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Education Outlook

Rewriting the Job Description: The Teaching Profession in the Twenty-first Century

By Frederick M. Hess

"Human capital" is quickly becoming the new site-based management, a popular strategy from the 1980s and 1990s that sought to increase autonomy in schools and spread decision making more widely. While few are sure what human capital means, everyone craves it, has a model to deliver it, and is quick to tout its restorative powers. It is trendy and impressive sounding, but too often it means recycling familiar nostrums or half-baked ideas with new jargon. What is needed instead is a serious effort to rethink what the teaching profession should look like in the twenty-first century.

Our schools are in a constant, unending race to recruit and retain some two hundred thousand teachers annually. Given that U.S. colleges issue perhaps 1.4 million four-year diplomas per year, schools are seeking to bring nearly one of seven new graduates into the teaching profession. No wonder shortages are endemic and quality a persistent concern.

It does not have to be this hard. Our massive, three-decade national experiment in class-size reduction has exacerbated the challenge of finding enough effective teachers. There are other options. Researchers Martin R. West, Ludger Woessmann, and their coauthors have pointed out that several nations that perform impressively on international assessments—including South Korea, Hong Kong, and Japan—boast average middle-school class sizes of more than thirty-five students per teacher.[1]

To improve schooling, the United States has adopted the peculiar policy of hiring ever more teachers and asking them each to do the same job in roughly the same way. This dilutes the talent pool while spreading training and salaries over ever more bodies. As Chester E. Finn Jr. wryly observes in *Troublemaker*, the United States has opted to "invest in many more teachers rather than abler ones. . . . No wonder teaching salaries have barely kept pace with inflation, despite escalating education budgets."[2] Since the early 1970s, growth in the teaching force has outstripped growth in student enrollment by 50 percent. In this decade, as states overextended their commitments during the real estate boom, the ranks of teachers grew at nearly twice the rate of student

Key points in this *Outlook*:

- Today's teaching profession is the product of a mid-twentieth-century labor model.
- Expanding the hiring pool beyond recent college graduates, staffing schools in ways that maximize the value of talented teachers, and using technology to increase teacher effectiveness are smarter ways for schools to approach the human capital challenge.
- Rethinking recruitment assumptions and job descriptions requires new models for salaries and benefits.

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enrollment. If policymakers had maintained the same overall teacher-to-student ratio since the 1970s, we would need 1 million fewer teachers, training could be focused on a smaller and more able population, and average teacher pay would be close to $75,000 per year.

Even without the constraint of limits on class size, trying to retrofit an outdated model for teaching is a fool's errand. Today's teaching profession is the product of a mid-twentieth-century labor model that relied on a captive pool of female labor, assumed educators to be largely interchangeable, and counted on male principals and superintendents to micromanage a female teaching workforce. Preparation programs were geared to train generalists who operated with little recourse to data or technology. Teaching has clung to these industrial rhythms, while professional norms and the larger labor market have changed. By the 1970s, however, schools could no longer depend on an influx of talented young women, as those who would once have entered teaching began to take jobs in other fields such as engineering and law. The likelihood that a new teacher was a woman who ranked in the top 10 percent of her high school cohort fell by 50 percent between 1964 and 2000. Meanwhile, policymakers and educators were slow to tap new pools of talent; it was not until the late 1980s that they started tinkering with alternative licensure and midcareer recruitment. Even then, they did little to reconfigure professional development, compensation, or career opportunities accordingly.

Even cutting-edge proposals typically do not challenge established routines but instead focus on filling that two-hundred-thousand-per-year quota with talented twenty-two-year-olds who want to teach into the 2040s. Perhaps the most widely discussed critique of teacher preparation of the past decade—the hotly debated 2006 study by the National Center for Policy Analysis, *Educating School Teachers*—simply presumed that teacher recruitment ought to be geared toward new college graduates who would complete beefed-up versions of familiar training programs before being cleared to enter the same old jobs. Absent was any reconsideration of who should be teaching or any inclination to question the design of the enterprise.

There are smarter, better ways to approach the challenge at hand: expand the hiring pool beyond recent college graduates; staff schools in ways that squeeze more value out of talented teachers; and use technology to make it easier for teachers to be highly effective. A twenty-first-century human-capital strategy for education should step back from the status quo and revisit existing assumptions.

Who Should Teach?

Recruiting new college graduates for teaching positions made sense forty years ago, when the typical graduate could expect to hold just five jobs in an entire career. Today the average college graduate may have had four jobs by age thirty.[3] This early career transience, coupled with the increasing prevalence of midcareer transitions, makes it impractical at best to try to identify future teachers at age twenty, train them fully before they enter the profession, and then expect them to remain in teaching jobs for decades. That is a surefire recipe for driving away today's most talented entrants. The composition of the teaching force is changing of its own accord—even in the absence of coherent new strategies to support this shift. In the 1990–91 federal Schools and Staffing Survey, among teachers of grades nine through twelve, 70 percent had entered the profession by age twenty-five and just 6 percent had entered after age thirty-five. In the 2003–2004 survey, the most recent data available, the number who had entered by age twenty-five had declined to just over half (56 percent), while 16 percent had started after age thirty-five. Those who entered the teaching profession after age twenty-five made up just 0.1 percent of all teachers in 1990–91 but 4.1 percent of all teachers by 2003–2004.[4]

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Highly effective teaching entails not only the application of research-based methods, but also leadership, content knowledge, life experience, organization, commitment, wisdom, enthusiasm, and applied knowledge (including a practical sense of how schooling can be put to use). The median working adult who becomes a teacher has likely enjoyed more opportunities to develop these qualities and skills than has the average new college graduate.

The population of college-educated workers already well into their first or second career—made comfortable by early success and now open to more rewarding, meaningful, and engaging work—appears to be substantial. One can safely estimate this population to be in the millions. A 2008 survey by the Woodrow Wilson National Fellowship Foundation reports that 42 percent

of college-educated Americans age twenty-four to sixty would consider becoming a teacher and would be more likely to do so if they could count on quality training and support and expect to start at salaries of $50,000 or more.[5] Those who expressed an interest in teaching as a second career were more academically accomplished than those who were not interested. Given current life spans and career trajectories, many thirty-five- or forty-five-year-old entrants could teach for twenty years or more.

A recruitment strategy that seeks to attract a larger percentage of mature entrants could reduce rates of attrition. In 2002, Anthony Morris, now a Mississippi superintendent, studied 1,895 Mississippi teachers and found that older, second-career teachers were more likely to stay in teaching than younger entrants.[6] The National Center for Education Information has concluded, "Individuals who have entered teaching through alternate routes at older ages are more inclined to stay in teaching for longer than people entering teaching in their early-to-late [twenties] and [thirties]."[7]

The evidence at hand recommends abandoning the presumption that new college graduates should be the backbone of new teacher recruitment. We should not discourage young entrants or discount the notion that some twenty-two-year-olds are ready to play a valuable role in schools, either for a limited period of time (for example, the private school or Teach For America model) or by committing to a career of classroom teaching. Such recruits, when promising, should be courted and welcomed. But there are good reasons not to presume that the just-out-of-college teacher should be the *model* recruit.

The 68 Percent Problem

Currently, there are approximately 3.3 million K–12 teachers in the United States, representing nearly 10 percent of the college-educated workforce. It should be no great surprise that some educators are far more skilled than others at teaching reading or mentoring at-risk youth. Yet schools and school systems casually waste scarce talent by operating on the implicit assumption that most teachers will be similarly adept at everything. In a routine day, a terrific fourth-grade reading teacher might give lessons in reading for just one hour while spending another five hours teaching other subjects in which she is less effective, filling out paperwork, and so on. This is an extravagant waste of talent, especially when there is widespread agreement that reading is an area of high-impact instruction that deserves special emphasis. In fact, general enthusiasm for mainstreaming children with special needs, untracked classrooms, and differentiated instruction have increased the breadth of demands placed on a typical teacher. Although about 60 percent of today's K–12 teachers have a master's or specialist's degree, these credentials generally have little impact on work routines or the scope of an individual's responsibilities.

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Schools require all teachers to devote time and energy to bureaucratic duties, patrolling hallways and cafeterias, taking attendance, and compiling report cards. The problem here is that school and district officials are conscious of expenses related to salary and materials but fail to account for the opportunity costs of failing to leverage the talent already in the schools. Even schools that tout their commitment to professional development and data-driven instruction press teachers to operate as generalists rather than leveraging their particular skills.

Two decades of surveys by the National Center for Education Statistics (NCES) suggest that the typical teacher spends only about 68 percent of classroom time on instruction related to core academic subjects, with the remainder consumed by administrative tasks, fund-raising, assemblies, socializing, and so forth.[8] Provisions for substantial numbers of sick days as well as collective bargaining agreements and management practices that result in the universal imposition of noninstructional responsibilities have all conspired to ensure that schools do not maximize the contributions from the talent they do have.

Rewriting the Job Description

The challenge, in short, is to find ways to "squeeze more juice from the orange" by using support staff, instructional specialization, and technology to ensure that effective educators are devoting more of their time to educating students. There are a number of possible approaches to the problem.

One course of action would entail hiring support staff who have not undergone as much training as teachers and are relatively inexpensive. Assigning administrative and other noninstructional tasks to the support staff would free up teachers to perform the work for which they are best suited. Teachers would be deployed according to their particular talents and focused preparation. Elementary reading instruction, for example, might be recognized as a role distinct from other tasks, with research-based preparation for diagnosing, instructing, and supporting early readers taught in highly specialized training programs. Teaching in remedial math at the secondary level might be another area suited to taking advantage of specific skills and training. Alternatively, rather than continuing to accept the notion that one either is a teacher or is not, schools might embrace hybrid positions to allow talented educators to grow by leveraging their skills in new ways, even as they continue teaching. A district might downsize its central office and invest those dollars in freeing up talented veterans to take on half-time teaching loads, with the other 50 percent of their time devoted to such responsibilities as professional development, curriculum development, or parent outreach. Rather than walling off instruction from these kinds of positions, teachers might be given the chance to grow in the course of their professional life without having to abandon the classroom.

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K–12 schooling already employs a large number of school-based personnel who are not teachers; support staff (including aides, librarians, and guidance counselors) account for about 30 percent of school employees. NCES reports that there are more than six hundred thousand "instructional aides" in K–12 schools,[9] but it is not certain that these employees are used to maximize teacher effectiveness or alleviate teacher responsibilities. Indeed, the two populations have grown in tandem in recent decades.

Other professions arrange work patterns much differently. In medicine, a century's worth of gains has been reaped by increasing specialization: the American Medical Association now recognizes nearly two hundred specialties. Today there are 5 million medical professionals in the United States but just five hundred thousand physicians. The rest are trained practitioners with complementary talents. In a well-run medical practice, surgeons do not spend time filling out patient charts or negotiating with insurance companies; these responsibilities are left to nurses or support staff. Similarly, not even junior attorneys are expected to file their own paperwork, compile their billing reports, or type letters to clients. These tasks are performed by paralegals and secretaries.

Such efforts to use talent and expertise fully have been largely absent in schooling, apart from some small-scale initiatives. One innovation worth exploring employs community resources to augment school staff. Boston-based Citizen Schools, for example, provides highly regarded after-school instruction and career-based learning by arranging for local volunteers to work with students on a regular basis. Rather than simply mentoring or tutoring students, participants teach weekly modules that tackle complex projects with interested students. Citizen Schools leverages the expertise of local professionals on a part-time (and cost-free) basis and points to the promise of approaches that do not wholly depend on full-time, career-long staffing. The key is to stop thinking of teaching as an all-or-nothing job and to create models that include the support and opportunity for steady part-timers who also have other obligations or complementary jobs. This consultant approach could reflect the way other kinds of organizations tap into particular expertise or retain the service of talented professionals despite changing life circumstances.

Another approach would use technology for tasks to which teachers add limited value. For instance, monitoring student achievement via technology might alleviate the need for teachers to devote substantial time to administering, grading, and entering data generated by formative assessments. One such example is provided by Wireless Generation software, which enables elementary school teachers to use Palm Pilots to assess and track early reading performance. Teachers save substantial time in the assessment and data-entry process while making a wealth of easily manipulated information on student performance immediately available.

Technology can also be used to change the way some education services are delivered. Today's model requires schools with many classrooms, each featuring a teacher working face-to-face with a particular group of students. This people-everywhere strategy is expensive and limits

the available talent pool, as some potentially effective educators may be unwilling to relocate to the communities where they are needed. Thus far this has not been a challenge for the premier school districts—like those in Westchester County, New York; Montgomery County, Maryland; or Fairfax County, Virginia—or for charter school operators like the Knowledge Is Power Program or Uncommon Schools, but it does impose a ceiling on the number of schools and districts that can rely on the people and strategies that drive success in these organizations. In accepting the assumption that each classroom should include a teacher and as few children as possible, these schools are entirely dependent on their ability to attract talented, high-energy staff, dramatically limiting the likelihood that these admired programs will be able to achieve the hoped-for scale.

Perhaps the most significant impact of education technology is its potential to eliminate obstacles posed by geography. Web-based delivery systems can take advantage of the wealth of highly educated, English-speaking people in nations like India willing to tutor children at relatively inexpensive rates. Washington, D.C.–based Smarthinking, Inc., uses American and international tutors to provide intensive tutoring to students. Students can log on to the company's website twenty-four hours a day, seven days a week, and work in real time with experts in various academic subjects.

Using technology to deliver instruction or tutoring from a distance creates opportunities to make "classrooms" with large numbers of children (as in South Korea or Singapore) and to streamline the "teacher's" role. In either case, the challenge of finding enough high-quality local personnel becomes more manageable. Technology also makes it easier for schools in different locations to communicate or share staff and enables central administrators to deliver support to campuses hundreds of miles away.

Some skeptics have suggested that technology cannot be substituted for and very likely cannot meaningfully augment the work teachers do. This argument underlies the dismal failure in education to use new technologies, from the television to the computer to the Internet, as labor-saving devices.[10] Schools similarly have floundered under a "supplement, not supplant" mindset in which there has been fierce resistance to using cutting-edge innovations. Too often, discussions about the use of computers, web-based delivery, and instructional software fail to consider what needs to be done in policy, in school organization, or within the teaching profession to take full advantage of those tools.

Different Pay for Different Work

Rethinking recruitment assumptions and job descriptions requires new models for salaries and benefits. If the ideal new teacher is a recent college graduate who intends to remain in the profession for decades, it is logical to rely on seniority to allocate salary and positional perks. If, however, the ideal entrant is someone age thirty to fifty-five who has worked for several years in another field and accumulated experience and skills, this paradigm is needlessly constraining. Benefit systems that penalize shorter terms of service are a stumbling block for second-career teachers; comparable salaries and a defined-contribution, 401(k)-type retirement plan make a lateral move more attractive.

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While the aim should be to create a profession with various roles and specializations, it should not be presumed that differential compensation requires finely graded hierarchies. Even seemingly sophisticated proponents of compensation reform have too often advocated variations on the blunt Pavlovian approach of paying more for higher student test scores while neglecting the broader design of the profession. After all, every teacher under a Denver Public Schools ProComp-style system, which links teacher pay to the district's mission and to student instructional outcomes, still enters teaching at roughly the same salary and with roughly the same job description. Every teacher pursues the same bonuses and seeks to climb the same career ladder. This would be akin to a law firm requiring every new J.D. to start as a paralegal and then eventually become a lawyer, or hospitals requiring every new M.D. to begin as a nurse and then become a general practitioner and eventually a specialist.

Law and medicine have weakened or even severed the link between an employee's formal place in an organizational hierarchy and expected compensation. By allowing pay to reflect perceived value, these fields have fostered norms whereby accomplished attorneys or doctors spend their careers making use of their skills and earn outsized compensation without ever moving into

management or administration. That kind of a model in education would permit truly revolutionary approaches to recruiting and retaining quality educators.

In moving away from the familiar pay scale, it is not enough simply to add bonuses atop the existing arrangement. If teachers are tutoring over the web or providing support services, their compensation needs to be reshaped accordingly. Payment might be by the hour, for each student successfully served, or in some other fashion, but it requires systemic redesign that even radical reformers have yet to undertake.

Ultimately, the goal is to rethink the teacher challenges of the twenty-first century. We are feeling our way toward a new and more fruitful era of teaching and learning. We have been slowed by habits of mind, culture, and institutional inertia that imagine a future for schools and school districts that embodies today's familiar assumptions. While we should recognize that institutions change slowly and celebrate incremental advances, we should not allow that to obscure the goal: to recruit the most promising talent and then foster a more flexible, rewarding, and performance-focused profession.

Notes

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7. C. Emily Feistritzer, *Profile of Alternate Route Teachers* (Washington, DC: National Center for Education Information, 2008), 33, available at www.ncei.com/PART.pdf (accessed November 19, 2009).

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9. Thomas D. Snyder, Sally A. Dillow, and Charlene M. Hoffman, *Digest of Education Statistics 2007*.

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