High schools in Louisiana, one of the poorest states in the nation, have faced multiple challenges in preparing graduates for college and the workplace. Although the state’s graduation rate has been improving, it was 77 percent in 2015 (most recent data available), seven percentage points below the 2016 national average of 84 percent (Sentell, 2018). Only 64 percent of Louisiana’s graduating high school seniors enrolled in a two- or four-year college in 2015, compared with the national average of 70 percent in 2016 (National Center for Education Statistics, 2018). Louisiana ranks 48th among American states in terms of the percentage of residents (23.8 percent) who hold bachelor’s degrees (U.S. Census Bureau, undated). Less than half of Louisiana students who started a four-year program finished within six years (Lounsbury, 2017),
Furthermore, over half of projected new jobs in Louisiana may be “middle-skill” jobs requiring a high school diploma plus some additional formal training, and Louisiana faces a projected shortage of workers who have these qualifications. Additionally, placing Louisiana 35th in the nation in four-year college completion rates (Tizon, 2017). Given that 65 percent of jobs nationally are estimated to require postsecondary education or training by 2020, Louisiana students’ lack of preparation for college is all the more concerning (Carnevale, Smith, and Strohl, 2013).
Background and Methods

In 2018, RAND published the report *Raising the Bar: Louisiana’s Strategies for Improving Student Outcomes* (Kaufman et al., 2018), which provides an overview of recent Louisiana state policies intended to improve student outcomes in the areas of early childhood education, K–12 academics, teacher preparation, and graduation pathways. The current report, which is part of a four-report series, focuses on Louisiana’s strategies for graduation pathways over the past decade and addresses two key questions:

1. What are on-the-ground responses to Louisiana state actions, including how graduation pathways are being interpreted, acted upon, and perceived by school systems and educators?
2. What are early signals of changes in outcomes that may be associated with Louisiana’s actions related to graduation pathways?

This report aims to provide insights to inform the work of other state departments of education working to improve students’ graduation pathways outcomes, as well as the educators who are responding to state guidelines in Louisiana.

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1 Throughout this report, we use the term *school system* to be inclusive of school districts and charter school systems in Louisiana.
Box 2. Graduation Requirements for TOPS and Jump Start Pathways

As of the 2017–2018 school year, graduation requirements for high school students in Louisiana depended on the type of diploma: whether the TOPS diploma or the Jump Start diploma. There was some overlap in graduation requirements, and all students, regardless of pathway, had to take the ACT test and complete the Free Application for Federal Student Aid (FAFSA) form or have a parent sign an opt-out for FAFSA completion. Both the TOPS and Jump Start pathways included course requirements for TOPS Scholarships, Louisiana’s state college scholarship program for two- and four-year colleges. Course requirements for each diploma are described in Table 1 (LDOE, 2018c). Students graduating with a Jump Start diploma were also required to earn a minimum of one industry-recognized “core” credential in their field and could also earn “complementary” credentials that were applicable to multiple careers. Which of Jump Start’s 45 pathways (such as construction trades, businesses, and health care) a given high school offered in 2017–2018 was chosen according to state and regional employment demand data and school resources (such as teacher availability) (LDOE, 2018g). (As of 2018–2019, the state increased the number of Jump Start pathways to 51.)

Louisiana’s Actions to Support and Improve K–12 Academics

Table 2 summarizes the five key actions Louisiana has undertaken to support implementation of these graduation pathways. Each of the five key actions aligns to one of four specific policy levers, as shown in Table 2:

1. **Mandates**: Rules or requirements for individuals or organizations.
2. **Resources**: Tools or information aligned with goals and intended to support individuals or organizations in meeting those goals.
3. **Incentives**: Inducements intended to encourage individuals or organizations to follow mandates and utilize resources.
4. **Communication/planning processes**: Communication networks, messages, technical assistance, and collaborative structures to inform stakeholders and gather inputs from them.

Louisiana has also taken actions to improve general K–12 education; those actions are summarized in a separate report (Kaufman, Steiner, and Baird, 2019).

Data Collection and Analysis

Data collected for this report is described in detail in a technical appendix accompanying this report series (available at www.rand.org/t/RR2303z5) and is summarized as follows:

- **Case study data.** To address both of our research questions, we conducted case study visits to three Louisiana school systems, where we interviewed high school staff and students (and which are not identified in this report in the interests of confidentiality) in spring 2018. We conducted interviews and focus groups with 20 central office staff, 6 school

### Table 1

Course Requirements for Louisiana’s Jump Start and TOPS Diplomas

<table>
<thead>
<tr>
<th>Subject</th>
<th>Jump Start</th>
<th>TOPS</th>
</tr>
</thead>
<tbody>
<tr>
<td>English</td>
<td>4 courses</td>
<td>4 courses</td>
</tr>
<tr>
<td>Mathematics</td>
<td>4 courses</td>
<td>4 courses</td>
</tr>
<tr>
<td>Science</td>
<td>2 courses</td>
<td>4 courses</td>
</tr>
<tr>
<td>Social studies</td>
<td>2 courses</td>
<td>4 courses</td>
</tr>
<tr>
<td>Jump Start</td>
<td>9 courses</td>
<td></td>
</tr>
<tr>
<td>Physical education</td>
<td>2 courses</td>
<td>2 courses</td>
</tr>
<tr>
<td>Art</td>
<td>1 course</td>
<td></td>
</tr>
<tr>
<td>Foreign language</td>
<td></td>
<td>2 courses</td>
</tr>
</tbody>
</table>
To address our second research question, as well as provide concrete data related to implementation of some state policies, we analyzed student leaders, 34 new or experienced teachers, 17 professional school counselors, and 35 high school students. We conducted focus groups with college-bound students in the three school systems and with Jump Start students in two school systems. The school systems were selected to vary on key dimensions—e.g., urbanicity and student demographics—in order to represent a range of school contexts in Louisiana. In addition, we asked state officials, as well as district administrators from our case study school systems, to recommend higher education partners, workforce board members, and employers with whom we could talk to gain a better understanding higher education and employer partnerships. Using these recommendations, we interviewed nine higher education partners and six workforce board members or employers in three school systems in Louisiana.

**School- and student-level data.** To address our second research question, as well as provide concrete data related to implementation of some state policies, we analyzed student
can reflect only the first several years of changes. Further, although the data inform an understanding of trends and describe differences in achievement across student subgroups, we cannot infer that the policies directly caused these changes. Lastly, it is possible that Louisiana’s policies, which are still being implemented, have not yet fully affected student outcomes. Some of these policies require school systems to make considerable changes to the courses they offer, the counseling resources they provide to students, and the partnerships they build in the community; many school systems may still be in the process of making these changes. Thus, any shifts in student outcomes that we do observe here should be regarded as early evidence; it is possible that further shifts or improvements to the pathways or in student outcomes will occur in the future.

Limitations

Readers should keep several limitations in mind when considering the key findings and implications of this report. First, the sampled case study school systems do not represent the full spectrum of schools, staff, and students across Louisiana. Thus, case study findings should not be interpreted as representative of the state as a whole or the full range of positive responses, negative responses, and challenges Louisiana schools and school systems faced in relation to state actions. Second, interview data rely on the self-reports of stakeholders who voluntarily participated, and we have no independent means of verifying the accuracy of their responses. The interview data could also reflect respondents’ own biases. Third, the conclusions we can draw from the LDOE-provided student data are limited given that many of the policy changes have been very recent, and so data...
State Action 1. Require all high school students to pursue a pathway toward postsecondary enrollment, an industry-based certification, or both.

Approach and Key Findings

How did we explore early signals for how this state action is working?

- We examined LDOE data about student participation in the college and career pathways.
- We asked educators and professional school counselors about how the new requirements affected their work.
- We asked students about how they decided which pathway to pursue.

Key findings:

- Of the first class of graduates of Louisiana’s new high school pathways in 2018, three-quarters graduated with a TOPS pathway diploma, and one-quarter graduated with a Jump Start diploma.
- The largest demographic differences in pathway choices were gender and income status, with more girls and fewer low-income students on the university track and more boys and more lower-income students pursuing Jump Start. Smaller differences were associated with race.
- The new pathway requirements meant more responsibilities for professional school counselors, and some schools struggled finding enough professional school counselor time.
- If students began Jump Start pathways in 11th or 12th grade, instead of 9th or 10th grade, they generally could not achieve higher-rated credentials because they lacked the time to fulfill course progressions.

Prior to requiring that all students graduate with either a TOPS or Jump Start diploma, Louisiana had three diploma options: a “Core Four” diploma that was intended to prepare students for college, a career diploma that did not require credentials, and a basic diploma. Louisiana eliminated these other diploma options, as they did not ensure students met the requirements for state higher education scholarships and were not coordinated with state industry demand (LDOE, 2013). The state’s intention in introducing TOPS and Jump Start was to improve the quality of preparation for both college-bound students (aligning with admission and scholarship requirements for two- and four-year colleges) and students planning to enter the workplace directly after high school. The first graduating class with these two diploma options was in the 2017–2018 school year.

Jump Start participation increased quickly, while most students pursued TOPS.

When Jump Start began in 2014–2015, students rapidly began participating in Jump Start courses.

In the results that follow, we distinguish between enrollment in Jump Start courses, which may involve any students, and graduation in the Jump Start pathway, which is only fully known after graduation and depends on certain requirements being met by the student. Because (1) no Jump Start students would graduate until 2018, (2) students could change their pathway up until graduation, and (3) some TOPS students took Jump Start courses, we provide numbers of students who took Jump Start courses as opposed to numbers of students who had committed to the pathway through 2017. All of the remaining students pursued only TOPS courses. In 2018, about 33,000 students graduated with a TOPS diploma and about
9,700 students (23 percent) graduated with a Jump Start diploma.

In 2017–2018, about 25,000 students in grades 9–12 were taking Jump Start courses. Figure 1 shows that increasing numbers of students in grades 9–11 took Jump Start courses after 2014. Twelfth-grade students looked a little different: Their enrollment in Jump Start courses jumped from 2014 to 2015 and then stayed relatively stable through 2017. Figure 1 also shows that additional students began taking Jump Start courses in each grade level, shown by the larger number of students in higher grades for any given year, with many students beginning Jump Start courses as late as their junior or senior years.

LDOE’s requirement is that students select either the Jump Start or TOPS pathway by grade 11. Yet Figure 1 shows enrollment in Jump Start courses in grade 12. We offer two possible hypotheses for why this might be. First, Figure 1 shows enrollment in Jump Start courses, not necessarily pathway selection. Some TOPS students may have chosen Jump Start courses as electives in their senior year. Second, some students may have switched from TOPS to Jump Start in grade 12, despite the policy to select a pathway in grade 11.

Multiple factors influenced students’ choices in selecting either a TOPS or a Jump Start pathway and, if Jump Start, which pathway among those available. The TOPS pathway was viewed by most educators we interviewed as the default option. Counselors and administrators reported that most students came into high school saying they were college-bound and that many parents wanted their children to stay in the TOPS pathway because they viewed it as the best option.

Some students chose a Jump Start pathway early on, in the 9th or 10th grades, according to students and counselors, based on their interests and career expectations. In our focus groups with students in Jump Start pathways in two of our case study school systems, participants often described their Jump Start choice in terms of aspirations: valuing the career options that came with certain credentials, a strong interest in certain occupations, and following the footsteps of someone they admired (such as a parent, relative, or neighbor). A Jump Start student in a focus group said:

There are so many activities where you don’t have to go to college. You can go straight to work, and it should be something you love and

---

**FIGURE 1**

High School Students Enrolled in Jump Start Courses over Time

![Graph showing enrollment in Jump Start courses over time from 2010–2011 to 2016–2017.](image)

**SOURCE:** Authors’ calculations from LDOE data.

**NOTE:** The counts shown here are approximate and may include students who were once pursuing the “basic” diploma, as well as students with interests in the new pathways.
something you really enjoy. So there’s just all
types of programs that help you decide who
you are and what you want to do or you can see
yourself doing.

Academic record was another factor in the
choice between the TOPS and Jump Start pathways.
Counselors in two out of the three school systems
described guiding some students with weaker
academic records into Jump Start. Some students
selected out of TOPS when facing particular courses
as hurdles; anecdotally, Algebra II, Chemistry, and
language classes were named as turning points for
some students switching out of TOPS into Jump
Start.

Administrators and counselors in two school
systems described stigma and parental lack of under-
standing of Jump Start options as reasons why more
students did not elect a Jump Start pathway earlier,
choosing to remain in the TOPS pathway. To address
this, school staff described working to explain the
opportunities associated with Jump Start, includ-
ing credentials, potential wages, and the ability for
students to attend a two-year college and transfer to a
four-year college. A counselor noted:

As far as serving the entire population, I think
we have some really bright kids going both
ways. We just don’t have enough, in my opin-
ion, doing Jump Start. We do fight the battle
of, again, this is not college preparatory and
therefore I want my kids in college.

Gender and income status were
the two demographic factors most
associated with pathway choices.

We used data provided by LDOE to examine demo-
graphic patterns among students who selected the
TOPS and Jump Start pathways; results are shown
in Figures 2 and 3. There were large differences by
gender for graduation pathway (TOPS or Jump Start)
and enrollment in Jump Start courses. There were no
substantial racial differences in pathway choices. We
also observed higher participation rates in Jump Start
pathways among lower-income students (using free-
and-reduced lunch [FRL] program eligibility status as
a proxy) and rural students.

More girls than boys pursued TOPS, and more
boys than girls pursued Jump Start. Our interviewees
hypothesized that many of the available Jump Start

FIGURE 2
Percentage of Students Graduating via the TOPS Pathway in 2018

<table>
<thead>
<tr>
<th></th>
<th>Percentage of students</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td>80%</td>
</tr>
<tr>
<td>Male</td>
<td>70%</td>
</tr>
<tr>
<td>Female</td>
<td>90%</td>
</tr>
<tr>
<td>Black or</td>
<td>80%</td>
</tr>
<tr>
<td>Hispanic</td>
<td>70%</td>
</tr>
<tr>
<td>Not black or</td>
<td>90%</td>
</tr>
<tr>
<td>Hispanic</td>
<td>80%</td>
</tr>
</tbody>
</table>

SOURCE: Authors’ calculations using LDOE data.
NOTE: Because of data masking, any school’s count of students graduating in TOPS below 10 is censored to <10. The bars in the figure represent
the use of the midpoint in these cases prior to aggregation across schools, while the error lines in the figure show the range of estimates when
using the minimum (0) versus the maximum (9) for each school/case. Having only counts, we did not adjust for other characteristics and did not test
statistical significance of differences.
Jump Start instead of TOPS. One principal described this concern:

I think one of the problems I’ve seen in talking to members of our black community . . . [is that] they are always afraid that we’ll steer a black kid . . . into a Jump Start program when he could be college tracked, university tracked. So we have to be very careful about that.

Despite these concerns, we found no statistical difference in Jump Start pathway participation rates between minority (black or Hispanic) and non-minority (nonblack and non-Hispanic) students of the same socioeconomic status, gender, and school characteristics. (See the technical appendix for further details on how these analyses were conducted.)

Lower-income (FRL-eligible) students took Jump Start courses at a rate higher than non-FRL students, as shown in Figure 3. Students who lived in rural areas were more likely to enroll in Jump Start courses than students in urban and suburban areas. These results are consistent with enrollment in CTE pathways and courses nationally (Levesque et al., 2008; Bierlein Palmer and Gaunt, 2007).

pathways (for example, the construction crafts) might have appealed more to boys than girls and that girls and boys were encouraged to pursue different things. One school principal said, “I don’t think that it’s equitable in what is offered for the girls here [in Jump Start]. . . . I absolutely think there are more boys just because of the pathways that are offered.” These comments are consistent with national data: The majority of students enrolled in CTE courses nationally are male, perhaps because of the occupations offered (Levesque et al., 2008). At the same time, pathway offerings depended partly on local employer needs; this would mean that offerings for pathways were uneven across the state, also contributing to differences in choice by gender. For instance, several interviewees thought that areas with manufacturing plants and construction opportunities tended to offer pathways that appealed more to boys, while areas with health care industries tended to offer more pathways that appealed more to girls, such as nursing.

Administrators in one school system noted that some local minority communities were concerned about the risk of minority students being tracked into Jump Start instead of TOPS. One principal described this concern:

I think one of the problems I’ve seen in talking to members of our black community . . . [is that] they are always afraid that we’ll steer a black kid . . . into a Jump Start program when he could be college tracked, university tracked. So we have to be very careful about that.

Despite these concerns, we found no statistical difference in Jump Start pathway participation rates between minority (black or Hispanic) and non-minority (nonblack and non-Hispanic) students of the same socioeconomic status, gender, and school characteristics. (See the technical appendix for further details on how these analyses were conducted.)

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Pathway implementation created expanded responsibilities for professional school counselors.

The mandate to choose TOPS or Jump Start pathways placed more demands on professional school counselors at several stages. Schools started to explain pathway options to students in 8th grade; pathway decisions and course selections were made in 9th through 11th grades; and counselors were tasked with ensuring that students met pathway graduation requirements in 12th grade. Recognizing the additional demands on professional school counselors, LDOE also offered some additional training for them.

The school systems that we visited took different approaches to helping students navigate their pathway options and expanded their counseling resources in some cases. One school system created new positions of part-time career counselors with a variety of career backgrounds who worked alongside the school’s full-time professional school counselors; career counselors spent time individually with each student to develop plans for their pathways, involving parents in discussions. These career counselors were hired with external financing obtained by the school system. In another school system, short-staffed counselors held an assembly about pathways, spending four minutes individually with each student; however, the counselors in this school system with whom we spoke agreed that this was insufficient. One school system had counselors in charge of a specific set of Jump Start pathways at all grade levels, while another organized counselors by grade level. Other approaches to informing students and parents about the pathways included career discussions in classes, visits by employers, aptitude assessments, newsletters, and parents’ nights.

As expected, given the different ways school systems approached counseling, students had varying views on the advising they received about their pathways. Some students felt that their counselors gave them useful information, helped them make decisions, and supported their decisions in a non-judgmental way. Other students expressed anger—particularly students in a school system that had not significantly expanded counseling resources—and said they wished they had more-active advising on steps to attend college and pathway choices.

Principals and counselors in all three case study school systems identified three main challenges in helping students with these decisions:

- **Confusing pathway choices.** Required courses and credentials varied for different pathways, which was confusing to students, counselors, and administrators. One counselor termed them “cumbersome,” and some professional school counselors and schools created their own explanatory materials to help students and parents navigate their choices. Said one school administrator, “Students are very confused. To tell you the truth, I think the counselors and teachers are somewhat confused too in terms of the Jump Start thing.”

- **Administrative and time burden.** Counselors described overwhelming paperwork and complications in tracking progress of each individual student on a diverse set of complex pathways and credentials. One counselor described what she viewed as the biggest challenges with the credentials: “Paperwork. Just keeping up.”

- **Last-minute graduation scrambles.** It was complex for school counselors to keep track of whether each student was on track to complete pathway requirements, which elements were missing, and whether students met requirements to earn credentials in time for graduation, particularly those who began Jump Start
in 11th or 12th grade. “Not all of our students were on track to graduate with this new Jump Start requirement, and so it’s been a cleanup, a backtrack effort to get that done in time for them to walk,” said one principal.

In two school systems that did not hire additional career counselors, other challenges were identified by counselors:

- **Not enough time:** Many counselors now found themselves with new responsibilities added to their existing responsibilities, and not enough time for each student. As one counselor said: “not sufficient, not enough time.”
- **Decisions by younger students:** Counselors told us that some younger students—and their parents—had trouble making pathway decisions. One counselor noted, “It’s difficult for a 13- or 14-year-old to say ‘This is what I want to do.’”

There was some, but not complete, flexibility for students to switch between pathways in the case study sites.

Educators talked about the need for flexibility across pathways, given the multiple changes and directions that people follow over the course of a working life. As one principal said:

> We’re trying to change the mind-set that you’re either college or career. . . . We saw so much this past year about this generation making [many] career changes. . . . We have to have the

mind-set that we’re preparing kids for postsecondary life, postsecondary education, whatever that looks like.

Yet students had some—but not complete—flexibility to move from one pathway to another after making their initial pathway choice. Two circumstances could make it challenging for students to catch up: when a student on the TOPS pathway switched to a Jump Start pathway in 11th or 12th grade, and when a student on a Jump Start pathway wanted to switch to TOPS to be prepared to enter a four-year college.

According to counselors, the ideal time to commit to a pathway was on entering 10th grade, because most courses were common in 9th grade and deciding in 10th grade allowed a student three years to fulfill the required sequence of TOPS or Jump Start courses. When a TOPS student switched to Jump Start in 11th or 12th grade, it was a challenge to ensure that the student had completed enough courses to meet the requirements for the pathway and passed credential exams by graduation. Some schools aimed to keep options open between the two types of pathways by requiring all students to take some TOPS and Jump Start courses through 9th or 10th grade.

Similarly, a Jump Start student wanting to attend a four-year college could face hurdles. While Jump Start sequences enabled students to meet requirements for two-year colleges upon graduation, students would often not meet the requirement for entrance into a four-year college. They would need to attend a two-year college first, then transfer to a four-year college.
Louisiana implemented two new requirements intended to increase enrollment at two- and four-year colleges and technical schools. First, as of 2013, all students were required to take the ACT college entrance exam, with the state covering the costs; as of 2015, students could also take the ACT WorkKeys exam as an alternative. State education leaders in our interviews hypothesized that if students who did not expect to attend college achieved an ACT score that enabled college acceptance, they might be more likely to enroll. The requirement to take a college entrance exam such as the ACT exam or SAT has been implemented in 25 other states and the District of Columbia (Gewertz, 2017; Adams, 2017). A study of 11 states found that states requiring the ACT exam or SAT for all students increased college enrollments, particularly for students who might not have taken a college entrance exam and who attended the poorest high schools (Hyman, 2017). In 2017, Louisiana reported that all graduating students in Louisiana took the ACT, compared with 60 percent across the United States (ACT, 2017).

Second, as of 2017–2018, all high school seniors were required to fill out federal financial aid forms (FAFSA) as a graduation requirement, or have a parent sign an opt-out. State education leaders reasoned that if students filled out the FAFSA, they could learn about and make use of financial resources available to them to pursue postsecondary education. This policy was partly motivated by LDOE’s belief that Louisiana’s students could have claimed an additional $54 million of available federal financial aid if they had completed the FAFSA at the national average rate (LDOE, 2017b, 2017c).

Male, minority, low-income, and rural students had lower ACT scores than their female, white, higher-income, and nonrural counterparts.

In 2013–2014, the first year that all students were required to take the ACT exam, Louisiana’s average ACT score dropped (see Figure 4). This result was expected because the previous average incorporated a self-selecting group of students with ambitions for college, whereas the new average included all students. In subsequent years, Louisiana’s average scores rose. School principals and teachers with whom we spoke described how schools integrated ACT preparation more carefully into classroom planning in order to improve scores. Some schools in our case study sample provided students access to ACT training preparation courses, using state supplemental
By way of comparison, the state-funded TOPS scholarship amounts are tied to ACT scores: an ACT score of 17 for the TOPS Tech award (typically for two-year colleges and technical programs), 20 for the TOPS Opportunity award, 23 for the TOPS Performance award, and 27 for the TOPS Honors award (Louisiana Office of Student Financial Assistance, undated-a). The average ACT scores by demographic subgroup indicate that fewer minorities than nonminorities will qualify for these opportunities, and being a low-income minority student confers even greater disadvantage in accessing scholarship funding. All differences reported between subgroups are statistically significant.

ACT scores revealed differences in student achievement by demographic subgroup.
Schools implemented the FAFSA requirement, but faced challenges.

In 2017–2018, 77.1 percent of graduating students in Louisiana completed the FAFSA—the highest percentage of any state (Boutte, 2018). Educators and administrators described significant efforts to meet the FAFSA requirement. To obtain the information necessary to help parents and students fill out the FAFSA forms, those with whom we spoke in our case study school systems implemented several strategies: They sent letters home, hosted parent nights, made calls to individual parents, offered automatic uploads of the data from parents’ tax returns with special software, had talks with students about the importance of doing this, and used class time for the FAFSA. Several described the state deadline as a helpful “push factor” that encouraged parents and students to complete the FAFSA. LDOE officials also indicated doing considerable work to support implementation of the FAFSA requirements, including coordinating with schools, outreach sessions, and provision of information.

School counselors and administrators believed that they had learned from the first year’s experience to simplify FAFSA administration the next year. One school counselor described the overall FAFSA process as “working exceptionally well.” However, counselors in all three school systems and administrators in two school systems described how the FAFSA requirement prompted a great effort, especially on the part of professional school counselors. Some described the additional administrative responsibilities as “a giant pain” and “cumbersome.” The FAFSA requirement, according to counselors, took time away from counselors’ other responsibilities, such as advising on college majors, helping with letters of recommendation, overall financial advising, psychological health of the students, family issues, and graduation parties. In addition, some parents did not want to fill out the FAFSA forms. According to
Some stakeholders thought the ACT and FAFSA requirements increased college awareness, while others thought they put pressure on students.

Principals and counselors had differing views on whether taking the ACT exam and filling out financial aid forms affected students’ postsecondary enrollment plans and expectations.

Administrators in two school systems recalled instances of seeing students or parents change their mind about college upon receiving surprising ACT results. One principal said, “We’ve had students that probably would not have taken the ACT test, would not have even considered college, would not have thought they were eligible for TOPS had we not made them take the ACT test at school.” Higher education partners in one school system and students in another school system said that the FAFSA requirement helps students see that more financial aid is available than they had thought. One school counselor described seeing students surprised that they could use financial aid for technical training programs, such as culinary school: “You could see their little minds being blown.”

On the other hand, several principals and counselors thought that students already knew their paths after high school—those who planned on attending college would anyway, and those who did not attend college would not be swayed by these requirements.

In addition, some teachers in our focus groups felt that the ACT requirement could be discouraging for students who felt underprepared academically and would not go to college; the test “makes them feel stupid” and “worthless.” Examples included some special education students and some students in Jump Start pathways (although the state Jump Start required courses include the content covered in the ACT).

The importance of WorkKeys was unclear in our case studies.

In 2015, Louisiana’s state Board of Elementary and Secondary Education permitted students to take the ACT-affiliated WorkKeys exam in addition to the ACT. The WorkKeys exam focuses on applied mathematics, workplace documents (formerly called reading for information), and graphic literacy (formerly called locating information) (ACT, undated-b). The test aims to measure career readiness and skills required in many jobs. WorkKeys participation among Louisiana students increased from less than 2 percent in 2014 to nearly 10 percent in 2017. As more students took the exam, average scores dropped from about 4.4 to about 3.8, shown in Figure 6.

In Louisiana, 18 of 64 parishes\(^2\) and 434 employers participated in the ACT Work Ready Communities, an effort that aimed to use the WorkKeys exams as a tool for employers to measure the hard and soft skills of job candidates and enable business and industry to “know exactly what foundational skills they need for a productive workforce—and to easily communicate their needs” (ACT, undated-a). In our case study school systems, employers and students did not appear to rely heavily on WorkKeys. Several of the workforce board members either were not familiar with the exam or noted that it was not used by local employers. In response to a question about how WorkKeys was used, one workforce board member said:

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\(^2\) A parish in Louisiana is a territorial division corresponding to a county in other states. One school district typically serves students in each parish, although charter school systems serve most students in New Orleans Parish and some proportion of students in some other parishes.
Another workforce board member described their community as beginning to meet Work Ready Community requirements, while also noting, “WorkKeys was an initiative [that] never got off the ground with employers.”

It all depends on the buy-in of the employers. . . . You get mixed reviews because in some cases people take the test and . . . nothing much really occurs. Then I have witnessed cases where the certification has been recognized and people that maintain acceptable scores on the WorkKeys test, they are pushed to the front of the line for an interview process and considered for hiring.

**FIGURE 6**
WorkKeys Participation Rate and Composite Score

<table>
<thead>
<tr>
<th>School year</th>
<th>Participation rate</th>
<th>Composite score</th>
</tr>
</thead>
<tbody>
<tr>
<td>2013–2014</td>
<td>0.10</td>
<td>4.5</td>
</tr>
<tr>
<td>2014–2015</td>
<td>0.08</td>
<td>4.4</td>
</tr>
<tr>
<td>2015–2016</td>
<td>0.06</td>
<td>4.3</td>
</tr>
<tr>
<td>2016–2017</td>
<td>0.04</td>
<td>4.2</td>
</tr>
</tbody>
</table>

**SOURCE:** Authors’ calculations from LDOE data.
**NOTE:** Participation rates and average composite scores are unadjusted for student characteristics.
State Action 3. Provide public data to hold Louisiana schools accountable on performance related to college and career readiness, valuing both tracks equally.

Approach and Key Findings

How did we explore early signals for how this state action is working?

- We reviewed state documentation about accountability measures.
- We asked stakeholders about how public data affected decisionmaking at the school and school system levels.

Key findings:

- While some administrators and educators found the accountability standards to be an effective incentive for school performance, some educators felt that higher accountability expectations were implemented too quickly.
- After ACT scores dropped in 2013, when all students were required to take the exam, schools appeared to have responded to accountability incentives by making efforts to better prepare students for the exams, and ACT scores rose.
- State efforts to incentivize CTE quality by treating high-quality CTE credentials as on par with college preparation courses (such as AP) in school rating systems were viewed as underway but nascent.

Louisiana uses public data to incentivize quality in graduation pathways. Each year, LDOE publishes school report cards with various performance indicators. The Louisiana “High School Accountability Formula” rates schools on an A–F scale, giving equal weight to four indicators: State Assessment Performance and Progress, ACT/WorkKeys, Graduation Rate, and Strength of Diploma (LDOE, 2018i). The State Assessments are discussed in the K–12 report of this series (Kaufman, Steiner, and Baird, 2019). The three other indicators relate directly to the graduation pathways initiatives described in this report. In addition, each school’s FAFSA completion rate appears on its school report card.

While schools appeared to respond to accountability incentives, some felt that standards were raised too quickly or were unfair.

Principals and teachers viewed their schools as responsive to the accountability indicators, making additional efforts at improvement in areas highlighted in the High School Accountability Formula. One school administrator explained,

It sounds like we’re playing the points game, but I think that [the] bottom line is the state has said, “This is what we want, and this is what you guys will earn if you are about to do it.” So we’re not just going after the points, but the points definitely make us work as hard or harder, I guess, to give these kids what they need.

LDOE has raised expectations and criteria to be an “A” school through 2025, including gradually requiring higher state assessment scores, ACT scores, and graduation rates (LDOE, 2018i). For example, from 2017 to 2018, the ACT score requirement for an A rating rose from 18 to 21.

Four administrators in one school system said that changes to state rating systems influenced their decisionmaking, and two felt that these changes were made too quickly, worrying that changes in
requirements would lower their school’s rating. One principal said,

We’re all about [the changes in rigor]. We just have been getting hit with so many changes at one time, and so we’ve got changes to accountability, changes to diploma, so we have assessment format changes, as well as instructional shifts. It’s a lot that’s happening all at once.

Another principal had the impression that the changes in requirements were happening suddenly as opposed to gradually (LDOE has implemented a gradual change in score requirements); this principal noted that when the state told them about the changes in average ACT score expectations for an A rating:

We’re like, whoa, whoa, whoa, can we tier that a little bit? Can we stagger it so it doesn’t appear like we’ve had this huge drop, that we’ve just tanked.

Some teachers expressed frustration that low ACT scores could reflect poorly on their school and school system ratings, and therefore on the quality of education provided in their school. They thought it was unfair that schools with larger numbers of special education students could have lower scores than other schools (although students with significant cognitive disabilities are not required to take the test), even if the quality of education provided was equivalent. They also thought that students who knew they were not college-bound sometimes did not apply themselves to the ACT exam and received lower scores, inaccurately reflecting on the quality of education provided at the school.

At the same time, as per Figure 4, after Louisiana’s ACT scores dropped after requiring all students to take it, scores rose somewhat, potentially due to steps that Louisiana’s schools took to better prepare their students.

The strength of diploma indicator and messaging efforts were meant to increase the perception of value of Jump Start credentials.

One educator we interviewed explained that, prior to Jump Start, they viewed previous non-college-bound diplomas in Louisiana as low-quality and as not providing robust opportunities for graduates. This is not dissimilar to perceptions of CTE in other states, where stigma associated with CTE has been found to limit the efficacy of CTE programs (Gordon, 2014; Shulock and Offenstein, 2012). An LDOE goal for Jump Start was to raise the perception of CTE. Increasing the rigor of Louisiana’s CTE offerings through Jump Start and the associated required industry-based credentials provided an opportunity to rebrand and send a message that the Jump Start was a high-quality diploma option.

Louisiana created a new indicator, called the Strength of Diploma indicator, that aimed to incentivize and reward schools for providing high-quality CTE, in addition to focusing on college readiness. To signify quality college and career preparation as equally valuable in the High School Accountability Formula, schools were awarded the same number of accountability “points” for a high school graduate who received either a highly rated Jump Start credential or college-level work (at least one passing grade in an AP, college credit, dual-enrollment, or International Baccalaureate course) (LDOE 2018d). Louisiana categorized Jump Start credentials by points based on their level of rigor and the degree to which Louisiana projects that the credentials may help students qualify for high-demand, high-wage jobs in the state (LDOE, 2018a).

Results of efforts to improve the perception of CTE, including through messaging and accountability measures such as the Strength of Diploma indicator, were viewed by counselors, employers, and teachers in one school system and administrators in another as underway but nascent. One principal summed it up, explaining that counselors had done a fine job . . . of helping the students to feel that [Jump Start] is not less of a diploma. This does not mean that you are any less smart. It just means that you chose to not take the courses required to go to a four-year. . . . I think we need to do a better job in that . . . I think it is still viewed by a lot of people as ‘I’m on this because I can’t hack it on TOPS.’ . . . In my opinion the state has a responsibility to make sure that that information is put in a great way, and that all the parents in the state are informed. We try really hard as a district to do that.
State Action 4. Create and offer course pathways that lead to high-quality industry credentials and preparation for college, including through partnering with employers and higher education institutions.

Approach and Key Findings

**How did we explore early signals for how this state action is working?**

- We examined data about availability of key courses for college and career preparation.
- We examined dual-enrollment data.
- We asked interview and focus group participants about the implementation of the requirements, including the provision of dual-enrollment courses.
- We asked school systems and employers, workforce boards, and higher education about their partnerships with each other.

**Key findings:**

- Workforce boards and employers in some school systems reported playing active roles in Jump Start, including in selecting priority pathways and credentials. Some school officials believed that Jump Start was more effective when local industry actively engaged.
- Through Louisiana’s Supplemental Course Academy program, which provided funding for students to take courses through external providers for both university and career preparation, students took about 53,000 courses in 2017–2018.
- Benefits of such courses included filling gaps in high school offerings, providing enriched education, preparing students for the ACT exam, helping students gain confidence in college-level work, and reducing time and money required in postsecondary education and training. Challenges included financing, transportation, and ability of some students to complete higher-level work.
- Some schools were limited in the numbers of AP courses, college-preparation math courses, and Jump Start pathways they offered.

Jump Start pathways were cultivated through partnerships with workforce boards and employers in some cases.

Louisiana’s Jump Start pathways were intended to prepare students for entry-level jobs in high-wage, high-demand fields; postsecondary training; and industry-based credential exams. To meet these goals, LDOE coordinated with employers and higher education institutions on pathway selection and supported schools in enabling students to take credential exams.

Pathway and credential options were developed to provide students with skills to fill high-wage, high-demand jobs within the state, based on state workforce data and an iterative decision process among LDOE, the Louisiana Workforce Commission’s Workforce Investment Council, regional workforce boards, regional economic development Offices, employers, and higher education institutions. The Louisiana Workforce Commission had a star-rating system of high-demand, well-paying jobs with anticipated industry growth (Louisiana Workforce Commission, undated), and pathways were linked to this rating system. Similarly, a few other states, such as Colorado and Tennessee, also implemented CTE pathways and engaged with employers on developing them (National Association of State Directors of Career Technical Education Consortium, 2014; Colorado Succeeds, 2017). One workforce board member explained the process as follows:

We’re surrounded by tons of manufacturing and processing and storage plants, some chemical facilities. . . . From that we basically can
worked better when they were directly connected with industry. One school administrator thought that Jump Start had “improved the connection between school districts, colleges, and businesses” but noted that there was still much room for improvement. Our third case study school system, which was rural, had minimal partnership with employers, with one high school principal reporting a complete absence of employer partnerships at their school. They described struggling to collaborate with local employers, particularly in rural areas with low employment demand.

Enrollment increased in dual-enrollment and external courses.

In support of Louisiana’s goal to enable students to have access to courses they needed to complete new pathways and fill in gaps in courses that schools did not offer, the state provided each school system with a discretionary budget to spend on supplemental courses provided by entities outside the school system, through funding from the Supplemental Course Academy, which was started in 2013 (it was initially called Course Choice). Supplemental Course Academy funding could be used to fund dual-enrollment courses for college credit or courses from private providers, such as for ACT preparation and specialized courses related to Jump Start credentials. This funding could also be used by schools to hire external providers for core courses required for graduation. In the 2016–2017 school year, the program had a budget of $7.5 million. The budget for 2017–2018 was $10 million, with allocations made on a per-pupil basis to school systems (LDOE, 2017c). In addition, beginning in the 2014–2015 school year, the state provided schools with $238 for each credit earned by a student in courses that were part of high-demand pathways.

In Louisiana, dual enrollment was offered to students in several ways: Students could take a course on a nearby college campus; universities provided dual enrollment courses in high schools; and an “early college option” was also piloted, in which high school students spent several years on a participating community college campus, taking classes with community college students and obtaining both a
high school degree and an associate’s degree. These programs were paid for by the state but supplemented by the school systems and sometimes parents (our interviewees mentioned that parents could pay several hundred dollars). Dual-enrollment students have to meet criteria to participate, such as having an ACT score and grade point average above set thresholds. External Jump Start courses were offered to students in facilities off-site or online; in one of our case studies, Jump Start students had to pass through an interview process to be selected.

In the 2017–2018 school year, there were 26,015 dual enrollments in 16 Louisiana four-year institutions (including Louisiana State University, Louisiana Technical University, Southeastern Louisiana University, and the University of Louisiana) and 17,090 dual enrollments in 13 community colleges (such as Central Louisiana Technical Community College, South Louisiana Community College, and River Parishes Community College). Dual enrollment in college-level courses has increased quickly since 2011, with nearly a fifth of 12th-graders participating in 2017 (see Figure 7). Enrollment was low in grades 9 and 10, much higher in grade 11, and higher still in grade 12. We also note that this indicates that students pursuing TOPS were not generally acquiring dual-enrollment credits until 12th grade.

Most dual-enrollment students graduated high school with roughly three college credit hours, or the equivalent of one typical college class. Our analysis of LDOE data shows that participation among rural students was higher than nonrural students and that FRL and non-FRL students were taking dual-enrollment courses at similar rates. The largest demographic difference was that black and Hispanic students took these courses at lower rates than white students.

There were also 9,858 Supplemental Course Academy enrollments with private providers in 2017–2018. These included ACT preparation (such as the Princeton Review), courses for particular trades (such as ABC Pelican, which taught construction crafts), and others, according to LDOE data.

However, while we have data on the increasing participation of Louisiana students in dual enrollment, we do not have data linking this participation with outcomes. Yet, based on existing literature, Louisiana’s increase in dual enrollment may be promising. The What Works Clearinghouse evaluated the five studies of dual enrollment that met its criteria and found evidence that dual-enrollment programs...
had positive effects on high school completion and academic achievement, college enrollment, and college degree attainment (What Works Clearinghouse, 2017). Other studies found that dual-enrollment participation was associated with higher college enrollment (Karp et al., 2007), higher GPA and first-year persistence (Jones, 2014), and college matriculation and completion (Miller et al., 2018; Berger et al., 2014).

Dual enrollment had benefits for students, and also posed challenges.

Administrators, higher education partners, and students identified what they viewed as the main advantages of participation in dual-enrollment and external courses through Supplemental Course Academy:

- **Filling gaps in high school offerings and providing enriched education.** Supplemental Course Academy enabled students to complete the courses required to attend a four-year university or complete a Jump Start pathway that were not offered by their high schools, as described by several principals and teachers. It also provided opportunities for students to pursue their interests in courses not offered at their school. Examples of dual-enrollment courses that students took included calculus, psychology, history, English, environmental science, and foreign languages. Examples of external courses for Jump Start in our case studies included welding, millwright, the construction trades, and health care. One university official explained,

  Several of the [school systems] we are working with do not offer a high school chemistry course. They do not have French. . . . There are school districts that have Algebra I, Algebra II, [but] they might not have calculus available. . . . I think it comes down to cost and availability of courses that are not at a high school. Students legitimately want to be challenged. They will sign up for calculus because they think college algebra is boring. They want a challenge.

- **Helping students gain confidence for college work.** Dual enrollment helped students feel more prepared for college because they had the chance to experience the structure and rigor of college courses, according to students and teachers. As one student taking dual enrollment provided on a high school campus said,

  It just gives us that readiness for what college classes are going to be like, like what the assignments are going to look like. . . . But I feel like it’s been an easier process since we’re still in high school. We’re still like around our familiar surroundings.

  Several university officials saw dual enrollment as preparing their pipeline so that students could perform better in college. One school administrator explained:

    I think it really gives our kids an edge on getting prepared and getting some credits under their belt before they move on, feeling a little bit of success. . . . The rigor of those courses are much more aligned with what’s going on in college.

- **Reducing time and money needed for the college degree after high school.** This was frequently cited as a benefit by students and principals in our interviews, in particular related to the early college option, although most dual-enrollment students received credit for only the equivalent of one college course. One principal said, “It’s still a deal compared to what they’ll pay in college.”

  There were also several challenges with increasing access to dual-enrollment and external Jump Start courses, according to our interviews and focus groups. However, none of these challenges appeared to be a substantial impediment for the implementation of these courses. First, schools had to navigate financing these courses in the face of rising costs, even with the state’s Supplemental Course Academy funding allocations. Some students had to pay extra fees of several hundred dollars per year, which could be financially difficult. Second, some students who took courses at separate locations had transportation
Algebra II, required for four-year college admission in many Louisiana institutions, was not offered in all high schools in Louisiana, although it was offered in the schools that we visited. Both AP and Algebra II offerings have increased substantially since 2011. The percentage of schools without Algebra II dropped from 5 percent in 2011 to 2 percent in 2017 (see Figure 8). Similarly, the percentage of schools that did not offer AP courses dropped from 70 percent in 2011 to less than half in 2017.

Just as schools had some difficulties providing AP and other advanced courses for the TOPS diploma, it was difficult for some schools to offer a large number of Jump Start pathways, which limited options for students. Administrators described not being able to provide more pathways because of limited access to CTE teachers, and also of cutting back on the number of pathways provided because of the complexity of managing multiple pathway requirements. One counselor explained, “If you get too many pathways going . . . you’ve got to keep up with your kids, what pathway they’re on, have they passed the credentials, have they taken the non-electives, what they are . . . all of that.”

Schools had varying capacity to meet TOPS and Jump Start requirements.

Even with additional resources available, some schools struggled to provide courses needed for TOPS and Jump Start. AP courses, while not required for TOPS, were viewed by the state as an important college-bound offering, and Louisiana recommended that schools offer AP courses. To increase AP access, LDOE offered additional training for teachers and provided funds for students to take the AP exams.

Difficulties. Third, some students were not prepared for the level of work in both the dual-enrollment courses and external Jump Start courses. Failing a dual-enrollment course could have further implications, such as poor grades on students’ college transcripts. Fourth, these options were limited in some school systems. Fifth, the early college option entailed taking courses on a separate campus and could mean missing out on parts of the high school experience. Finally, some schools encountered problems with staffing the dual-enrollment courses because of lack of availability of qualified teachers.

FIGURE 8
Proportion of High Schools Without Algebra II and AP Courses in Louisiana

![Graph showing the proportion of high schools without Algebra II and AP courses from 2010-2017.](image)

SOURCE: Authors’ calculations from LDOE data.
NOTE: Raw unadjusted averages.
To ensure that Louisiana’s CTE teacher workforce had the knowledge, skills, and qualifications to teach the slate of courses offered in the Jump Start pathways, Louisiana required Jump Start teachers to hold relevant industry credentials for the fields that they teach. While some teachers already held the necessary qualifications to meet the certification requirement, Louisiana took additional steps to increase the numbers of teachers with the required certifications to teach Jump Start courses.

Louisiana increased the numbers of teachers with the required certifications.

The state addressed the revised requirements for CTE teacher qualifications in several ways. Beginning in 2014, LDOE, in collaboration with the South Louisiana Community College and the Louisiana Community and Technical College System, provided training and administered credential exams each summer to teachers at the Jump Start Super Summer Institute. These summer trainings provided teachers with professional development specific to earning CTE credentials aligned with the pathway courses they taught. In 2017, the Jump Start Super Summer Institute provided 25 certification training courses across a range of industries (LDOE, 2017a). By 2018, according to LDOE data, 850 teachers who taught Jump Start courses had collectively obtained more than 1,000 credentials during the summers (such as in construction crafts, business management and administration, health sciences, hospitality and tourism, information technology, and transportation, distribution, and logistics). In addition, Louisiana drew on the state’s existing CTTIE certification, which enabled professionals outside the school system who were already industry-certified to teach, with some additional training in teaching methods. By 2017, 391 people had been hired to teach in Louisiana public schools through this program. Schools encouraged teachers to obtain multiple certifications to teach several types of courses. In our three case study school systems, administrators viewed these training processes and hiring options as effective in enabling their teachers to meet the certification criteria.
At the same time, principals and teachers in our case study schools identified challenges:

- **Lack of certified teachers.** Administrators in two school systems described challenges with both finding teachers who were already certified in some areas and with helping existing CTE teachers adapt and earn the credentials needed to continue teaching certain courses. Smaller schools, in particular, did not have enough teachers to offer many pathways. This was the most frequently mentioned challenge.

- **Pedagogy among teachers hired through special programs.** According to several administrators, teachers who provided CTE courses through external Supplemental Course Academy courses and teachers hired through CTTIE sometimes lacked classroom management skills to deal with youth, maintain discipline in the classroom, and structure lessons. Some required additional mentoring at the schools about how to work with high school students. “If you have an instructor that normally just teaches adults, they’re not sure about discipline and what to do, so I think that’s been a learning process as we introduce some of these credentials,” said one counselor.

- **Teacher adaptation.** Several counselors and administrators noted that a small number of teachers, particularly those who had taught for many years, struggled to adapt. One CTE teacher in our focus groups said, “I am leaving the teaching profession next year because of Jump Start,” in particular because of the “paperwork” involved. One counselor said, “We’ve had some turnover honestly. Some teachers have left because of the pressure of Jump Start. . . . We also have some teachers that have had no problems evolving to Jump Start.”
College enrollment rates remained about the same overall, but increased for low-income, high-performing students.

College enrollment speaks to college readiness, a key aim of the graduation pathway policies. Since 2011, overall enrollment rates in two- and four-year colleges in Louisiana have remained about the same, ranging between 64 percent and 66 percent (see Figure 9). Two-year college enrollment rates increased slightly, rising from 17 percent in 2011 to 22 percent in 2014 and dropped to 19 percent in 2015. Four-year college enrollment rates declined from 47 percent in 2012 to 44 percent in 2014, rising again to 46 percent in 2015.

It is too early to speak conclusively about the effects of Louisiana’s state policy actions on college enrollment because college enrollment data were available only through 2015; the universal ACT requirement was implemented just in 2013; and the 2018 class of high school graduates was the first

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**Student Outcomes Associated with State Actions**

**Key Findings**

- An aim of Louisiana’s requirement that all students take the ACT was to motivate students who might not have enrolled in college to enroll. While our data do not support a causal analysis, we found that in parallel with the ACT requirement, the numbers of FRL and minority students who scored in the top quartile of ACT scores and then enrolled in college approximately doubled between 2011 and 2016.
- Students varied in how prepared they felt for college and the workforce.
- High school dropout rates declined, with graduation rates increasing from 76 percent in 2014 to 78 percent in 2017. Our data do not support a causal analysis, but some administrators and students felt Jump Start options had prevented some students from dropping out.
- Louisiana students obtained around 100,000 credentials in the 2016–2017 school year. Only 1 percent of these were the state’s highest-rated credentials. This could possibly be because these credentials relied on sequences of courses that started early in high school, but many students did not have enough years in the program to complete the required sequences of courses. It could also be because students may have struggled with the highest-rated credential exams, which were designed for adults.
- Graduates with certain credentials had job opportunities that were sometimes well above minimum wage, but available job opportunities were regional and depended on the state of the economy.
- Some employers viewed soft skills as more important than particular credentials; their perceptions of graduates’ soft skills varied.

Louisiana’s graduation pathways were intended to improve students’ college readiness, career readiness, and access to financial aid. While many of the changes are new—for example, the 2018 graduating class was the first with Jump Start and FAFSA requirements—our data provide some early signals about how state policies may have influenced the three goals.

**College Readiness Outcomes**

Louisiana’s key steps to improve college readiness included requiring that students aiming for college take courses on the TOPS pathway, which was aligned with Louisiana university entrance and scholarship requirements; requiring all students to take the ACT exam and fill out the FAFSA; publishing state indicator data about aspects of college preparation; engaging with university partners in designing some courses; and expanding dual-enrollment options.
minorities and nonminorities was much smaller, indicating that much of the racial difference was also related to poverty. Nonrural areas had higher unadjusted enrollment rates than rural areas, but, after adjusting for poverty and race, rural areas had higher enrollment rates.

A key aim of the new requirements, such as the universal requirements for students to take the ACT exam and fill out the FAFSA, were to increase college enrollment rates among students who might not have otherwise attended college. Figure 12 tracks two trends: the number of students taking the ACT exam (solid lines) and the number of students enrolling in a four-year college within one year of graduation from high school (dotted lines). The figure clearly illustrates the upward climb in the number of all students—including FRL and minority students—taking the ACT exam (FRL results may include minority students and vice versa). These figures also illustrate the more gradual but still upward trend in the number of students enrolling in four-year universities for all three groups.

Data from 2015 show that students’ college enrollment depended on region and student background. The highest enrollment rates were in the greater New Orleans area and in the northern part of the state, while the central rural areas of the state had lower enrollment (see Figures 10 and 11). Poverty was the characteristic most associated with not enrolling in college, followed by gender (males had lower enrollment rates) and race (minorities had lower enrollment rates). While minorities had much lower rates of college enrollment when the averages were unadjusted, the poverty-adjusted gap between minorities and nonminorities was much smaller, indicating that much of the racial difference was also related to poverty. Nonrural areas had higher unadjusted enrollment rates than rural areas, but, after adjusting for poverty and race, rural areas had higher enrollment rates.

A key aim of the new requirements, such as the universal requirements for students to take the ACT exam and fill out the FAFSA, were to increase college enrollment rates among students who might not have otherwise attended college. Figure 12 tracks two trends: the number of students taking the ACT exam (solid lines) and the number of students enrolling in a four-year college within one year of graduation from high school (dotted lines). The figure clearly illustrates the upward climb in the number of all students—including FRL and minority students—taking the ACT exam (FRL results may include minority students and vice versa). These figures also illustrate the more gradual but still upward trend in the number of students enrolling in four-year universities for all three groups.

Figure 13 repeats Figure 12 but limits the sample to students who scored 23 or higher on the ACT, approximately the 75th percentile (or top quartile) across all students and all years of our sample.
FIGURE 10
Differences in Four-Year College Enrollment Rates Within One Year of High School Graduation, 2015, by Demographics and Parish

Enrollment rate (%)

Male Female Rural Nonrural FRL Non-FRL Black or Hispanic Not black or Hispanic

SOURCE: Authors’ calculations from LDOE data.
NOTE: These enrollment rates have been adjusted using regression models that included the following student covariates: gender, race/ethnicity, FRL eligibility status, economic disadvantaged status, gifted status, special education, and English proficiency. The regression also controls for school-level averages of the student covariates, total number of students in the school, the rurality of the county the school is in, and year fixed effects. Error bars represent 95 percent confidence intervals. Solid bars denote statistical significance between groups at the 5 percent level.

FIGURE 11
Four-Year College Enrollment Rates in Louisiana by Parish for 2016 High School Graduates

SOURCE: Authors’ calculations from LDOE data.
NOTE: These enrollment rates have not been adjusted for student characteristics.
FIGURE 12
Counts of Students Taking ACT and Enrolling in Four-Year Colleges

FIGURE 13
Counts of Students Taking ACT and Enrolling in Four-Year Colleges Among Top-Quartile ACT Scorers, Minority, and FRL Students
Figure 13 illustrates particular growth in the numbers of high-scoring ACT takers enrolling in college, which suggests that the new requirements may be encouraging some students who would otherwise not take the ACT exam to take it, score well, and then go on to college.

Two differences between the all-score students in Figure 12 and the top-quartile scorers in Figure 13 stand out. First, the fraction of all test takers who enroll in four-year college within one year of graduation is much higher for the top quartile. This is not surprising, given that they are scoring higher. Second, the trajectories are steeper for college enrollees. This is more easily seen in Figure 14, in which we present the percentage increase from the graduating class of 2011 to 2016 in each of these metrics.

Figure 14 demonstrates not only substantial growth in all of these measures but also that FRL and minority students scoring in the top quartile of ACT scores and enrolling in four-year college had the most dramatic college enrollment increases. The raw numbers of students in these groups doubled between 2011 and 2016, and growth in the percentage of students in these groups was twice as much as that of their non-FRL and nonminority peers. While our data do not allow us to make causal claims about the relationship between state requirements and increased college enrollment among minority and low-income populations, these results support the hypothesis that requiring all students to take the ACT exam led to an increase in FRL and minority students scoring well, which then resulted in a higher number of college enrollments among these students. There was also an overall increase in two-year college enrollment, but not for top-quartile ACT scorers, which makes sense given that those who score well on the ACT—including minority and FRL students—infrequenty enroll in two-year colleges as opposed to four-year colleges.

Students varied in how prepared they felt for college.

Students in our focus groups reported a range of perceptions about their preparation for higher education. Many students liked the increased rigor in the college-bound preparation, with more emphasis on access to AP classes, dual enrollment, and changes in the curriculum. In two of three case study school
Yet students on the TOPS pathway in one lower-performing school system felt academically underprepared for college. They felt that even if they were doing well in their classes, the classes lacked rigor and they would therefore struggle in college. First-generation college students in particular discussed difficulties with the college application process. Said one first-generation college-bound student:

I don’t care about graduation if you can’t help me get to the next level. What is the point of graduation if I’m sitting in these baby classes and you’re not preparing me?

Another said:

I had no help. I was trying to maneuver the college application process and actually figure it out on my own. It’s basically like they randomly made the head captain of a pirate ship to go through the Atlantic Ocean, and I had no idea where I was going.

**Career Readiness Outcomes**

Key state steps to improve career readiness for Louisiana high school graduates included introducing the Jump Start pathways, which increased the rigor of CTE courses and aligned them with the labor market; requiring all students to fill out the FAFSA (for financial aid that can support two-year colleges and technical training) as a graduation requirement; providing public data about graduation rates; developing the Strength of Diploma indicator, which places high-quality industry based-credentials on par with college preparation courses in school ratings; providing state Supplemental Course Academy funding for Jump Start courses provided by external providers; and collaborating with employers on pathway selection and development.

**High school dropout rates declined.**

One intention of the Jump Start program was to enable students who did not follow a college-bound pathway to pursue an alternative, career-focused pathway, thereby reducing their likelihood of dropping out of high school. Although our data do not support a causal analysis, in our interviews, several stakeholders thought that the new Jump Start options...
might have motivated some students to finish high school, as they provided other types of activities at which students could succeed. One administrator said:

We’ve had success stories where we’ve gotten these kids that have graduated from this program, that looking back when they were in school, there was a possibility that they may not graduate because they didn’t have an opportunity like this to do something that they could succeed at.

And one Jump Start student explained:

Jump Start really helped a lot of students in their path. . . . This class, they had a lot of kids that didn’t have a lot of confidence in their self anymore. . . . But then getting them onto the Jump Start program really built the courage back up, from the teacher there telling them that they’re going to graduate and be somewhere in their life. So that build a lot of confidence off of them.

High school dropout rates decreased from 2011 to 2016 for grades 10, 11, and 12 (see Figure 15). Grades 10–12 all saw decreases in the dropout rate, with the largest decreases in grade 11 (11 percent to 8.5 percent). Grade 9’s dropout rate was stable across this period. Consequently, the graduation rate rose from around 76 percent in 2014 to around 78 percent in 2017.

Louisiana students obtained many credentials, but few of the highest-rated credentials.

The first year that students graduated from the Jump Start pathways was 2018. Louisiana high school students earned about 100,000 credentials in 2017–2018. While some schools had prepared students for credential exams before Jump Start, such credentials were optional and not a graduation requirement. Louisiana ranked the credentials on a point system for the Strength of Diploma Indicator, with 150 points given to a school for a Statewide Advanced credential, 110 points for a Statewide Basic or Historical Approved industry-based credential, and 100 points for a Regional Core or Regional Complementary. Figure 16 shows the categories of credentials that students earned in 2018, for all students and some specific subgroups. We found the vast majority of credentials earned were 100- or
Second, some high school students may have struggled with the exams, which are designed primarily for adults. Third, counselors in one school system and a principal in another said that they encouraged students to take lower-rated credential exams to ensure that they would be able graduate in the event that they failed higher-level credential exams. One counselor explained:

Because at the end of the day, the kid’s got to have a diploma. And that’s very risky when you do those [pathways] that have hard credentialing exams. . . . And if they don’t [pass], they don’t graduate. So that’s why everybody is kind of going into—let’s find the easiest three or four [credential exams].

In addition, as shown in Figure 17, boys and nonminority students were more likely to obtain a 150-point Statewide Advanced credential than girls or minority students, respectively. Note that the data were masked when there were few students, such that the whiskers in the figure represent the range of possible values given the masking. See the note under the figure for more details.

110-point credentials for each group. Only about 1,000 of the approximately 100,000 credentials earned in the year were the top 150-point Statewide Advanced credentials.

LDOE officials we interviewed viewed the 110-point credentials as their target for success; yet only a little over half of students achieved these credentials. These officials indicated their disappointment with the low percentage of students who obtained the 110-point credentials and 150-point credentials. LDOE officials hypothesized that reasons for the low numbers included that many schools were still not offering credentials aligned with regional job forecasting and that many seniors chose to not take full course loads, reducing their ability to obtain the highest credentials. Our interviews with principals and counselors suggested several additional reasons. First, few students in the case study schools took the sequences of courses necessary from grades 9 to 12 that would have enabled them to take the corresponding credential exams. Many students entered a Jump Start pathway in 11th or 12th grade and would not have had time to complete these sequences.
years old and learning the trade, and we’re doing it in high school. We’re a step ahead.” Another student described their opportunities as “a whole lot better” by having the Jump Start credentials than if they had not. Examples of types of jobs that interviewees described graduates as obtaining were health care (Emergency Medical Technician [EMT], nursing assistant, pharmacy technician), construction trades (welding, millwright, pipe-fitting), hospitality, manufacturing, and transportation (truck driving). Some students in the welding and millwright programs reported typical starting salaries of $18 per hour after high school. Teachers reported some students with business-related credentials having starting salaries of $12 per hour. In comparison, the minimum wage was $7.25 per hour.

Second, job opportunities still depended on the economy. A clear theme of interviews in all three case study school systems was that local job opportunities depended on the local and state economies, as well as geographically based demand for certain occupations. Some regions had a lot of manufacturing, construction, or health care needs (for example, with clusters of nursing homes or hospitals); rural areas, in particular, had fewer opportunities. A principal in one rural case study school system described few jobs in the region that could draw on credentials by students; to obtain many types of work, those graduates would need to leave the region.

Third, credentials were regarded as a foundation to build on, not the end of training needed for a career. Three employers we spoke with viewed the credentials as a useful first step, but like in many entry-level positions, graduates, once hired, would need to complete additional job-specific training. Employers said that most were willing to provide training. “We’ll probably start out as helpers and work our way up,” said one welding student. Credentials appealed to some employers even if not directly related to the job; for example, an EMT certification holder with first-responder skills could appeal to a manufacturing plant. Age limitations in some cases affected graduates’ job opportunities, as some employers required job candidates to be 21.

Fourth, some teachers and partners questioned the relevance of some credentials. CTE teachers and a workforce board member in one school system

Students with certain credentials had a variety of job opportunities after high school.

Although 2018 was the first year that students graduated from Jump Start pathways, some students in previous cohorts had obtained credentials, and students in the 2018 graduating cohort and their teachers were able to comment on how the credentials affected job opportunities. Several themes emerged in our discussions with teachers, students, principals, and employers regarding job opportunities for students after high school. Although their views are not necessarily representative, they shed some light on how credentials affected job opportunities.

First, graduates with certain credentials had better job opportunities, some well above minimum wage. In the two case study school systems in which we conducted focus groups with Jump Start students, the students generally spoke highly of how their credentials prepared them for the workforce. One Jump Start student said, “We had people in [the credential exams] that had jobs. They were 30, 40
wondered whether some of the credentials, particularly those in the lower point categories, were meaningful to employers. One teacher said, “A lot of the little ones [credentials] that they’re taking . . . don’t mean a hill of beans to an employer.” Though our sample size of employers and workforce board staff was small and we cannot make broad conclusions, we heard these themes several times. Because significant resources are being spent on credentialing efforts, this warrants further consideration.

**Lastly, some employers viewed soft skills of graduates as a priority, but suggested that students may not possess those skills.** Two employers, two workforce board staff members, and several administrators with whom we spoke emphasized that soft skills were often more important to them than particular credentials among their entry-level hires. Employers said that if new hires had key soft skills—such as being on time, not being insubordinate, following safety rules, not using illicit drugs, engaging in teamwork, and being able to take constructive criticism—the employers would provide any needed technical training. One workforce board representative explained: “During the workforce meetings in our district, the main concern is soft skills. They don’t mention credentials per se, it’s just those soft skills coming in.” One construction employer echoed the same idea—problems with soft skills could lead to job loss, whereas problems with technical skills could be alleviated with additional training for an employee: “[Getting fired]’s either for safety violations, it’s for drugs, it’s for absenteeism, or for insubordination. I can’t tell you the last time we fired somebody because their skill level was too low.” One principal described reaching out to a local employer about their requests for certain credentials, only to have the employer respond, “You know what, I’d like somebody that can show up for work and pass the drug test—that’s all I prefer.”

Some spoke highly of graduates’ soft skills, such as this employer in the construction industry:

> Coming out of school, they don’t know what they want to do, but they are responsible adults and they can be taken under the wing and do a very good job. . . . Good kids, well rounded, eager, able to learn. No issues.

Others described poor soft skills as a serious problem. Administrators, teachers, and employers described problems with absenteeism, home life, ability to work with others, personal financial management, too much time on cell phones, social-emotional learning, low work ethic, and opioid addiction. They felt that these issues reflected broader societal issues.

Schools acknowledged that it was difficult to combat social and societal factors that prevented students from developing soft skills that support educational and career success.

Some teachers related how they integrated some soft skills into the classroom, such as in a business class that taught résumé skills, a culinary course that taught students about how to run a business in addition to food preparation, an agriculture class that taught students how to interact with customers and deal with feedback, and a microenterprise class that taught interview skills.

Employers said that if new hires had key soft skills—such as being on time, not being insubordinate, following safety rules, not using illicit drugs, engaging in teamwork, and being able to take constructive criticism—the employers would provide any needed technical training.
In 2017–2018, Louisiana’s FAFSA completion rate was 84 percent, the highest in the nation.

Financial Aid Outcomes

While FAFSA completion was a graduation requirement for the first time in 2017–2018, the state encouraged FAFSA completion in the years prior. Forty-eight percent of students completed the FAFSA in the 2014–2015 school year, 75 percent in 2015–2016, and 77.1 percent in 2016–2017, in comparison with the national average of 61 percent. In 2017–2018, Louisiana’s completion rate was 84 percent, the highest in the nation. The FAFSA provided students eligibility for state and federal financial assistance, such as the TOPS scholarship, the Federal Pell Grant Program, and Louisiana Education Loan Authority financial assistance.

The class of 2017 was the first graduating class where more than half of graduates qualified for TOPS scholarships (LDOE, 2018h). Yet demographic disparities persisted between the makeup of the Louisiana student body and those students who received TOPS scholarships (only the highest-performing students graduating with a TOPS diploma receive a scholarship). For instance, while the entering freshmen student body in 2017 was 50.4 percent white, 72.4 percent of TOPS scholarship recipients were white (Louisiana Board of Regents, 2018).

Conclusions and Implications for Other States

In this report, we examined on-the-ground responses to state actions intended to support graduation pathways and early signals of changes in outcomes that may be associated with these state actions. We considered evidence from three case study school systems and descriptive trends in statewide data about teacher and student outcomes. Given the limited number of case studies and nearness in time between the state actions and the available data, our conclusions are suggestive. Further analysis of these trends in several years may more conclusively shed light on impacts of Louisiana’s graduation pathways policy changes. In this section, we summarize our key findings and then consider the implications for state policies in Louisiana and across the United States.

Conclusions

Louisiana’s requirements for high school graduation pathways appear to have been implemented for most students and schools across the state by 2018. State-level data indicate that nearly all students are pursuing a university or career pathway and that a great majority completed financial aid forms for college enrollment and took the ACT examination. Growing proportions of schools offered courses intended to help students meet college pathway requirements, including Algebra II, AP courses, and dual-enrollment courses. Student dual enrollment and enrollment in externally provided CTE courses have increased. Colleges, universities, and private providers played significant roles in offering dual-enrollment courses to high school students. Anecdotal evidence suggests that workforce boards and employers played an active role in developing Jump Start, including guidance for selecting Jump Start career pathways and credentials. Lastly, Louisiana trained hundreds of teachers to teach Jump Start courses.

Some of these requirements may be paying off. Our data suggest that some student outcomes have been improving over time in concert with the implementation of various policies, although available data do not allow us to definitively attribute
Louisiana’s requirement for all students to take the ACT exam was associated with minority and FRL students’ increased enrollment in four-year colleges.

improvements to these policies. Some examples of improvements include steady rises in ACT scores (after an initial drop when the state put universal ACT requirements in place) and in graduation rates, and higher college enrollment numbers among high-performing minority and low-income students. High school students are graduating with industry-based credentials that qualitative data indicate may provide them with better job opportunities than they would have had otherwise, although not many students obtained the state’s highest-rated credentials. Requiring filling out the FAFSA as a graduation requirement appears to have resulted in Louisiana having the highest FAFSA fill-out rate in the nation in 2018, which may potentially link Louisiana’s students with additional financial aid for postsecondary education.

Putting these requirements in place was challenging for the case study school systems, and especially for professional school counselors. Our data suggest that case study schools struggled to find all the resources necessary to adhere to state requirements and offer prescribed courses for university and Jump Start career pathways. The requirements also placed many more demands on professional school counselors, who had to ensure students pursued either a university or career pathway, fulfilled all the requirements of their chosen pathway, and completed financial aid forms.

Educators identified several key challenges for supporting college and career pathways for all students. First, it was difficult for students to shift from a college to career pathway or vice versa and still meet the pathway requirements. Second, many students (and parents) likely viewed a college pathway as more ideal than a career pathway, even if the career pathway could lead to success in school and opportunities after graduation. Third, pathways often had complex and multiple requirements that were difficult for both educators and students to track. Finally, credential tests—designed for adults—were often challenging for students to pass successfully. Students often pursued lower-level credentials in order to meet graduation requirements.

Implications for Other States

These findings have implications for Louisiana as these state-wide reforms mature, as well as implications for other states seeking to enact statewide policy changes using similar levers. In particular:

Requiring all high school students to take the ACT exam has potential to increase college enrollment, particularly for high-performing minority and lower-income students. Louisiana’s requirement for all students to take the ACT exam was associated with a doubling of the number of minority and FRL students scoring 23 or higher, equivalent to Louisiana’s top quartile, and with these groups’ increased enrollment in four-year colleges. At the same time, although the ACT requirement may be associated with more students taking the ACT, scoring higher, and enrolling in college, it may have also made students who received poor test results feel discouraged, sending unintended messages to these students about their capabilities. States requiring all students to take the ACT exam should take care to mitigate the potential negative messages to low scorers.

Requiring students to graduate on a college-bound pathway or a CTE-focused pathway should entail significant early high school information about the pathways and flexibility to switch pathways. Teachers pointed out that late switchers from the college-bound to the CTE pathway did not have sufficient time to acquire the highest-rated credentials. Lack of time, accompanied by the incentive for schools to graduate students with a credential,
likely contributed to our finding of low levels of attainment for the highest-rated credentials. Schools should provide information that facilitates students making the best choices early enough—and certainly by grade 10—so there is time to complete their pathways and achieve the highest credential possible.

When implementing multiple diploma pathways, educators should be intentional with their messaging so that public opinion accurately reflects understanding of opportunities in all available pathways. If public opinion is not favorable toward all pathways, students might hesitate to enroll in the pathway that might be the best fit. Since Jump Start students could earn highly rated credentials if they were in the program longer, it was important for adequate counseling about the program to be provided early on in their education. Depending on the history of CTE in particular areas, the challenge of creating positive messaging around CTE pathways may be great. This is consistent with the history of perceptions of CTE in the United States and reinforces the need for ensuring that CTE options are high-quality and carefully planning communication.

States should consider additional academic supports that students might need in order to successfully pass the highest-rated credentialing tests. Many credential exams were developed for adults, and proved to be difficult, in terms of reading level or other factors, even for students with strong technical skills. States should emphasize both the hands-on aspects of CTE courses skills and solid general academic skills.

When implementing new statewide high school pathways, states should provide additional resources to schools for counseling students on pathway choices and requirements. When states provide students multiple graduation pathway choices in high school that depend on timely, informed decisionmaking, professional school counselors should be given sufficient resources to fulfill these new duties. Schools might consider hiring more counselors to help with these efforts and increasing the resources of the existing counselors. To support this, states might consider an allocation of state funds.

Partnerships among high schools, local institutions of higher education, employers, workforce boards, and regional planning offices have the potential to increase rigor and relevance in high school courses and give students the chance to gain exposure to college courses and the needs of the workplace. When dual enrollment is available, students have an opportunity to try college courses without committing to full-time enrollment, and potentially to gain confidence in college-level work. Similarly, exposure to externally provided industry-based courses can give students experience that can lead to entry-level positions in middle-skill jobs.
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Acknowledgments

We owe a debt of gratitude to many people who have made this series of reports possible. Thanks particularly to John White and Bridget Devlin at the Louisiana Department of Education for all their communications with us and their unflagging support of our work. In addition, we appreciate the time and effort that the following people at the Louisiana Department of Education put into reviewing our reports and talking with us about their work, including Ken Bradford, Erin Carroll, Jenna Conway, Jill Cowell, Hannah Diestch, Leslie Doyle, and Nasha Patel. A big thanks to all of those who participated in interviews from our case study sites and schools across Louisiana, as well as those who coordinated our work. We will not name you in this report because we would like to keep the names of your sites confidential, but we greatly appreciate all your insights and time. Thanks to the lead authors of the other published reports in this series for helping shape the structure and content in this report. Thanks also for the considerable data collection and analysis help from Elizabeth Thornton, Agnes Wang, and Elizabeth Steiner. We would like to thank our reviewers, Fatih Unlu, Cathy Stasz, and Julie Edmunds. James Torr carefully edited the manuscript, and Monette Velasco effectively managed the production of this report series. We take full responsibility for any errors.
About This Report

This report is part of a four-part series on how policy actions intended to support students from birth through graduation from high school in the state of Louisiana are being implemented by educators and the organizations where they work, and how those policy actions are related to successful student outcomes. Each of the four reports addresses a different topic that has been the focus of Louisiana’s education policy reforms: early childhood education, K–12 academics, teacher preparation, and graduation pathways. The report series follows up on *Raising the Bar: Louisiana’s Strategies for Improving Student Outcomes* (Kaufman et al., 2018), which provided an in-depth description of the key actions that the state has been taking in each of these four areas to support and improve outcomes for all students in Louisiana. Taken together, these reports provide an overview of how an ambitious set of interconnected state policies, introduced in 2012, are making their mark on the teaching and learning happening in early childhood centers, schools, and teacher preparation institutions across the state.

This report focuses on graduation pathways. It specifically examines the implementation of key state actions—described in Kaufman et al. (2018)—intended to support and improve graduation pathways in Louisiana, and early signals regarding changes in student outcomes that might be associated with those actions. Findings suggest that state policies may have supported increases in college enrollment among low-income and minority students and enabled students to receive industry-based credentials upon graduation from high school. However, we also identified some achievement gaps, particularly between higher- and lower-income students, girls and boys, and minorities and nonminorities. And only a small number of students obtained the highest-rated industry-based credentials expected to lead to high-wage, high-demand jobs. Lastly, this study pointed to some challenges in implementing the state’s ambitious and comprehensive graduation pathways reforms.

RAND Education and Labor

This study was undertaken by RAND Education and Labor, a division of the RAND Corporation that conducts research on early childhood through postsecondary education programs, workforce development, and programs and policies affecting workers, entrepreneurship, and financial literacy and decisionmaking. This study was sponsored by the Baton Rouge Area Foundation, via a generous donation from Bloomberg Philanthropies.

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