buser (1966) found that roughly 80% of high schools utilized department chairs, a figure consistent with a recent large-scale survey of high schools in New York State (Brent, DeAngelis, & Surash, in press). Perhaps not surprisingly, both studies revealed that larger high schools were more likely than smaller ones to employ department chairs, with faculty size and student enrollment, as opposed to district wealth, seemingly responsible for the difference in utilization among schools. Existing studies also indicate

that principals on their own or in consultation with teachers most often determine who is selected to serve as department chair (Klar, 2012; Worner & Brown, 1993). Evidence regarding *why* particular teachers are tapped for the position is less clear, though seniority or selection by rotation have been cited as criteria in some schools (Clement, 1961; Duke, 1990; Maczuga, 1962). Given their expanded role, the majority of department chairs have been found to receive some type of additional compensation, generally in the form of a stipend and/or release time from teaching (Berrier, 1974; Buser & Humm, 1970; DeRoche et al., 1988; Fish, 1976; Klar, 2012; Mayers & Zepeda, 2002; Papalia, 1970; Schuman, 1966; Worner & Brown, 1993).

What Chairs Do

A common perception is that department chairs largely perform routine managerial tasks, such as maintaining the departmental budget, ordering supplies, and assigning teachers to classes (Brown & Rutherford, 1998; Copland & Boatright, 2006; Flores & Roberts, 2008; Hanney & Ross, 1999; Klar, 2012; Mercer & Ri, 2006). An examination of the literature over time, though, suggests that chairs' roles—or at least expectations for their roles-have been expanding. This is particularly evident in England. There, the establishment of national standards for the position in the late 1990s (TTA, 1998) and findings from a growing body of research indicate a move toward increased expectations for department chairs (often referred to as subject leaders or heads of department) to take on greater leadership responsibilities at the department and even school levels (Adey, 2000; Bennett et al., 2003, 2007; Brown & Rutherford, 1998; Glover et al., 1999; Wise, 2001; Wise & Bush, 1999). Along with traditional roles related to resource management, these added responsibilities primarily focus on greater accountability for the quality of teaching and learning in departments and involvement in the wider school context, including strategic planning and support of school-level aims. As a number of studies have noted, these greater expectations regarding accountability will require department chairs to become more involved in the evaluation, monitoring, and/or development of colleagues, roles which chairs in the past have indicated they had little time for and were reluctant or ill-prepared to play (Bennett, 1995; Bennett et al., 2003; Brown & Rutherford, 1998; Earley, 1990; Glover et al., 1998; Turner, 1996; Wise, 2001). Adey (2000), however, reported increasing acceptance of responsibility for the quality of teaching and learning, thereby providing some evidence of an actual expansion in their roles, not simply increased expectations for that position.

Similar trends in expectations have been documented in Australia (Dinham, 2007), Portugal (de Lima, 2008), and Wales (Aubrey-Hopkins & James, 2002), although the research base on department chairs in those countries is much more limited. In the U.S., studies dating as far back as the 1960s suggest that principals generally expect department chairs to serve in both managerial and supervisory capacities, though the roles actually performed in the latter realm, particularly with regard to instructional improvement and the evaluation and monitoring of teachers, appear to vary across schools (Feeney, 2009; Fish, 1976; Little, 1995; Manlove & Buser, 1966; Mayers & Zepeda, 2002; Siskin, 1997; Weller, 2001; Worner & Brown, 1993; Zepeda & Kruskamp, 2007).

Similar to the findings from England, recent studies in the U.S. cite growing expectations by principals and even department chairs themselves with regard to chairs' responsibilities in the areas of visioning, instructional improvement and leadership, and teacher development (Bliss, Fahrney, & Steffy, 1995; Flores & Roberts, 2008; Weller, 2001; Worner & Brown, 1993). These findings correspond with the results of a recent large-scale study of high schools across New York State, where principals'



expectations for department chairs extended well beyond resource management to include visioning and leadership responsibilities aimed at improving teaching and learning (Brent et al., in press). However, New York State principals' expectations differed somewhat depending on department chairs' qualifications, which might help to explain the variation across schools in chairs' responsibilities documented in earlier U.S. studies. The evaluation of teachers by department chairs, for example, has been reported to be either outside the role of department chairs or a role held by only a small fraction of chairs (Klar, 2012; Weller, 2001; Worner & Brown, 1993), which Siskin's (1997) case study suggests might be dependent on whether a chair is administratively certified.

Who Chairs Are

Studies regarding who serves as department chairs are almost non-existent. A study of department chairs in over 250 Virginia high schools by Worner and Brown (1993) provides one exception; there they found that department chairs were majority female (about 66%), white (86%), and middle-aged (median age of 41 to 45 years). In addition, two-thirds had 11 or more years of teaching experience and 58% held a master's degree or higher. It is not clear from their study, though, how the chairs compared to other high school teachers in the state, making it difficult to know whether certain characteristics, such as teaching experience or educational background, were important to their serving in that position.

Studies describing the types of preparation and skills that department chairs ought to have are more common, though less useful in terms of contributing to our understanding of those actually serving in the role. Among these studies, expertise as a teacher and in one's subject matter were cited most frequently as being necessary for department chairs in order to establish one's authority in the position (Bennett et al., 2003; Dinham, 2007; Little, 1995; Manlove & Buser, 1966; Poultney, 2007; Weller, 2001; Zepeda & Kruskamp, 2007). A couple of studies also cited teaching experience as being important (Dinham, 2007; Weller, 2001), although Manlove and Buser (1966) found in a multi-state survey that teachers, department chairs, and principals all perceived teaching and leadership ability, as well as mastery of subject matter, to be more important for chairs than amount of time spent in the profession. Other favored attributes included leadership knowledge, management skills, and strong interpersonal skills (Bennett et al., 2003; Dinham, 2007; Harris et al., 1995; Manlove & Buser, 1966; Poultney, 2007; Turner & Bolam, 1998; Weller, 2001; Wise, 2001). Only Manlove and Buser (1966) explicitly cited department chairs' level of academic preparation, indicating that graduate study was less important than chairs' abilities to teach, lead, and manage. It is important to note that none of these studies linked chairs' actual effectiveness to any of these attributes, but rather based their recommendations on their own or various stakeholders' (i.e., principals, department chairs, and/or teachers) perceptions of what makes an effective department chair.

In this study, I aim to address the overlooked issue of who department chairs are. I do so by examining high school chairs' personal, academic, and professional characteristics. I then consider how department chairs differ from other teachers at that level, thereby providing some sense of what attributes currently appear to be important for serving in that position.

Data and Methods

Data

I utilize restricted-use data from the public school teacher survey component of the National Center for Education Statistics' (NCES) 2007–08 Schools and Staffing Survey



(SASS). SASS, which has been administered periodically since 1987–88, provides cross-sectional data from a representative sample of U.S. schools stratified by state, sector (public/private), and school level. Both traditional public schools and charter schools are included in the public stratum. Among the sampled schools, surveys are administered at the associated district, school, principal, teacher, and library media center levels (Tourkin et al., 2010).

Given my focus, I restrict the sample in this study to high school-level teachers who provided departmentalized instruction, which SASS defines in its teacher survey instrument as instructing "several classes of different students most or all of the day in one or more subjects." Thus, I exclude preK-8 teachers, as well as those at the high school level whose instruction was not departmentalized (e.g., pull-out teachers). I also exclude those who identified their primary position as something other than teaching, including librarians, counselors, social workers, and other support staff.

In the public school teacher survey, respondents were asked to report information regarding their personal characteristics, academic and professional preparation, experience in teaching, current teaching position(s), and conditions and experiences in their school. Of particular relevance, teachers were asked whether they were serving as "a department lead or chair" during the current school year. Those who responded affirmatively comprise the group identified as department chairs in this study.¹ Because the teacher survey was not designed to be representative of teachers within individual schools, I am not able to compare department chairs to other teacher respondents from the same school; rather, I compare across all schools in my sample the subset of teachers who identified themselves as department chairs to all other high school, departmentalized teachers. As noted previously, not all high schools utilize department chairs. To identify schools with department chairs, I limit my sample to high schools where at least one teacher respondent indicated serving in that capacity. This restriction is conservative in that it likely excludes some high schools that utilized chairs but did not have a department chair participant in the survey. Nonetheless, the restriction prevents me from including in the comparative analyses teachers from schools without department chairs.²

Table 1 defines the personal, academic, and professional preparation characteristics available in the SASS data and considered in the analyses.³ As shown in Table 1, I consider three personal characteristics, namely gender, race/ethnicity, and age at the time of the survey. With regard to preparation, I distinguish between total years of teaching experience and years of experience in the current school to capture both seniority in the profession and seniority in the teacher's school. Unfortunately, the survey did not ask about prior years of experience in more specific roles, such as years as a department chair, mentor teacher, or other teacher leader positions. The advanced degree variable indicates whether the teacher had earned any postbaccalaureate degree (regardless of subject area), whereas the graduate training in educational administration variable indicates whether the teacher had post-baccalaureate training, such as an advanced degree or certificate, specifically in the field of educational

¹ The use of teacher survey data is warranted given that existing studies indicate that the vast majority of department chairs are employed and serve as teachers, not administrators (Siskin, 1997).

² The results using all high schools were nearly identical to the results presented herein using the restricted sample. The former results are available from the author upon request.

³ In the survey, teachers were also asked whether they were certified by the National Board for Professional Teaching Standards. Though the response to that question would have been relevant and of interest in this study, the percentage of respondents who answered yes was much higher than expected based on NBPTS counts (about 20% of the sample), suggesting some respondents likely misinterpreted the question. As a result, I exclude that survey item from consideration.

Table 1: Description of Variables

| Variable | Description |
|---------------------------------|--|
| Personal Characteristics | |
| Female | Teacher's gender. Female=1, Male=0 |
| Person of color | Teacher's race/ethnicity. Person of color=1, |
| | White=0 |
| Age | Teacher's age at the time of the survey. |
| Academic and Professional Prepa | - |
| Full-time | Indicator of whether teacher reported being |
| | employed in the school full time. full-time= |
| | part-time=0 |
| Years of teaching experience | Teacher's total adjusted years of teaching |
| | experience, including full-time and part-tim |
| | experience in public and private schools, |
| | as calculated by NCES (Tourkin et al., 2010) |
| Years of experience | Teacher's continuous years of experience |
| in current school | teaching in current school. Years accumulat |
| in current school | prior to any break in service from current |
| | school (if applicable) are not included. |
| Advanced degree | Teacher's highest degree level. MA or |
| Advanced degree | higher=1, $BA=0$ |
| Graduate training in | • |
| educational administration | Indicator of whether teacher reported having any post-baccalaureate training (i.e., Master' |
| | educational specialist, certificate of advance |
| | * |
| | study, or doctorate) in the field of education administration. Yes=1, No=0 |
| Regular/standard certification | |
| Regular/standard certification | Type of state certification held by teacher. |
| | Regular/standard=1, All other types=0 |
| College major in main | Indicator of whether teacher earned a major |
| assignment field | (baccalaureate level or higher) in his/her |
| | reported main teaching assignment field. |
| | Hill (2011) report was used to model match |
| | of majors to teaching assignment. Yes=1, No |
| Barron's ranking | Barron's (2003) competitiveness ranking of |
| | teacher's baccalaureate college. Rankings |
| | combined to create three categories: most |
| | competitive and highly competitive, very |
| | competitive and competitive, less competitiv |
| | and noncompetitive. Graduates of institution |
| | categorized by as Barron's as "special" |
| | institutions, such as art institutes, music |
| | conservatories, nursing colleges, and |
| | theological seminaries, are coded as missing |
| Other variables | |
| Core subjects | The subset of departmentalized subjects |
| | identified by Hill (2011) as "core" subjects. |
| | These include English/language arts, |
| | mathematics, science, history/social science |
| | foreign languages, art, music, and |
| | dance/drama or theater. |
| | |
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| | |

administration. The college major in main assignment field variable serves as a rough proxy for the level of content expertise of the teacher. I utilized the matching of major to main assignment field defined by Hill (2011) in his 2011 NCES report on the qualifications of U.S. secondary teachers. Similarly, Barron's *Profiles of American Colleges* ranking of the competitiveness of the teacher's baccalaureate institution is an oft-used rough measure of the teacher's academic aptitude. In the analyses, I examine differences between department chairs and other teachers in all departmentalized subjects as well as in the smaller set of core departmentalized subjects. I utilize the designation of core subjects established by Hill (2011), which is described at the bottom of Table 1. These restrictions resulted in unweighted sample sizes of 14,304 and 10,112 (713,768 and 512,450 when weighted) departmentalized teachers for all subjects and core subjects, respectively.

Methods

As a first step, I simply compared, using descriptive and inferential statistics (i.e., t-tests, z-tests, and Chi-square tests), the personal characteristics and academic and professional preparation of department chairs versus other departmentalized secondary teachers. All of the analyses are weighted using the teacher final weights provided with the dataset to produce estimates that are representative. On account of the complex sampling design of the survey, I also used replicate weights provided with the dataset to calculate appropriately adjusted standard errors (Tourkin et al., 2010).

In addition to the descriptive comparisons, I used logistic regression analysis to determine which personal and preparation characteristics were uniquely associated with holding a department chair position, controlling for other differences in teachers' characteristics. The outcome variable in the models is dichotomous and equal to one for department chairs and zero for other teachers. Given the strong correlation between age and total years of experience in teaching (r = 0.75, p \leq .001 for all subjects, r = 0.76, p \leq .001 for core subjects), I reported results with age and total years of experience in separate models (Models I and II, respectively) to avoid problems with multicollinearity. None of the other correlations among independent variables was strong enough to warrant such concern.⁴

I also included squared terms in the models to capture potential non-linearities related to age and experience (overall and in current school). I hypothesized that the probability of holding a chair position increases with age and experience, but only up to a certain point, after which it decreases. I also included a few school variables in the regression models to control for differences in the likelihood of department chairs being included in the SASS survey sample across schools. The variables included locale type indicators (urban, town, and rural with suburban as reference category) and size, as represented by the number of full-time equivalent (FTE) teachers in the school. As noted earlier, SASS was not designed to be representative at the school level and only a subsample of teachers was selected for participation from each school (Tourkin et al., 2010). Thus, it is likely that the probability of a department chair being sampled from a given school differed across schools.

Results

Table 2 shows that departmentalized teachers in U.S. high schools overall in 2007–08 were predominately White and somewhat more likely to be female than male. On average, they had over 13 years of total experience in teaching, with over seven

The correlation between age and years of experience in current school is r = 0.53, $p \le .001$ for all subjects and core subjects. The correlation for total years of experience and years of experience in current school is r = 0.70, $p \le .001$ for all subjects and core subjects.

of those years in their current school. Whereas the vast majority (over 91%) held regular/standard certification in their state, only about four out of five had earned a major in their main assignment field and slightly more than half had earned a post-baccalaureate degree. Moreover, only a small percentage (7.1% overall) reported having had any graduate training in educational administration.

Table 2 also reveals a number of differences in the characteristics of those who reported being department chairs as compared to other (non-chair) departmentalized teachers. The differences are very similar for all subjects and core subjects so I focus the discussion on the results for all subjects. The core subject results also are reported in Table 2. Though the comparison reveals no significant gender difference between department chairs and other teachers, a racial/ethnic difference was found with persons of color comprising 17.2% of non-chair teachers but 14.1% of department chairs. Department chairs also were older on average (45.9 years versus 41.2 years) and had significantly more years of teaching experience—both overall and in their current school—than non-chair departmentalized teachers. In fact, department

| | | | .) | | | |
|--|---------------------------------------|----------------------|--------------------------------|---------------------------------------|----------------------|--------------------------------|
| | All Subjects | | | Core Subjects | | |
| | All (Chairs and Other Teachers) | Department Chairs | Other Non-Chair Teachers | All (Chairs and Other Teachers) | Department Chairs | Other Non-Chair Teachers |
| Personal Characteristic | S | | | | | |
| % Female | 56.9 | 55.9 | 57.3 | 58.9 | 58.2 | 59.1 |
| % Persons of color | 16.3 | 14.1 | 17.2* | 16.2 | 14.1 | 17.0* |
| Mean age | 42.5 (0.17) | 45.9 (0.25) | 41.2 (0.20)*** | 41.9 (0.20) | 45.7 (0.34) | 40.5 (0.24)*** |
| Academic and Professional Preparation and Experience | | | | | | |
| % Full-time | 94.7 | 95.4 | 94.5 | 94.7 | 95.0 | 94.6 |
| Mean years of | | • | | | • | |
| teaching experience | | | | | | |

Table 2: Characteristics of All Teachers and Department Chairs versus OtherTeachers, by All Subjects and Core Subjects

| Mean age | 42.5 (0.17) | 45.9 (0.25) | 41.2 (0.20)*** | 41.9 (0.20) | 45.7 (0.34) | 40.5 (0.24)*** |
|---|--------------------|---------------|----------------|-------------|-------------|----------------|
| Academic and Professio | onal Preparation a | ind Experienc | е | | 1 | |
| % Full-time | 94.7 | 95.4 | 94.5 | 94.7 | 95.0 | 94.6 |
| Mean years of | | | | | | |
| teaching experience | | | | | | |
| total | 13.8 (0.17) | 17.6 (0.23) | 12.3 (0.21)*** | 13.4 (0.19) | 17.5 (0.27) | 11.9 (0.24)*** |
| in current school | 7.8 (0.15) | 11.3 (0.25) | 6.4 (0.16)*** | 7.4 (0.16) | 10.9 (0.27) | 6.1 (0.16)*** |
| % with advanced degree | 51.9 | 55.7 | 50.4** | 53.3 | 57.3 | 51.9** |
| % with graduate training in educational administration | 7.1 | 9.0 | 6.4** | 7.1 | 9.7 | 6.1** |
| % with regular/ standard certification | 91.2 | 94.2 | 89.9*** | 91.6 | 94.5 | 90.5*** |
| % with college major in main assignment field | 79.1 | 81.5 | 78.1** | 81.5 | 83.9 | 80.6* |
| Barron's ranking | | 1 | | | 1 | 1 |
| % most or highly competitive | 11.3 | 9.1 | 12.1** | 13.0 | 10.6 | 13.9** |
| % very competitive or competitive | 72.2 | 72.9 | 72.0 | 71.5 | 71.3 | 71.5 |
| % less competitive or noncompetitive | 16.5 | 18.1 | 15.8* | 15.5 | 18.2 | 14.6** |
| N | 713,768 | 206,100 | 507,669 | 512,450 | 136,969 | 375,481 |

Note: The numbers were weighted to produce estimates that are nationally representative. Replicate weights provided with the dataset were used to calculate standard errors, which are shown in the parentheses. Statistically significant differences between department chairs and other (non-chair) teachers are reported in the Other Teachers' columns. *** $p \le .001$, ** $p \le .01$



chairs had been employed in their schools nearly twice as long, on average, than other teachers.

In addition to having more professional experience, department chairs also were more likely to have an advanced degree and graduate training in administration, although the percentage of chairs with the latter type of preparation was still very low (<10%). Department chairs also were somewhat more likely to hold a regular/ standard teaching certificate. The percentage of department chairs that majored in their main assignment field was significantly greater than it was for teachers from a statistical standpoint; however, the results indicate that roughly one out of five department chairs and non-chair teachers did not have that level of subject preparation.

Finally, Table 2 shows that the academic ranking of one's baccalaureate college appears to have little impact on who becomes a chair. In fact, the vast majority of both chairs and other high school teachers earned bachelor's degrees from institutions rated in the middle two categories (i.e., very competitive or competitive) of Barron's competitiveness scale.

In Table 3, I report the results from the multivariate logistic regression models for all subjects and core subjects. These multivariate results reveal the impact of each personal and professional characteristic on the probability of serving as a department chair while controlling for other personal and professional differences among teachers, thereby providing an indication of each attribute's unique contribution. As indicated earlier, the columns labeled Model I include age along with the other independent variables but not total years of teaching experience due to the strong correlation between age and total experience. The columns labeled Model II include just the opposite (i.e., total experience but not age). Estimated odds ratios are shown in the table. An odds ratio significantly greater than one indicates a greater likelihood of event occurrence (i.e., being a department chair), whereas an odds ratio significantly less than one indicates a lower likelihood.

Again, the results for all departmentalized subjects versus just the core subjects are strikingly similar so my general reporting of the results below is applicable to both subject groupings. In contrast to the findings in Table 2, Table 3 shows that age is the only personal attribute associated with serving as a department chair, all else held constant. Specifically, the significant odds ratios corresponding to the age and age-squared variables indicate that the odds of being a department chair increases with age, but declines after a certain point. A similar non-linear relationship was found for the number of years of experience in the current school. To provide a sense of what the non-linear relationship for age looks like, I show in Figure 1 the estimated probabilities of being a department chair for teachers aged 25 to 65. The probabilities were calculated using the estimated coefficients from Model I while holding all of the non-age variables at their mean levels. The results are based on the model for all departmentalized subjects; the probabilities for the model associated with just the core subjects are very similar. As Figure 1 shows, the likelihood of a teacher holding a chair position increases fairly steadily until about age 50 and then declines thereafter.

Substituting total years of experience in teaching and its square for the age variables (Model II in Table 3) reveals that both total experience and experience in one's current school were significant and positive, indicating that seniority in the profession and seniority in one's own school, while correlated, play unique roles in one's like-lihood of holding a chair position.

With regard to teachers' other academic and professional characteristics, graduate training in educational administration was positively associated with holding a



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| Table 3: Logistic Regression | Analysis of Factors | s Associated wi | th Holding a |
|------------------------------|---------------------|-----------------|--------------|
| Department Chair Position | | | |

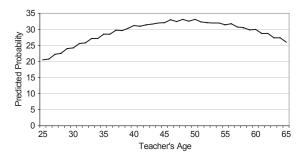
| | All Subjects | | Core Subjects | | |
|----------------------------------|------------------|-----------------|---------------|-------------|--|
| | Model I | Model II | Model I | Model II | |
| Personal Characteristi | ics | | L | | |
| Female | 1.092 | 1.077 | 1.104 | 1.087 | |
| Person of Color | 1.077 | 1.084 | 1.114 | 1.129 | |
| Age | 1.121*** | - | 1.119*** | - | |
| Age ² | 0.999*** | - | 0.999*** | - | |
| Academic and Profess | sional Preparati | on and Experier | nce | -H | |
| Employed full-time | 1.264 | 1.265 | 1.144 | 1.144 | |
| Total years of | - | 1.098*** | - | 1.109*** | |
| teaching experience | | | | | |
| Total years of | - | 0.998*** | - | 0.998*** | |
| teaching experience ² | | | | | |
| Years of teaching | 1.140*** | 1.109*** | 1.158*** | 1.122*** | |
| experience in | | | | | |
| current school | | | | | |
| Years of teaching | 0.997*** | 0.998*** | 0.997*** | 0.998*** | |
| experience in | | | | | |
| current school ² | | | | | |
| Advanced degree | 0.970 | 0.969 | 0.957 | 0.958 | |
| Graduate training in | 1.443** | 1.357* | 1.589** | 1.477* | |
| educational | | | | | |
| administration | | | | | |
| Regular/standard | 1.235 | 1.079 | 1.172 | 1.026 | |
| certification | | | | | |
| College major in | 1.164 | 1.130 | 1.251* | 1.228† | |
| main assignment field | | | | | |
| | | | | | |
| Barron's ranking ^a | 0.905 | 0.901 | 0.954 | 0.959 | |
| Most or highly competitive | 0.900 | 0.901 | 0.934 | 0.939 | |
| Less competitive | 1.078 | 1.074 | 1.152 | 1.153 | |
| or noncompetitive | 1.070 | 1.074 | 1.132 | 1.100 | |
| or noncompetitive | | | | | |
| Likelihood ratio | 98771.18*** | 101512.46*** | 75631.08*** | 78687.42*** | |
| test (χ^2) | 50771.10 | 101012.10 | , 0001.00 | , 0007.12 | |
| N | 713,768 | 713,768 | 512,450 | 512,450 | |
| | , 10,700 | , 10,, 00 | 012,100 | 012,100 | |

^aVery competitive/competitive is the reference category.

Note: Odds ratios are reported. Controls for school characteristics are included in the models. Weights were used to produce estimates that are nationally representative. Replicate weights provided with the dataset were used to calculate standard errors. *** $p \le .001$, ** $p \le .01$, * $p \le .05$, $\pm p \le .10$.

department chair position (Table 3). Indeed, among departmentalized teachers of core subjects, the odds of being a department chair were nearly 50–60% greater for those with administrative training. For core subject teachers, having a major in one's main assignment field was also associated with being a department chair. It was not

Figure 1: Predicted Probability of a Teacher Holding a Department Chair Position by Age.



significant, however, in the models that included all departmentalized subjects. In contrast, other, more general types of academic and professional preparation, including having an advanced degree in any subject, holding a regular/standard license as opposed to some other type of state teaching certificate (e.g., emergency, alternative, provisional), and the competitiveness ranking of one's baccalaureate college, were not associated with holding a department chair position, all else equal.

Discussion

Notwithstanding department chairs' prevalence and the growing support for distributed leadership practice in schools, little is known about department chairs, including who they are and how they compare in terms of their characteristics to their non-chair colleagues. My purpose in this study was simply to begin to fill this gap and provide some insight for administrators and teachers who may be interested in serving as department chairs into the characteristics that appear to be important to serving in that position.

Using a national dataset I found a number of differences in the attributes of chairs and non-chairs. For example, department chairs on average were older and had significantly more years of teaching experience—overall as well as in their current school-than other high school teachers. Additionally, greater percentages of chairs had potentially relevant academic and professional preparation, including graduate training in educational administration and a major in their main assignment field. These differences were not unexpected given limited evidence from existing literature that attributes like seniority and subject expertise tend to be used by schools as selection criteria or perceived by stakeholders as being important for department chairs (Bennett et al., 2003; Clement, 1961; Dinham, 2007; Duke, 1990; Little, 1995; Maczuga, 1962; Manlove & Buser, 1966; Poultney, 2007; Weller, 2001; Zepeda & Kruskamp, 2007). Other differences, however, were less intuitive. For example, department chairs were less likely to be persons of color than others teachers at the high school level. This finding of underrepresentation is consistent with the results of studies of other educational administrative positions (DeAngelis & O'Connor, 2012; Baltzell & Dentler, 1983; Tallerico, 2000); however, my multivariate results suggest the racial/ethnic difference herein was associated with differences in other attributes between White respondents and respondents of color. Controlling for these other attributes, the racial/ethnic difference was no longer significantly associated with serving in a chair position.

In my second set of analyses, I used logistic regression to control for multiple attributes of those in my sample in an effort to identify which personal and preparation



characteristics seem to be uniquely associated with holding a department chair position. My results indicated that only a few measurable characteristics distinguish high school teachers serving as chairs from other teachers at that school level. Seniority—whether measured by age, years in the profession, or years in the current school—were all positively associated with being a department chair, although only up to a point. My results demonstrated a non-linear relationship for each of these attributes, meaning there comes a point when age and experience start to exert a negative influence on serving in this role. Perhaps this is due to a lack of interest in the position among teachers who have taught for many years and are nearing retirement age. Alternatively, it may be that many of the most senior teachers have already served in that role. Regardless of reason, my results suggest that seniority in the profession and school, as was shown in studies dating back to the 1960s (Clement, 1961; Maczuga, 1962), continue to play significant roles in the selection of department chairs.

My multivariate results also suggested that subject expertise, as measured in this study by having majored in one's subject assignment, may be more important for department chairs in some subject areas than in others as indicated by the significant effect of the major in main assignment field variable for core subjects but not for departmentalized subjects more generally. Alternatively, it may be that a college major is a good proxy for subject expertise in some subject areas but not in others. For example, relevant work experience or some type of postsecondary certificate may be more indicative of expertise in an area like vocational education, which is not included in the core subject category. Nonetheless, strong subject knowledge is perceived in the literature as being critical for department chairs (Bennett et al., 2003; Dinham, 2007; Little, 1995; Manlove & Buser, 1966; Poultney, 2007; Weller, 2001; Zepeda & Kruskamp, 2007) and my study provides support for content knowledge having some influence on one's becoming a department chair.

Graduate training in educational administration also was significantly associated with holding a department chair position. In fact, the odds of being a department chair were about 50-60% greater for teachers in core subjects with administrative training. Yet, only a fraction of department chairs (< 10%) reported having this type of training. This lack of formal administrative training is not terribly surprising given that department chairs are most often employed as teachers, not administrators (Siskin, 1997). Nonetheless, the literature revealed that principals and other stakeholders perceive leadership ability and supervisory skills as being essential for chairs, perhaps even more so than school-based seniority and time in the profession (Bennett et al., 2003; Brent et al., in press; Dinham, 2007; Harris et al., 1995; Manlove & Buser, 1966; Poultney, 2007; Turner & Bolam, 1998; Weller, 2001; Wise, 2001). Trends and evidence from outside the U.S. suggest that such skills may become even more important as expectations for chairs' roles expand with the growing push for greater teacher and school accountability. Adey (2000) cautioned that on-the-job learning likely would not be sufficient for chairs to perform effectively the range of responsibilities that are increasingly expected of them. As noted earlier, other countries in recent years have moved to develop professional standards and training for subject leaders (de Lima, 2008; TTA, 1998). My review of the U.S. literature revealed an absence of chair-specific leadership training, though a growing interest in and availability of programs designed to train teacher leaders (e.g., NCTQ, 2010).

This leads to the question of whether department chairs are (or could be) viewed as teacher leaders in today's high schools. The literature on teacher leadership provides

virtually no mention of department chairs, perhaps due to the formal structure of the chair position and the shift over time in the conceptualization of teacher leadership away from teachers who hold formal positions or special titles to those who share their expertise and influence their colleagues, schools, and/or profession more informally (Hatch, White, & Faigenbaum, 2005). Yet, an examination of the expectations of department chairs (see, e.g., Brent et al., in press; Klar, 2012; Siskin, 1994, 1997) and informal teacher leaders (see, e.g., Curtis, 2013; Hatch et al., 2005; Killion & Harrison, 2006) shows a number of commonalities, including, but not limited to, supporting the practice and growth of teacher colleagues, serving as a bridge between school administrators and teachers, and assisting with the identification and implementation of school priorities. Moreover, department chairs and teacher leaders are described in the literature as having or needing similar traits, including subject matter expertise, credibility with their colleagues, and leadership and interpersonal skills (Bennett et al., 2003; Dinham, 2007; Hatch et al., 2005; Little, 1995; Manlove & Buser, 1966; Poultney, 2007; Weller, 2001; Wise, 2001; Zepeda & Kruskamp, 2007). Thus, school administrators and department chairs themselves might consider whether chairs also could benefit from the increasing opportunities for training being provided to teacher leaders.

Conclusion

The cross-sectional nature of my dataset enabled me to provide only a point-in-time view of department chairs in this study. Further research on the career trajectories of department chairs would help to shed light on their relationship to teaching and teacher and administrator leadership. Do they start as informal teacher leaders and use that experience to take on the more formal role of department chair? Or do teacher leaders and department chairs follow different career paths? Are department chairs more likely than teacher leaders and other high school teachers more generally to transition into administrative positions at the school or district level? Or do department chair positions provide those who desire to remain in teaching a means to have some formal influence outside of the classroom while maintaining their teaching role? Such research would fill a gap in the extensive and ever-growing body of evidence regarding teacher and administrator career paths. However, this study demonstrates that national datasets are quite limited in terms of what can be learned about career paths *within teaching*. Other data sources, including more local data collection efforts, will be needed to help fill this knowledge gap.

Finally, research shows that academic departments vary widely in effectiveness and that departmental leadership and improvement can promote school-wide improvement (Busher & Harris, 1999; Harris, 2001; Sammons, Thomas, & Mortimore, 1997). This suggests that administrators' selection of department chairs has implications that extend beyond individual departments. This study seeks to bring attention to the department chair position and identifies some characteristics of high school teachers that appear important to serving in that role. Additional research is needed to determine how these and other, less easily measured characteristics contribute to chairs' ability to have a positive impact on their departments and schools.

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