

# The Value of People, Place and Possibilities: A Multiple Case Study of Rural High School Completion

Kristen Campbell Wilcox

Janet I. Angelis

Linda Baker

Hal A. Lawson

*University at Albany*

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*What are the qualities of classroom, school, and district processes and practices in rural high schools with higher-than-average graduation rates? How do these processes and practices compare with rural schools with histories of average graduation rates? In this study, six schools were sampled for a multiple case study of rural high school completion. Four had higher-than-average graduation rates, while two had average rates. All six schools were visited by site teams who conducted 63 interviews and collected documentary evidence of practices and processes related to high school graduation. Using cross-case analytic procedures, we found several important contrasts between the two sets of sample schools. Differences in graduation outcomes in these rural schools were associated with (1) the qualities of academic goals, expectations, and learning opportunities; (2) the nature of individual and collective educator efficacy; (3) the strategies educators used to develop and maintain family relationships and engage community members; and (4) mechanisms for adapting instruction and employing interventions for students at risk of dropping out.*

The U.S. national average for high school graduation falls far below that of many other industrialized countries and is marked by significant graduation rate gaps between students of higher- and lower-socioeconomic status and students attending suburban vs. rural or urban schools (Rumberger, 2011). The failure of youth to complete high school is a problem both for them and for the greater society as high school dropouts have lower earning power, higher rates of incarceration, and poorer health, with all the attendant consequences for themselves, their families, and society (Hauser & Koenig, 2011; McLaughlin, Embler, Hernandez, & Caron, 2005; Purcell, East, & Rude, 2005).

Although much of the focus on the high school dropout rate in the United States has been on urban “dropout factories” that serve large numbers of minority and immigrant students (see Balfanz, 2008), many high school dropouts are in fact native-born English speakers from lower-income families who do not necessarily attend urban schools (Perreira, Harris, & Lee, 2006; Rumberger, 2012). Meanwhile, as local rural economies in much of the United States and Canada face the challenges of economic globalization, decreasing populations and tax bases, increasing transiency and poverty, historic tensions between developing college-ready vs. workplace-ready young adults remain (Albert & Jury, 2005; Brandau, 1996; Brandau & Collins, 1994; Corbett, 2007). These tensions are exacerbated by increased expectations for student performance on assessments of college and career readiness that are used as exit requirements from high school.<sup>1</sup>

Notwithstanding all such emergent issues, the fact remains that few studies of rural schools, districts, and their community contexts are sufficiently nuanced to take into account the obvious import of “place” and the very idea of “the rural.” Scholars have documented distinctive differences among different kinds of rural communities—to wit, resource extraction communities, agricultural

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All correspondence should be directed to Kristen C. Wilcox, Department of Educational Theory and Practice, University at Albany, ED 115A, 1400 Washington Avenue, Albany, NY 12222. E-mail: Kwilcox1@albany.edu

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<sup>1</sup> Partnership for Assessment of Readiness for College and Careers (PARCC) has been implemented in 12 million public K-12 schools as of 2014 (PARCC, n.d.)

communities, bedroom communities for urban and suburban commuters, tourist-oriented, recreational communities, and Native American reservation communities (Gonzales, 2003; Lichter & Brown, 2011). All in all, differences between these communities are part of a new spatial focus on social geographies and ecologies because place matters; these ecologies are socially constructed and constituted and include identity-bestowing dynamics for people and the organizations in which they interact, such as schools (e.g., Tate, 2012).

In brief, research designs for rural schools and districts need to be adapted to address the rural community context—the social geographies and ecologies of particular schools and districts. These research designs also need to be configured so that important intra-school interactions can be investigated by focusing on the relations among instructional practices in classrooms, salient features of schools as organizations (e.g., leadership, workforce configurations, organizational routines), and district-level policies and alignment mechanisms related to monitoring of data and capacity building. Together, these phenomena of interest—micro (classroom), meso (school), macro (district), and exo (state and national policy)—are part of a particular rural school’s social ecology (Wilcox, Lawson, & Angelis, in press). Such a socioecological framework, in tandem with an interest in rural social geography, facilitates the identification and analysis of commonalities, similarities, and nuanced differences among rural schools and districts.

This study, then, is rooted in the idea that the qualities of practices and processes in classrooms, schools, and districts and their relationships to children and families in the communities they serve are central to understanding academic outcomes, including graduation rates. This socioecological lens frames this study, in which we investigate the processes and practices in rural schools that are associated with higher graduation rates.

### Related Literature

Since the 1980s’ *A Nation at Risk* (Gardner, 1983) and the 1990s’ Goals 2000: Educate America Act (1994), and especially since passage of the No Child Left Behind Act (NCLB, 2002), a number of scholars have examined the impact of homogenized state education department policy, with particular interest in how standardized accountability mechanisms influence rural schools (e.g., Schafft & Jackson, 2010; Theobald & Wood, 2010; Zhang, 2008). One strand of this research proceeds with an all-important focus on whether, how, and why these policy mechanisms erode and possibly rule out the local, and particularly the rural, in local district and school policies, practices, and processes.

During these same years, other scholars have explored how globalization of the economy has impacted rural

communities and their schools (Howley & Howley, 2010; Schafft & Jackson, 2010; Schafft, Killeen, & Morrissey, 2010). For example, economic restructuring, resulting from globalization, has led to the relocation of manufacturing operations overseas and the consolidation of agriculture in corporate hands (Carr & Kefalas, 2009). What is more, scholars have highlighted that weak economies in rural areas are further deteriorated by the low-paying service and seasonal employment that has replaced traditional living-wage jobs, limited local infrastructure for incubating new businesses, and contributed to the outmigration of highly skilled human capital (Budge, 2006; McGranahan, 2003). At the same time, researchers have documented how the ease of mobility and connectivity in the twenty-first century has influenced rural outmigration, as the most highly educated seek employment opportunities elsewhere (Carr & Kefalas, 2009).

### Social Ecologies of Rural Schools and Education Policies

By 2008, only 20% of public school students in the United States were enrolled in rural schools (Strange, Johnson, Showalter, & Klein, 2012), yet that 20% represented nearly 10 million students. The trend toward urbanization began early in U.S. history and took place against a nearly constant backdrop of disagreement about whether the new (and maturing) nation should favor urban-industrial or rural-agrarian development. The argument can be seen, for example, in the differing visions of Hamilton vs. Jefferson during the drafting of the Constitution, and it underlays differences between North and South leading up to the Civil War, as progress increasingly came to be equated with urbanization (Fulkerson & Thomas, 2013; Theobald & Wood, 2010).

Currently the overall trend is an outflow of youth from the country’s rural areas. In some communities, this outmigration has been accompanied by an in-migration of more transient populations living in deep poverty (Schafft et al., 2010). Despite popular—and nostalgic—notions of rural life as healthy and traditional (e.g., two-parent households in which the father provides the financial support and the mother stays at home), that image is no longer the norm in rural communities. The percentage of rural households headed by single females has increased; more mothers are working outside the home; and some rural communities have been plagued by meth labs (Carr & Kefalas, 2009; Reding, 2009), and more recently by an influx of heroin (Seelye, 2014). These changes present additional challenges for rural educators, who may not have the knowledge, experience, or access to provide adequate services to meet students’ social and emotional needs.

The association of urbanization with progress and the challenges of decreasing rural populations and increasing

challenges in rural communities has been exacerbated by increasing standardization of education, begun during George H. W. Bush's administration with Goals 2000 (1994) and culminating more recently, under George W. Bush, with NCLB (2002) and Barack Obama's Race to the Top Fund (RTTT) (2011). RTTT hinges on adoption of Common Core State Standards (CCSS) and other "reforms" that are seen by many as more suitable for urban than rural settings. As some have argued, these policies have disproportionately and largely negatively impacted education in rural communities (Bryant, 2010; Schafft & Jackson, 2010).

### **Interactions Among Exo, Macro, Meso, and Micro Levels**

At the most exo-level of analysis, national and global conditions impact rural schools and districts and the rural communities they serve. One dilemma for rural administrators and teachers is that preparing students to meet state-set standards and graduate from high school ready for college or career inadvertently may mean orienting and preparing them to leave their communities (Carr & Kefalas, 2009). Whether this phenomenon is pervasive in all kinds of rural schools and communities is an empirical question. To the extent that it is evident and growing, it will probably influence the student, teacher, and administrator composition in schools and districts and both educators' and students' orientations toward graduation and postsecondary education readiness and completion. Simply put, rural context matters—and not necessarily or automatically in desirable ways.

Some studies (e.g., Demi, Coleman-Jensen, & Snyder, 2010; Hardré, Sullivan, & Crowson, 2009) have found that in rural high schools, school climate provided a stronger influence on students' decisions to engage in school, earn good grades, and graduate than did family or peers. School climate also was found to influence aspirations and decisions about continuing to postsecondary study. Still other studies (e.g., Albert & Jury, 2005; Carr & Kefalas, 2009; Theobald & Wood, 2010) have documented how some rural youth develop special identities in their somewhat unique social geographies. These young people have come to internalize the rural is inferior message that surrounds them (Theobald & Wood, 2010). Such an identity development progression serves to undermine their confidence in their abilities to succeed and adds to educators' challenges to keep them engaged. In contrast, others have highlighted an alternative interpretation of the relationships of school climate and outmigration by citing the role of rural schools in fostering strong school identification and community attachment and related expectations to reconnect and return (Petrin, Schafft & Meece, 2014).

Still other studies have revealed how rural students' long-term plans are consequential for important outcomes such as academic engagement and high school graduation. For example, Corbett (2007), Carr and Kefalas (2009), and Sherman and Sage (2011) have explored why some students stay, some leave, and some return. In a fishing community in Canada (Corbett), a farming community in Iowa (Carr & Kefalas) and a logging community in northern California (Sherman & Sage), these researchers found that the school played a role in how students came to identify themselves and their educational trajectory.

Sherman and Sage (2011) argue that it is not just a rural family's economic status that influences whether a child pursues higher education. Also in play are social factors, including educators' perceptions of the family's income level and "moral" standing (e.g., drug or alcohol use/abuse, reliance on public aid), that influence how educators perceive and treat the children of those families, independent of a child's individual characteristics. They found that marginalized families distrusted the school and its personnel and thought that the education provided was inadequate to prepare their children to be successful in that locale. Such mistrust even affected whether or not at-risk students took advantage of the supplemental education services mandated by NCLB (2002), particularly those provided by school personnel (Barley & Wegner, 2010).

### **Academics for Rural Youth**

Some researchers have examined practices related to connecting students to their communities as a way not only to help them engage with and stay in school but also to acquire knowledge and skills relevant to building their own futures (Bartsch, 2008; Tompkins, 2008). Bartsch (2008) in particular provides evidence from a community-based program in Maine that improved participants' reading, writing, listening, and analytical skills to the point that the high school's performance on state assessments moved from 99 out of 127 high schools in the state to 12. Such results are consistent with findings by Hardré and colleagues (2009) about motivation. When rural students found usefulness and value in what they were learning in school and thought it would contribute to achieving their goals, they were more likely to exhibit an interest in school and make the necessary effort to achieve in their academic work. In addition, the more confident that students felt in their ability to perform, the more likely it was that they would be interested in their courses and would intend to graduate. This finding was applicable not just to high achievers.

Overall, the related literature suggests a strong influence of school climate on rural students' decisions to attend, engage with, and stay in school until graduation, and whether

to pursue postsecondary studies (Palardy, 2013). Although macro-level economic forces and state policy decisions have unique repercussions in areas beset by shrinking economies, tax bases, and populations, their effects differ from school to school. In some rural schools and communities, these factors result in a negative reinforcing cycle (Senge, 1990, 1998) in which students disengage and leave school before graduation, but in other schools the influence of these forces are mitigated. The current study was designed in part to identify what those mitigating forces might be in rural schools with higher graduation rates. We sought to answer the overarching question: What are the qualities of classroom, school, and district processes and practices in rural high schools with higher-than-average graduation rates? Next, we describe how we set out to investigate this question.

## Method

In this multiple case study we used regression analyses to identify a purposive sample of schools to compare distinguishing features of schools with statistically significant differences in graduation rates. The multiple case study method was chosen as it facilitates comparison of different data sets and focuses attention on contextual conditions that are pertinent to pursuing the research questions (Yin, 2005).

## Context

The current study, which investigated rural schools specifically, was part of a larger study conducted to investigate practices and processes related to graduation outcomes in rural, suburban, and urban schools. The larger study took place in New York, a highly diverse state with some 700 school districts, many of which are located in rural areas that are experiencing both economic and demographic changes (Miller, 2012; Sipple & Diianni-Miller, 2014). Of the six rural schools in the larger study, in 2012, five were in the 30% of school districts in the state serving fewer than 537 students (the U.S. median for rural districts) (Strange et al., 2012). All these schools fell into one of the three categories of rural schools (i.e., rural fringe, rural distant, or rural remote) as defined by the National Center for Education Statistics (NCES) and based on the most recent census data (NCES, n.d.).

In the first decade of this century, even as the percentage of rural students in the state dropped overall, rural districts in New York experienced a slight increase in student population due in part to an increase in the in-migration of Hispanic students (Strange et al., 2012), a trend also reflected in the schools in this study. Thus, in addition to already higher-than-average transportation costs (Strange

et al., 2012), rural schools are facing the need to provide more services such as English as a Second Language. All the districts involved in this study also serve a higher percentage of students with Individualized Education Plans (IEPs) than the U.S. average (12.1%), and five of the six serve more than the state average (13%).

Academically, New York has a long history of requiring multiple exit assessments (called Regents Exams) at the high school level. Since 2005 New York has tightened graduation requirements to include passing five Regents Exams in English, mathematics, global history, U.S. history, and science to earn a state-sanctioned diploma.

## The Larger Study Sample

In the larger study, in which the one presented here was embedded, we employed regression analyses to identify a purposive sample of two sets of schools that consistently graduated youth in four years at better-than-predicted (what we term “higher-performing”) or typical (“average-performing”) rates. Schools with low graduation rates were not chosen since most are under close scrutiny and mandated state evaluations to such an extent that our research efforts would not only place an undue burden on their administrators, teachers, and students but also potentially raise questions about the validity and reliability of our data collection efforts. In brief, including low performers in the study was not “practical” for them or for us.

From the initial pool of 1,114 high schools in New York for which graduation rate data were available, we eliminated schools in the New York City School District as we did not have permission to conduct research there. Next, using SPSS, we ran regressions (i.e., statistical tests for the extent of relationship between the mean value of one variable—e.g., graduation rate—and corresponding values of other variables—e.g., poverty—as indicated by percentage of students qualifying for free/reduced-price lunch). Table 1 shows the sample demographics and regression results in terms of z-scores.<sup>2</sup> The z-score indicates a standardized mean of residuals for the percentage graduating on time (in four years), for the years 2009, 2010, and 2011, taking into account such variables as poverty and ethnic and linguistic diversity. We then filtered our sample down to eight higher-performing schools (those with z-scores representing graduation rates at least one standard deviation above the

<sup>2</sup>The difference between expected and actual graduation rates was standardized to have a mean of 0 and standard deviation of 1, which is represented in the z-scores. This standardization places the actual-expected graduation rate on an equivalent scale for all schools such that a cumulative gap can be calculated. Schools with average graduation rates (i.e., close to expected for the populations that they serve) would have z-score values close to 0, while those schools with z-scores greater than 1 have a statistically significantly higher graduation rate, taking into account the populations they serve.

Table 1

*Characteristics of Sample Schools*

	Grade Span	9-12 Enrollment	% Free/Reduced-Price Lunch	District Per-Pupil Expenditure*	% 4-Year Graduation Rate	Z Combined rank
<b>Higher-Performing</b>						
Wicket	P-12	c. 80	c.45	c. \$20,000	100	1.06
Lychgate	P-12	c. 130	c.45	c. \$20,000	98	1.09
Palfang	7-12	c. 150	c.50	c. \$20,000	95	1.03
Torana	P-12	c. 80	c. 60	c.\$40,000	96	1.73
<b>Average-Performing</b>						
Quill Valley	7-12	c.275	c.35	c. \$20,000	c.75	.16
Maple Mount	P-12	c.100	c.40	c. \$30,000	c.75	.07
State Average			49	\$19,076	77	
State Rural Average					80.5	

*Note.* Except where indicated, all data are from NYS Report Cards. Data are for 2009-2010, except per-pupil expenditure, which are from 2010-11. Pseudonyms are used and data are rounded to protect anonymity.

\*See Dixon (2013).

\*\*See Strange, Johnson, Showalter, & Klein (2012).

mean) and five average-performing schools (those with z-scores representing graduation rates close to the mean), taking into account these criteria: (a) variety in terms of geographic distribution across the state and across types of schools (i.e., rural, suburban, and urban); (b) oversampling of higher-performing as opposed to average-performing schools so as to provide as many examples of promising practices as the study budget would allow; (c) oversampling of schools with greater challenges (i.e., those with at least the state average for free and reduced-price lunch levels [a poverty index], as well as near-average state per pupil expenditures [a wealth index]); and (d) at least one average-performing school to compare to at least one higher-performing school by categories of urbanicity (i.e., rural, suburban, and urban). In the end, the sample for the larger study included six rural schools, four higher-performing (Lychgate, Palfang, Torana, and Wicket<sup>3</sup>) and two average-performing (Maple Mount and Quill Valley).

### The Current Study Sample

Using an explanatory participant selection design that samples to explain some aspect of the phenomenon of interest (see Creswell & Clark, 2011), the six rural schools became the focus of the current study. These schools were chosen because they are located in “durable agrarian” communities (Howley & Howley, 2010) that have traditionally been agricultural but are experiencing considerable economic change. None of these schools are located in New York state’s established resort areas, where the property taxes on

<sup>3</sup> All school names are pseudonyms

high-end second homes can provide significant additional income for school districts. In sum, the higher-performing rural schools’ graduation rates were all at least one standard deviation above the mean in comparison to similar schools, while average-performing school rates were close to the mean as represented by their near-zero z-scores (see Table 1).

### Data Collection

Data collected included interviews and documentary evidence. We used a semi-structured interview protocol (see Appendix for example) to interview teachers and administrators for 40 to 120 minutes each during two-day site visits by two-person research teams. In each school, participants included two to five administrators (e.g., superintendents, assistant superintendents of curriculum and instruction, school principals, parent/family liaisons) and five to ten teachers and specialists (e.g., content teachers, guidance counselors, special education teachers, social workers, school psychologists). In total, we conducted 63 interviews in the six rural schools included in this study. We also collected documentary evidence, including school and district plans, curriculum maps, and pacing guides; professional development information and materials; teaching evaluation information/forms; staff selection materials; unit and lesson plans; school schedules; district, school, and classroom assessments; and Academic Intervention Services (AIS)- and Response to Intervention (RTI)-related documents.

## Data Analysis

In the first stage of analysis, site team researchers wrote memos after the first day of interviews to record developing interpretations of the data and to guide data collection on the second day. At the end of the second day of each visit, the researchers composed a summary of the site visit to record developing interpretations and guide the crafting of the case report. Each site team subsequently produced a 10-14 page report on the participating school. The researchers then confirmed each report's accuracy through a member-checking process that included sharing case study drafts with superintendents and principals who then provided input as to the accuracy of the reports. We then corrected inaccuracies by referring back to the evidence and again shared the drafts with the superintendents and principals. We continued this process until we arrived at a final draft.

Next, to complete the cross-case analysis, two researchers coded all the interview data. These two researchers achieved intercoder reliability of .70 using a priori codes that fell into six major categories: academic goals and curriculum; instructional programs and practices; leadership, staff selection, and capacity building; monitoring of performance and data use; interventions and adjustments; and beliefs about teaching and learning. These code categories were derived from earlier studies and included five organizing themes that encompass the primary teaching and learning activities undertaken in consistently higher-performing school systems (i.e., curriculum and academic goals; instructional programs and practices; staff selection, leadership, and capacity building; monitoring, compilation, analysis, and use of data; and recognitions, interventions, and adjustments; see Levine & Lezotte, 1990; Slavin &

Fashola, 1998; Wilcox, 2013; Wilcox & Angelis, 2009; 2011; Wilcox, Lawson, & Angelis, in press). We organized all interview data from all case study schools using codes that fell into the six categories (an example of data coded in the curriculum and goals category is presented below). This coding was done using the qualitative software program HyperResearch (Hesse-Biber, Kinder, & Dupuis, 2009).

Finally, using typical cross-case procedures, we used the software to generate code reports by major categories (e.g., curriculum and academic goals)—one for the higher-performing schools and another for the average-performing schools. As we analyzed these code reports, we further categorized features of practice into dimensions. To assist in the analysis across individual schools and across higher- and average-performing schools, and because the data set was sizable, we used a matrix to compare dimensions of each category (Stake, 2008; Yin, 2005). Table 2 provides an example of the matrix used in this process. In this example, the theme related to expectations (in the curriculum and goals category) was divided into dimensions of: (1) setting goals and high expectations for success beyond state mandates; (2) belief that every student can/will meet the expectations; and (3) preparing students for success in college and career. Using source triangulation techniques, we examined data for whether there were multiple verifications, inconsistencies, or little evidence of these dimensions as indicated with the initials M, I, and L.

The dimension of "setting goals and high expectations," for example, saturated the data in the higher-performing schools, as is evident in coded examples such as "We push them to excel," "We feel successful when we are preparing kids for things you might not think they can do," and "It's up to us to let students know what's out there. Just because

Table 2

### *Coding Matrix*

	Setting goals and high expectations for success, beyond state mandates	Belief that every student can/will meet the expectations.	Preparing students for success in college and career
Higher-performing			
Wicket	M	M	M
Torana	M	M	M
Palfang	M	M	M
Lychgate	M	M	M
Average-performing			
Maple Mount	I	I	L
Quill Valley	I	L	L

Note. M=multiple verifications, I=inconsistency in references, L=Little evidence

they're from a rural area doesn't mean they can't do great things." If evidence of a dimension was evident in multiple sources (i.e., at least three interviews) within a particular case and also exemplified in documentary evidence, we noted a "Y" in the matrix. We analyzed all cases by category and dimension in this way.

In sum, the following methods for triangulation supported the articulation of cross-case findings: data triangulation (through the use of documentary evidence, interview, and researcher memos); investigator triangulation (through the use of multiple site teams and member checking of both individual case studies and the cross-case analysis); and triangulation in time and space (through the use of multiple years of graduation data for sample selection and multiple locations for site study) (Patton, 2001).

## Findings

Our study suggests that the challenges facing the schools in our sample are largely consistent with those described in the literature about rural schools across the United States and internationally. As we will describe in more detail, we found that while the six schools in this study faced declining property values, resources, and enrollments as they were being mandated to increase graduation requirements and four-year completion rates, the higher-performing schools differed from the average-performing schools in a few marked ways, namely in: (a) the qualities of academic goals, expectations, and learning opportunities; (b) the nature of individual and collective educator efficacy; (c) the strategies that educators used to develop and maintain family relationships and engage community members; and (d) mechanisms for adapting instruction and employing interventions for students at risk of dropping out.

### Academic Goals, Expectations, and Learning Opportunities

Their often small size and isolation can make it difficult for rural high schools to offer rigorous, deep, and broad academic programs that meet the needs of all students, but academic opportunities in rural schools are not static from school to school (Bryant, 2010; Wilcox, 2013). As some researchers have found, learning opportunities for rural students are oftentimes tied inextricably to educators' beliefs—including their expectations for students—and these beliefs are reflected in school and district practices and processes (Carr & Kefalas, 2009; Sherman & Sage, 2011).

**Rigorous goals and high expectations.** The more successful schools in our study showed evidence of having established rigorous goals and high expectations rooted in the belief that every student can meet those expectations and be prepared to succeed in and beyond high school. In both Lychgate and Torana, for example, educators stressed

that they do not "relax the standards" for some students. All students, including those classified for special education services, are expected (and supported) to pass the same state-mandated assessments and graduate on time. Educators in these schools also explained that they were looking beyond success in high school to college, other postsecondary education, or career. In the words of one Torana educator, "We are always thinking long term." Or as a teacher from Palfang, put it, the goal is not only that all students will "walk across the stage, but that they have a plan for beyond high school."

In the two average-performing schools, educators described lower expectations for students. Their goals tended to focus more on complying with state-mandated performance targets for subgroup populations (e.g., special needs students) than ensuring that all students would meet rigorous academic expectations. For example, a Quill Valley administrator commented, "You can't [expect to meet high goals] if 25% of the population struggles with their schoolwork." At Maple Mount, educators expressed concern about "working with many more kids in crisis than in the past" and noted that, as the student population had changed (fewer students from single-family farms and stable families and more transient students), they wondered whether some students really could be successful in high school. Teachers and administrators in the higher-performing schools expressed no such doubts, and they deliberately sought to instill in their students the confidence that they can succeed and their focus was on preparing their high-poverty and special education students for success beyond high school, not simply on meeting Annual Yearly Performance targets on the next state assessment.

**Use of outside resources.** In the higher-performing schools, we also noted that school members made an effort to identify and incorporate resources from beyond the district to align learning opportunities with rigorous academic goals and high expectations. These outside resources functioned in two ways: to enhance the professional knowledge and skills of educators, and to provide a broad array of learning opportunities for youth.

Activities that enhanced learning for educators included extensive use of regional or other networks, especially those that supported school improvement planning and professional development. For example, Torana and Palfang belonged to a collaborative of schools using the same continuous improvement model. That model links together all aspects of academic planning and guides their in-school and in-district work on an ongoing basis. The collaborative provides opportunities for school personnel across districts to share knowledge and experiences and develop their improvement capacities. Lacking multiple schools within the district with which to network, they reach across district lines. Other regional networks supported implementation of

the CCSS. For example, some teachers and administrators in the higher-performing schools had attended state and regional workshops on CCSS implementation. In tiny Wicket, for instance, three of its 30 teachers had attended state-provided CCSS professional development and returned to work with colleagues in their own building as well as others in the region as turn-key facilitators. A district administrator described the value of the facilitators' work:

I can't say enough about the three Common Core ambassadors that have gone to Albany [the capital of New York] on so many days..., then coming back and turn-keying the information not only for Wicket teachers and students, but for the whole [county]. Comparatively speaking, given our size, that we have three of them is fantastic. And I think that has carried over to the staff.

Resources that enhanced students' learning opportunities include online and distance learning as well as virtual and real field trips to take them outside their rural environments. Staff in the higher-performing schools reported looking "for opportunities outside this building to give to our kids." "We go out and bring in services to provide our students with a proper education, whether that be [through] BOCES [Board of Cooperative Educational Services] or college credit [distance learning] courses," said a Wicket administrator. Students in all four higher-performing high schools could take courses at or through a nearby college or university and were encouraged to do so. One purpose of these opportunities, said a Palfang educator, is to give them the confidence that they can be successful in college and outside their community: "Taking a college course in high school [tells them], 'I can do this. I am capable of doing this.'" Also in Palfang, the guidance department used video to expose students to the wider world and potential post-high school opportunities.

On the other hand, educators in the average-performing schools cited budget cuts and reduced staff as limiting opportunities for professional development and for offering a range of courses to their students. Both Maple Mount and Quill Valley educators voiced concerns about having difficulty balancing the needs of both college-bound students and those less likely to attend college. For example, according to an administrator in Quill Valley, one of their major problems was the lack of the practical, "elective courses: the cooking classes, the welding classes, the hands-on classes ... where [at-risk students] could take a break from the academic classes," whereas in Maple Mount a teacher expressed concern about too much focus "on struggling learners rather than higher learners" and not presenting "enough advanced curricula for higher-performing students."

In sum, at the micro- and exo-levels (i.e., classroom, school, and district), we found contrasts between higher- and average-performing schools in terms of their goals and expectations for student success as well as in the corresponding content and arrangements for rigorous teaching and deep student learning evident in their academic programming.

### **Efficacy and Engagement**

The higher-performing schools in this study showed evidence of being infused with what Hoy, Tarter, and Hoy (2006) call "academic optimism"—interwoven qualities of focus, belief in individual and collective efficacy, and trust in each other's shared goals.<sup>4</sup> Other research (e.g., Bryk & Schneider, 2002; Wilcox & Angelis, 2011) has also shown trust to be an essential underpinning for collaborative cultures and both individual and collective efficacy.

**A culture of shared responsibility and professional engagement.** In the higher-performing schools we found a well-established collaborative culture, and educators in these schools identified this culture as an important element in their school's graduation rate, especially for their at-risk students. As one teacher explained, a culture of working together had existed "for as long as anyone can remember." Educators in these schools tended to talk of this culture of shared responsibility as part of staffing arrangements that sometimes stretched them in multiple directions. For example, in Wicket, the superintendent was an interim and shared with another district, the principal served as guidance director, the business manager also served as dean of students, and a "lead teacher" joined them on a four-person management team. This model was designed "after a lot of discussion with the school board and teaching staff," a school administrator explained. In Torana, a teacher led the school improvement team, and teachers served as co-curriculum coordinators. As Wicket administrators described, "We do not have walls built with everyone having their own turf," and "Our hierarchy isn't lines and arrows but linked Olympic circles." "If you see something that needs doing, you do it," said a teacher. That idea of doing whatever "needs doing" often translated into teachers' teaching six or seven periods each day to provide a range of course selections for students. This sharing of responsibility continued into time spent with students. Teachers reported being "there for students" before and after school, at lunchtime, or whenever a student needed help. As one teacher asserted, "If I'm engaged, students engage." Despite administrator worries about the common rural challenge (Zhang, 2008) of losing effective teachers

<sup>4</sup> Goddard, Hoy, and Hoy (2000) also describe academic optimism as "the perceptions of teachers in a school that the efforts of the faculty as a whole will have a positive effect on students" (p. 480).

because of low pay and multiple class preparations, teachers reported feeling valued and knowing that what they did mattered. Rather than seeing such role configurations as burdensome, in the higher-performing schools, educators related the shared responsibility and distributed leadership of such arrangements as contributing to students' academic success.

While administrators in all schools in the study spoke of the struggle to position personnel as effectively as possible under considerable financial constraints, those in higher-performing schools described adjusting staffing arrangements collaboratively and in ways that seemed to match roles to educators' skills and experience. On the other hand, educators in the average-performing schools tended to report less success in arranging staff in ways that both engaged and effectively used teachers' skills and expertise. Teachers in Quill Valley, for example, viewed changes in staffing to cover administrative duties as necessary sacrifices in light of decreasing resources. Since the changes had been made without collaborative decision making, however, they also lacked teacher support. In addition, we found that in the average-performing schools, leadership transitions had been accompanied by changes perceived by teachers as unsettling, often including mandatory shifts in staff assignments that were not always viewed as the best use of teacher expertise. Again, we found little evidence of collaboration in making such decisions. While some educators in the average-performing schools also described expending the extra time and effort with students and the importance of making a difference for a student, several teachers indicated that they did not always feel successful, valued, or supported by colleagues, even when they went, as one Maple Mount teacher put it, "above and beyond."

**Individual and collective efficacy.** Most educators in the study seemed intensely aware of the challenges that their small, rural schools were facing, and most also indicated that they were striving to do their best. Yet, in comparing the viewpoints of teachers in higher- vs. average-performing schools, we noted some distinct differences in their expressed individual and collective efficacy in supporting youth to achieve a high school diploma.

Teachers in the higher-performing schools spoke of being encouraged to take the risk to innovate to meet student needs, and administrators spoke of how receptive teachers were to new ideas. The Palfang principal, for example, said that if he suggests something new, teachers will respond, "There's an idea! When can we start?" Teachers and administrators attributed their success to these reciprocal, collaborative, and trusting relationships with each other. Indeed, collaboration went beyond teacher-teacher and teacher-administrator cooperation; it occurred between

administrators with teachers' union representatives as well. For example, we were told that any union grievances were worked out through discussion rather than arbitration. As a Lychgate administrator put it, "Teachers feel free to communicate openly. It's not us vs. them," and a Torana administrator said of working with the union, it's "kind of fun. It's good to have working colleagues like that."

In contrast, many educators in the average-performing schools voiced frustration and a general sense of being unsupported—by parents, students, and/or administrators—in their efforts to improve the graduation outcomes of their most at-risk youth. For instance, when asked about what kinds of things they were doing to positively impact at-risk students' performance in school, Quill Valley teachers tended to focus their responses on persistent problems in motivating students to attend school and engage in learning once there:

There are still families in this district where kids still go home and work in the family business—on the farm—or where they own a small ice cream shop in town. I had a kid yesterday, and he wasn't reading, and he said he had to go home and frost the cookies because his dad owns the bakery in town. The priority is not going to be the education, [although] that's not across the board. It comes down to the parents.

Like their counterparts in Maple Mount, Quill Valley teachers expressed frustration with the lack of student effort and described feeling that they had done all they could do. As one Maple Mount teacher put it, "It can be really difficult sometimes because as teachers we put in so much effort, and at times it feels like teachers care more than the students."

Overall, the sense of efficacy and engagement had been extended to educators' relationships with families and community in the higher-performing schools. This finding was unique to the higher-performing rural schools in our study, in contrast with the suburban and urban schools. From a socioecological perspective, then, we found contrasts between the two sets of schools both in the culture of shared responsibility and professional engagement (exo-level factors) and educators' sense of individual and collective efficacy (i.e., that they could take action and that their actions would achieve the desired effect on student performance) (micro-level factors).

### **Family and Community Relationships**

As is common in rural settings, a strong sense of place anchored all the schools in this study (Barley & Beesley, 2007; Gruenewald, 2008). Educators referred to their

schools as “the heart,” “the pulse,” “the hub” of their communities. However, the increasing standardization of schooling has sometimes put rural communities at odds with the K-12 schools that serve them (Albert & Jury, 2005; Corbett, 2007, 2009). Also, while this sense of place can be a positive for students whose families are a stable and respected part of the community, transient students or students who are different in some other way can be at risk of alienation (see Schafft et al., 2010).

**Inclusiveness.** The collective efficacy that educators in the higher-performing schools applied to academics was also seen in their efforts to create consistently inclusive environments in which everyone felt a sense of belonging. While all schools in this study were located in communities characterized by disparities of income and lifestyle, staff in the average-performing schools seemed to struggle more with at-risk students than their peers in higher-performing schools. Some Maple Mount educators spoke of transient families who moved in and out of town as not really a part of the community, whereas teachers in Lychgate, with similar demographics to Maple Mount, described ways to connect transient students and families to the school: “We try to make the transitions as positive as possible. We make sure the students join something, get involved right away,” a district administrator said.

Educators in the higher-performing schools highlighted the quality and amount of outreach to families. Torana educators, for example, indicated that the school had become a primary conduit for helping families find and gain assistance in a wide variety of services. Recognizing a similar need, Lychgate assigned a district employee specifically to serve as a liaison to help families. She established a relationship with every family when a child entered school and served as a resource to help the family as the child continued. “I visit every home.... I connect them to further services if they need help.... I do parenting programs and involve parents in monthly activities. I try to make it fun. I want them to feel a part of the school,” she explained. One payoff of such efforts was the trust that families placed in the school. Teachers and administrators in the higher-performing schools said that they were “awed” or “surprised” by families’ beliefs that the school could be trusted to help, even when it meant sharing sensitive information. A Wicket teacher told of parents, confused by college financial aid forms, who even sent in their income tax data with a request for help.

Educators in the higher-performing schools reported that they had worked hard to establish trust and stressed not only that trust builds over time but that it happens naturally when positive communication and interaction are part of the daily school-community relationship (e.g., Bryk &

Schneider, 2002; Wilcox & Angelis, 2011). They described communicating with parents through encouraging notes and phone calls as well as through casual interaction in the grocery store or at athletic events, where parents, grandparents, residents, and teachers mixed and mingled. The idea that school staff and community members knew each other well was mentioned frequently, and the continuity of the relationships was seen as crucial, as was the fact that everyone took part. The effort was systemic. Educators in the average-performing schools, on the other hand, reported less success in their efforts to reach out to families. In Quill Valley, an administrator lamented a parent event that resulted in “taking home a lot of chicken” because of poor attendance.

**Valuing education and connection to place.** Although educators in the higher-performing districts took no credit for the high value that they said community members placed on education, the study uncovered some indications that educator attitudes and practices were interwoven with those community attitudes. Reflecting what other researchers have found in rural areas (e.g., Corbett, 2007, 2013; Gruenewald, 2003), in the words of a Palfang administrator, becoming a “productive adult within the community” was seen as the definition of success. While most educators in the participating schools echoed the ideas that community members stressed practical applications of learning and that student success was not necessarily only about high grades or college admittance, it was only in the two average-performing districts that educators expressed doubts as to whether a formal education was considered at all important to students and their families. “I would say about half of the parents really understand what the purpose of education is. Maybe half the community really gets it, and the other half doesn’t,” claimed a Maple Mount teacher.

In the higher-performing schools, belief in the value of education was interwoven with the importance that adults placed on developing students’ work ethic. Deeply embedded vestiges of agrarian life remained, as evidenced in one Wicket administrator’s reference to the fact that “there are still a fair number of kids who get up in the morning to milk the cows before school.” Some educators attributed parents’ expectations of a strong work ethic at school and at home to students coming to school ready to learn. Educators in both average-performing Quill Valley and Maple Mount, in contrast, told of challenges in gaining consistent family support for school attendance or academic work and said that they felt that for some parents, school was not important.

Again, viewing this finding through a socioecological lens, while teachers and administrators reported family and community relations as critical, in general, the higher-

performing schools provided evidence of prioritizing inclusive outreach to all parents and families, pointing to the ways in which school and district-level practices and processes were calibrated with the social ecologies of the rural communities they served. In return, the schools benefited from trusting relationships with students' families. In the average-performing schools, educators described having had less success in involving parents and families in their efforts to support at-risk students to complete high school, focusing more on what they felt they could effectively do within the school walls such as teach and provide programs during school hours.

### **Adapting Instruction and Employing Interventions**

In an era of heightened accountability and increasingly rigorous standards, more young people—especially those from high-needs communities, whether urban or rural—are at risk of failing to complete high school (Palardy, 2013; Rumberger, 2011; Strange et al., 2012). The more successful schools in this study provided evidence of differentiating instruction, carefully monitoring individual student progress, and strategically deploying resources to address individual student needs (Thousand, Rosenberg, Bishop, & Villa, 1997; Wilcox & Angelis, 2011).

**Collaborative monitoring and intervention.** “We are always looking out for those signs, flags that a kid is heading in the wrong direction,” said a teacher in higher-performing Torana. “No one falls through the cracks here—ever. Nobody can hide.” Although in a small school it is easier to spot students in danger of not graduating, educators in these higher-performing schools stressed that they supplemented observational evidence with hard data; they used databases to monitor details of attendance and behavior as well as academic performance. Teacher databases of student assignments and individual academic progress allowed both parents and other school personnel, such as guidance counselors to easily access information to help keep each student on track. “Lately I’m looking at data constantly; parents do that also,” said a Lychgate teacher. Direct, proactive communication via these data systems was crucial to the monitoring process. “Don’t wait for students to come to you. Go to them,” a Lychgate teacher advised.

Within the higher-performing schools, processes had been established to ensure communication between school and home, especially for at-risk students. Meetings with the parents and all the teachers of any at-risk student were the norm in the higher-performing schools. Parents expected to be part of the intervention team and were reported not to consider communication or home visits to be intrusive. For example, a Wicket educator said, “I can name names of students who ... [graduated] because our staff, our principal and guidance counselor, spoke with them and pushed the

student so hard and went to their home when they didn’t show up in the morning and banged on that door and got them out of bed and got them here.” A less personal, more bureaucratic approach to communication regarding chronic student absenteeism or tardiness was described by a Quill Valley administrator, who reported that the school response began with a letter to the parents and might proceed to identifying the student as a Person in Need of Supervision (PINS) and involving social services.

While faculty members in all schools stressed that they collaborate with colleagues to help at-risk students, their approaches differed, with more established and detailed processes in place in the higher-performing schools. At average-performing Maple Mount, for example, an administrator noted that teachers collaborate informally when “dealing with an at-risk student and we’re trying to come up with some activities for them,” whereas a district administrator at higher-performing Lychgate noted that educators met every Wednesday to discuss “which individual students need help and how that help can be provided; that means that on Thursday the student is talked with and put back on track.”

**Supplemental instruction.** Differences also were evident in both the content and the arrangements for additional instruction provided to at-risk students in the higher- and average- performing schools. Educators in higher-performing schools were more likely to credit academic performance data with informing the content of interventions, noting that test data helped show “exactly what we need to do” to provide instructional scaffolding for individual students. Teachers in Torana, for example, praised their School-Based Inquiry Team for help in interpreting data and identifying patterns to determine content or skills needing to be taught or re-taught to individual students. In contrast, a school administrator at Maple Mount reported that the district had not yet identified an effective diagnostic tool to determine instructional needs of individual students. “We’re looking for one, and I think that will be the next step in our evolution,” he said. Meanwhile, educators at Quill Valley were reacting to new state requirements by attempting to reintroduce evidence-informed instruction in their professional development program.

Providing extra instruction by teachers certified in specific content areas was a given in the higher-performing schools, whereas the average-performing schools struggled with arranging content-specific intervention. A Maple Mount administrator suggested that small rural schools have a particular challenge:

I know ideally our AIS [Academic Intervention Services] math students should be working with a math teacher. It may not always be that way in a small

district, however... If we can't have an intervention specialist working with a student, we take advantage of online interventions and programs that TAs and aides can monitor as the child moves through the intervention him or herself.

On the other hand, at higher-performing Torana, AIS was "a structured class, with content-specific skills to be mastered, rather than just help with homework," one teacher explained. Lychgate teachers also noted the importance of help from content experts when a student was misunderstanding a concept or needing to rethink a process: "We can't just let them do what they are doing," one teacher said. "We have to provide corrective action."

Extra help in preparing for exams was a highlight of the intervention reported by several educators in higher-performing schools. One Lychgate teacher explained the high level of engagement she saw among students: "They've been brought up this way, to understand how important it is to attend review class. Before a unit test or state test, attendance at review class is phenomenal. They want to be here," she said, noting that almost all students, whether at risk or not, attended the eight to ten evening review classes she routinely held before major exams. Torana educators were particularly proud of the summer tutoring given to students who failed state exams in June: "It was tough during the summer, but we tutored those two kids for the two weeks before the August Regents [State Exams] ... and they passed," one teacher reported.

Although all the schools had instituted some form of academic assistance beyond regular classes, as mandated by NCLB (2002), educators in the higher-performing schools expressed feelings of accomplishment and more positive student engagement in relation to those programs than did the teachers in the average-performing schools. Attending extra help sessions beyond the school day was part of the culture in the schools that achieved nearly universal on-time high school completion. Tutoring of individuals or small groups took place in the summer, in the evening, and before or after school. At Lychgate, informal tutoring often took place in the school library, which was open until 6:00 p.m. for students who "need that extra boost" and "may not have a conducive atmosphere for study at home," a teacher explained, noting that teachers "always" check to see who is there and in need of assistance.

"After school" at higher-performing Palfang, as in many districts, referred to a 45-minute block at the end of the school day when at-risk students and others routinely stayed at school for extra academic assistance. It was difficult to convince students to attend similar "help" times at Quill Valley or Maple Mount, however. "They don't want to stay after. They don't have any down time," said a Quill Valley teacher. A colleague said, "It was hard to get kids to stop skipping [the end-of-day help period]. It was hard,

too, because now people had to cover it." Teachers were working with large numbers of students, and they were not necessarily their own students, so the support offered was not that effective, staff members indicated.

In sum, while educators in all six schools were expending considerable effort to support high school completion, policies and practices in the higher-performing schools and districts (meso- and macro- levels) were more deliberately and effectively targeted to the needs of individual students (a micro-level factor), and supplemental instruction (exo-level) was closely tied to course requirements and learning goals.

### Limitations

As is typical in studies using case study methods, the findings presented here are based on a small sample and therefore cannot be assumed to have revealed all the nuances that a large sample of rural schools, and one that investigated rural schools with especially low graduation rates, might have revealed. Our sample was also situated in one Northeastern state with particular economic, historic, and other characteristics that may differ considerably from other rural locales around the United States and the globe, further limiting the transferability of the findings. The study design did not include observations in classrooms or data collection with parents, other relatives, or community members, so the findings need to be understood as based solely on educator reports and documentation. We also would like to make clear that since our analyses are correlational (our sample was selected based on graduation rates over a three-year period and from this sample mapping back on practices and processes was done), we do not assume that the contrasts we found between higher- and average-performing schools were the *causes* of the graduation rate differences. Rather, we sought to identify associations in our data.

### Discussion and Conclusion

This study set out to answer the overarching question: What are the qualities of classroom, school, and district processes and practices in rural high schools with higher than average graduation rates? In contrast with studies that investigate a particular aspect of instruction or policy or some other discrete trait of schools or school contexts, this study approached the question from a socioecological perspective by looking to characterize the relationships of classroom instruction to school and district practices and processes and how those practices and processes relate to educators' understandings of the needs of the children and families in the rural communities they serve.

Findings from this study suggest that the most salient contrasts between rural schools with higher and those with average graduation rates related to: (a) the qualities of

academic goals, expectations, and learning opportunities; (b) the nature of individual and collective educator efficacy; (c) the strategies educators used to develop and maintain family relationships and engage community members; and (d) mechanisms for adapting instruction and employing interventions for students at risk of dropping out. These features of practices and processes, which distinguished the higher from the average performers, appear to be intertwined and mutually supportive. We found, for example, that individual and collective efficacy manifested in a proactive approach to setting goals and aligning programs and practices to meet those goals. This process required reaching out to families and helping them to understand the need for and benefit of programs that would help their children to meet state requirements for graduation and potentially be better prepared for college or career.

The findings from this study suggest that better graduation outcomes in the sample of higher-performing schools relate to a climate of high expectations and alignment of practices and processes to reach those expectations (Demi et al., 2010). As suggested in other studies, this environment takes shape in such activities as tailoring programs and interventions to meet individual student needs and interests (e.g., Gruenewald & Smith, 2008), actively fostering an inclusive environment that mitigates student or family alienation (e.g., Sherman & Sage, 2011), developing trusting relationships with families (e.g., Albert & Jury, 2005; Barley & Wegner, 2010), and expressing clear messages about the value of academics (Hardré et al., 2009). While the key features that distinguish higher- from average-performing rural schools in terms of graduation rates mimic what might be found in urban or suburban schools, this study revealed that the ways in which educators approached resource constraints and use, relationships with students and families, and bridging between designated roles in school and outside of school to the benefit of children were uniquely affected by their rural context.

Furthermore, although the educators in the rural schools in this study had not escaped the challenges identified by other researchers discussed earlier (e.g., increased accountability to the state, decreasing populations and tax base, increasing transiency and deeper poverty), they focused on the advantages offered by their small, tightly knit communities. Many of them expressed valuing people, place, and possibilities. Cognizant of the economic and social changes impacting their communities, teachers and administrators were working to help families to understand changing educational needs and opportunities for their children. They also readily adopted rigorous standards and accountability measures demanded by the state while still valuing the local context, and they deliberately built relationships both within the school and district and with families and other residents through their involvement in

community activities and in their communication with community members.

In a state where the “invisibility” of rural education persists and policy decisions are largely based on urban problems (Strange et al., 2013), there have been repeated calls for further consolidation of local government entities, including rural school districts (Cuomo, 2014; Lamendola, 2012). However, the refrain “We’re holding on here” was common among the educators in the schools with higher graduation rates, many of whom saw maintaining their rural school identity as crucial to their students’ success in the face of pressure to consolidate districts. Should the current pressure for additional consolidation be successful (e.g., Lamendola, 2012), future research might examine what effect, if any, such consolidations may have on fostering on-time graduation for students at risk of dropping out. To what extent, if at all, are consolidated larger rural high schools able to provide rigorous instruction that engages students with a variety of interests and past achievement histories? What are the characteristics of individual and collective educator efficacy in larger rural high schools? To what extent, if at all, are larger rural schools able to develop inclusive family and community relationships of mutual respect and trust? In general, how would a change in relationships brought about by combining rural schools contribute to or hinder students’ high school completion?

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## Appendix

### Semi-Structured Interview Protocol

#### ***Mainstream Content Teacher/Department Chair***

1. Please restate your name and your position.
2. How long have you been working as the <insert job title>?  
*What attracted you to this district?*
3. How would you describe the <name of> school's climate?  
*What are the major challenges?*  
*What are the major successes?*
4. To what do you attribute the school's graduation rates?
5. What are the main challenges you face in improving graduation rates in this school?
6. Please describe the focus of any academic goal-setting work done in this school over the past four years?  
*How are academic goals developed in this school?*  
*Who is involved in the development process?*  
*How do district goals align with school goals?*  
*Describe any process your district/school has to monitor how well it is meeting its goals?*
7. Describe any process your school has to develop and revise the curriculum in response to mandates.  
[IF RESPONDENT INDICATES A PROCESS]  
*Who is involved in the development and revision of the curriculum?*  
*How are vertical teams involved, if at all?*  
*How are ESL specialists involved, if at all?*  
[IF RESPONDENT DOES NOT INDICATES A PROCESS FOR CURRICULUM REVISION]  
*Are there any ways your district attempts to coordinate instruction across schools?*  
*[If no] Why not? Please describe.*
8. How would you describe high-quality teaching for students at risk of dropping out?  
*What types of student work would be evidence of high-quality teaching?*
9. How has the state accountability system impacted the instructional practices, mandated or strongly encouraged in this school, if at all?  
*Provide specific examples*
10. Describe any ways you collaborate with other teachers and other colleagues.  
*How is this collaboration supported?*  
*By whom and when?*  
*Can you provide an example of this kind of collaboration?*
11. What professional development activities do you participate in to improve graduation rates among at risk students?  
*What professional development do general education teachers receive to equip them to better serve students with disabilities?*  
*Any other?*

## Appendix (continued)

12. What programs and processes do you currently have in place to improve graduation rates in this school?

[IF RESPONDENT INDICATES PROGRAMS]

*When were those programs implemented?*

*Who developed them?*

*Were teachers involved in the development?*

*How were they implemented?*

[IF RESPONDENT DOES NOT INDICATE PROGRAMS]

*Are there any other things you can think of in your school that may help improve graduation rates?*

13. How would you describe the approach toward behavior management in this school?

*How is this approach supported by the district or school?*

14. Describe any ways data is used in this school.

*What kinds of data are collected?*

*Who is responsible for collecting and analyzing data?*

*How do you use data?*

15. Describe any specific interventions in place for students at risk of dropping out.

*How are determinations made?*

*Which of these interventions occur at the district level versus the school or classroom level?*

*How are you involved in this process?*

*Can you provide an example?*

16. If you were to give other educators a sense of what is done in <name of> school to affect graduation rates, what would you describe?