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Student Writing, Teacher Feedback, and Working Online

Launching the Drive to Write Program

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How do schools encourage students to write more and teachers to offer more comments on student writing? How can schools use technology more effectively to support this shift in instruction? What makes achieving both of these goals difficult? A new program in New York City high schools tackles these challenges.

When you enter Ms. G's classroom of ninth-graders, what you first notice is the quiet. The clacking sound of laptop keyboards and the sight of students in pairs intently reading text on screens is a scene of focus, compared with the student distraction that confronts many high school teachers. On this rainy day in March, these Global History students are reading a document related to South America that their teacher sent to them on Google Classroom, an online system used to host and distribute assignments in the "cloud." Students highlight pieces of text in the document online, and then start to organize responses to an essay question using an online "graphic organizer" — a series of short tables where they can jot down important facts and ideas that can eventually turn into an essay.

This classroom reflects the goal of a program organized by New Visions for Public Schools (a New York City school support network that helps schools with professional development, data infrastructure, leadership training, certification, and more), an experiment New Visions hopes will lead to a new standard in writing instruction and student learning. New Visions is developing coaching and professional development methods meant to help teachers integrate writing into other subjects, and to encourage students to organize and revise their writing based on regular comments from teachers. Writing happens both in class and as part of homework. The program, called Drive to Write, follows the adage that "writing is rewriting."

Google Classroom is part of a free suite of online tools called <u>G Suite</u> (formerly Google Apps for Education) that allow teachers to distribute assignments and to comment on and grade student writing electronically. New Visions has deployed these tools extensively in Drive to Write, with the idea that they will help teachers and students interact more often about writing, help students revise their work more regularly, help teachers tailor assignments to students' learning needs, and ultimately help students improve their writing.

This brief describes what it takes to launch a program that integrates writing, teaching, and technology. It offers lessons from the 2016-2017 school year, which was spent developing and pilot testing the elements of the program. (Box 1 describes New Visions' preparation and behind-the-scenes planning.) The program will be implemented and evaluated in full in 2017-2018, and the brief concludes with plans for the full evaluation, in which MDRC will evaluate how the program affects ninth-grade students' performance at the end of the 2017-2018 school year. This brief is not an assessment of fidelity to a finished model, but rather a chronicle of multiple teachers' experiences as the program was forming and an account of how coaches worked with teachers to develop the program.

Pairing Technology with Writing and Revision

The Drive to Write program responds to two trends in public high schools over the past 5 to 10 years. First, there are more free, cloud-based tools available to schools, and a greater number of classrooms (at least in larger districts) have wireless networks. Second, high schools are increasingly focusing on writing, in part because the Common Core standards adopted by most states over the past few years emphasize nonfiction writing, and in part because most districts are trying to prepare students better for college application essays and papers.

But it is not easy to marry writing instruction and technology. Teachers need targeted, tailored coaching, as New Visions is providing, to help them make it work. Teachers also may not find it easy to teach writing in a class organized around some other subject (Global History, for example). Global History teachers may not see themselves as writing instructors or technology specialists. In fact, earlier programs that have tried to integrate writing into other subjects have not always succeeded.¹ New Visions' program is designed to provide the coaching, technology, and other support that teachers need to make this integration work.

The Drive to Write program has a few main components:

- Monthly professional development sessions where coaches introduce the new parts of the program to all the teachers involved:
- One-on-one coaching sessions for teachers;
- Four preset writing assignments distributed using Google Classroom or Doctopus (an enhanced spreadsheet feature in G Suite that allows teachers to collect, review, and grade assignments from Google Docs) that students can complete in class and after school:
- Online rubrics documents that outline what is expected from student work and specific writing elements associated with different levels of performance — that teachers can use to grade and track students' skills;
- More constructive criticism from teachers and more chances for students to revise their work.

The program focused on ninth-graders enrolled in Global History who were scheduled to take the state Regents exam at the end of tenth grade. Students have

¹ The Content Literacy Continuum program, for example, tried to include literacy instruction in four high school subjects. See Corrin et al. (2012).

Box 1

How New Visions for Public Schools Prepared for and Refined Drive to Write

Drive to Write is an initiative developed by New Visions for Public Schools over the course of two years. Before the 2016-2017 school year, coaches at New Visions researched options and chose Chromebooks as the hardware for Drive to Write. Coaches worked side by side with school-based technology coaches to ensure that there were school-based staff members prepared to help teachers with their day-to-day needs. When the Chromebooks arrived, the coaches worked with teachers to label and set up laptop carts in their classrooms. At the same time, the coaches were developing a professional development curriculum to help teachers learn to use this technology for writing instruction, and to help teachers learn to use other interesting or appealing technological tools as well.

Coaches continued to develop the program throughout the year. They developed a portfolio of tools for the teachers to use, including customized Google Suite add-ons and a skills-based rubric. They also sought out and shared other free websites and tools with teachers that involved creative ways to share content, such as Google Tour Builder and PowToon, and ways to use technology to tailor instruction to students' learning needs and seek students' responses, such as Kahoot.

As the school year went on, coaches monitored teachers' progress and offered comments and suggestions during coaching and professional development sessions. In coaching sessions, coaches were often able to observe teachers' practices, review skills introduced at professional development sessions, and talk with teachers after classes to hear their concerns. The professional development sessions featured online discussions conducted using Google Classroom and conversations conducted in person. Each professional development session also ended with a survey asking for teachers' opinions of the session. Coaches referred to these surveys as the year progressed to adjust the program to fit teachers' needs.

to pass that test to graduate from high school. The program's goal is to start students' high school careers with good habits for writing and using technology, which they can then carry with them to other courses in later grades.

New Visions assumed that teachers in these schools already provided comments to students to encourage them to revise their paper-based assignments. The shift in Drive to Write was supposed to be about adopting new technology, so that students and teachers could work together, exchange documents, and revise assignments online. There were supposed to be three main changes:

1. The program encourages students and teachers to collaborate more, instead of students just submitting assignments and teachers then grading them. Students are supposed to compose and share online documents in class, so that teachers can offer realtime editing and suggestions for improvement. Between classes, teachers also can insert comments into students' work or answer their questions. This

kind of two-way conversation with students is new for many public school teachers.

- 2. The two-way conversation should include specific suggestions from teachers to students about what they could improve in their writing, and requests for students to respond to those comments with revisions and edits to their drafts, all *before* final submission.
- 3. New Visions expected that digital technology could help teachers complete this work faster. For example, teachers could copy and paste common comments into many student papers, rather than spending hours writing the same things by hand over and over. If these comments were offered quickly, with time for revision before the final assignment was due, students could improve their drafts over at least one or two cycles of revision.

<u>Box 2</u> describes how the process is supposed to work. In the pilot year, four coaches served 12 schools, promoting these practices.

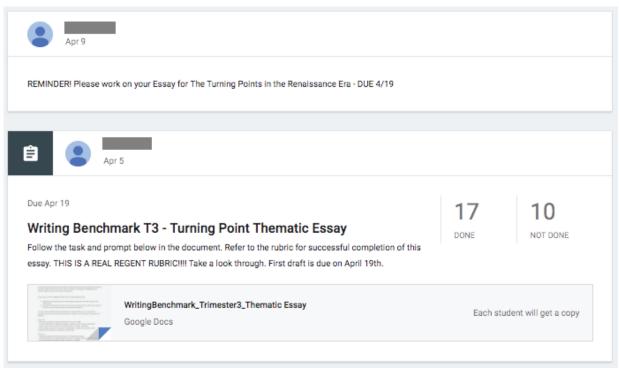
Box 2

The Steps in a Drive to Write Assignment

- 1. The teacher distributes a Drive to Write assignment through Google Classroom (as shown in Figure 1). Students at different skill levels may get slightly different assignments.
- 2. The student composes his or her response in a Google Doc, ideally beginning during class time. The teacher can see and edit this document along the way.
- 3. The teacher comments on the document using the comments function (as shown in Figure 2), either during class writing time or after school.
- 4. The student responds to the teacher's comments and makes edits, either during class time or after school.
- 5. The student submits the final essay using Google Classroom.
- 6. The teacher uses Goobric, an online rubric on the Google platform, to grade the student's work directly within the document and to track students' scores centrally. The student can see the Goobric score and the teacher's comments in the Google Doc.

This whole process took some teachers just two days and others about a week.

FIGURE 1 Example Google Classroom Stream Showing Digital Assignment Distribution



SOURCE: New Visions for Public Schools.

FIGURE 2

Example Google Doc from a Student with Teacher Comments

Another turning point during the Renaissance was when the Black Plague occurred. So many individuals died and because of this people began to show an interest in science. More research was done and theories were made to why it killed so many. This caused an advance in science.

Two of the major turning points during the Renaissance had to do with both science and religion. Which both ironically are two very controversial topics.

Discuss this... What type of science would be affected?

SOURCE: New Visions for Public Schools.

Design Meets the Real World of the Classroom

As mentioned earlier, the program was designed assuming that to some extent, Global History teachers already used some regular writing practices. The program also expected that teachers would want to have their students write more to prepare for the essay questions on the Regents exams.

The original vision, then, was first to train teachers to use the Google tools, then train them to use the tools to comment on student writing, and finally train them to use both tools and their Global History content to improve students' revision process. As one of the coaches said, "If you don't have your technology in place and you don't have a management system in place for the technology, everything else will crumble, no matter what you're doing."

Teachers did indeed soon see the benefit of including technology in their writing routines. In an open conversation with other teachers and coaches in the December 2016 professional development session, teachers cited a number of advantages. They said they could assign work ahead of class digitally, for example, so that students were ready to work as soon as they got to class. They could see students' edits over time and

hold students accountable for improving each draft of an assignment. They could give richer comments because they had to spend less time shuffling paper and handwriting those comments.

But it turned out that while some teachers were able to bring these pieces of Drive to Write into their classrooms, throughout the year many had trouble combining technology, writing, and commenting smoothly. In Ms. G's classroom in the pilot year, for example, it took a couple of weeks for laptops to arrive and work reliably, and then for students to get used to writing online. Similar delays happened in other schools as well, due to factors outside of the program. In addition, Ms. G and other teachers had a hard time incorporating writing and technology while still teaching all the material in the Global History curriculum and prepping students for the Regents exam.2 It turned out to be harder than expected for both teachers and coaches to figure out how to blend content, technology, writing, and constructive criticism. Few programs like Drive to Write exist that coaches or teachers could copy.

2 A passing score of 65 percent or higher on the Global History Regents exam is required for graduation from New York City Public Schools. As of 2012, this exam had one of the lowest pass rates of the Regents exams required for graduation, at 56 percent. See Evans, Gebeloff, and Scheinkman (2012); Office of P-12 Education, Curriculum and Instruction, New York State Education Department (2014).

In the November 2016 professional development session, coaches realized that the teachers needed more writing instruction techniques to use with their students, as most had never been trained as writing teachers. Coaches introduced approaches teachers could use to offer constructive criticism (including specific examples of comments),³ but as one coach said:

We had an incorrect assumption that our teachers had [learned] more writing pedagogy than they did.... Then when we were focusing on feedback, most of what we were seeing is comments from teachers based on content — "This content is wrong," "This content is incorrect" — and not really around ... thesis statements and transitions and basic writing.

Teachers also worried their students were not prepared to take on so much writing. One teacher said, "I try to meet the kids where they're at to either boost their skills or push them a little further." The coaches heard the same thing from teachers. One of them said, "[The] pushback that we had from teachers [was] ... 'You're not understanding where my students are in writing and their capabilities. I shouldn't ask my students to write this much in the beginning of the year." Some teachers were also used to saving their writing for the end of each unit — teaching content first and then distributing a writing assignment — which limited the opportunities for comments and revision.

Keeping the comments and revisions online during class time required a change of practice for both teachers and students. The day an MDRC researcher observed Ms. G's classroom, Ms. G and a coteacher were walking among the students to address their questions about the assignment and about how to organize their ideas. Students were supposed to be using the graphic organizer (as described on page 1) to organize their thoughts and then start drafting paragraphs on their own. Instead they were raising their hands to ask

questions after each step in using that graphic organizer. As a result, Ms. G could not be at her computer to offer written comments on assignments online as students were drafting or submitting them.

Drive to Write spreads the philosophy that all students can be writers. But the way the assignments were structured, there may not have been enough time for all students to practice their writing. A student has to work fast to draft, revise, and finalize an assignment in just a few days. For some classes, the writing assignments were structured to allow students to draft and revise paragraphs rather than full essays.

TAKEAWAY: In order for technology to support certain teaching practices, teachers need guidance to master those practices first.⁴

Coaches Adjust

Around midyear, as coaches learned more about teachers' needs, Drive to Write coaches started to adjust the way they approached and organized professional development sessions. They started to emphasize more explicitly three beliefs that teachers did not always express on their own:

- **1.** Global History teachers can be writing instructors.⁵
- 2. Student writing can improve.⁶
- **3.** When teachers use constructive criticism and certain teaching techniques, and use technological tools to interact with students, they can help students improve their documents.

³ Mishra and Koehler (2006); Harris, Mishra, and Koehler (2009).

⁴ Hess and Saxberg (2014).

⁵ Shanahan and Shanahan (2008); Wineberg (1991).

⁶ Hattie and Timperley (2007); Parr and Timperley (2010).

⁷ Graham and Perin (2007a, 2007b); De La Paz and Graham (2002); Hillocks (1987).

That first point was a big one. Teachers needed to stop thinking of themselves only as history teachers and begin thinking of themselves as writers and writing instructors too. Practicing writing themselves in the professional development sessions helped them to see their students as writers who could improve.

On the second and third points, teachers also struggled to provide substantive comments about writing (as opposed to content, grammar, spelling, or punctuation). "It makes sense because they weren't taught and trained how to be writing teachers," one coach said. Even teachers confident in their own writing did not know how best to come up with constructive suggestions for their students. As one of them said, "It's more like the communication behind it.... [Students] ask, 'Well, how do I do that?' And I'm like, 'What do you mean, how do you do that?' I can't find the words to say, 'Oh, it's changing this topic sentence around."

So coaches introduced a rubric that shows a "ladder" of learning skills, to help teachers understand and track their students' progress.⁸ Teachers were shown the example in Figure 3 and were encouraged to create similar rubrics to address the skills they were emphasizing with their students.⁹ These rubrics can help teachers deliver comments intended to foster specific writing and thinking skills throughout the revision process, and give coaches, teachers, and students a common language to talk about writing skills.

This rubric broke down the individual features in an argument essay for students, which gave some teachers more confidence in teaching writing and in grading. As one teacher said, "Some of [the students] will write

body paragraphs only and no introduction and conclusion and then I say, 'Well, there is no introduction and conclusion here. So you either have to add that or take points off.' And that's where the rubric comes in."

Drive to Write wanted teachers to help students learn higher-order writing skills, such as developing an argument. One of the stated end-of-year goals was to have students be "able to write a well-thought-out and interesting essay." Many teachers talked about writing structure in terms of sentences, paragraphs, and essays. They tried to build up students' writing skills slowly throughout the year. Some students were writing full essays by spring, while other classes were just starting to examine introductory paragraphs. To address teachers' concerns about students' basic writing abilities, and to highlight how a rubric can be helpful in offering specific constructive comments, the final Drive to Write professional development session of the school year in May was devoted almost entirely to sentence and paragraph writing.

In response to teachers' varied needs, coaches experimented with different content and tools. During their weekly one-on-one coaching meetings they addressed different things with different teachers — some had more trouble with technology, others had more trouble with classroom management (in which case coaches used their visits to join teachers in the classroom, helping students stay on task and get through the writing tasks). Over the course of the year, coaches themselves came to use different tools and different coaches adopted different approaches. For example, two of the coaches had intended to use online documents to record what they observed as strengths and areas for growth, but they found that it was hard to complete those documents while they were also helping out in the classroom. Sometimes these logs were shared with teachers and sometimes they were not. In the beginning of 2017, coaches created a tracker to help teachers set goals and track their progress, but one coach found

⁸ This rubric was based partly on Bloom's Taxonomy. See Blooms Taxonomy.org (n.d.).

⁹ That emphasis might shift from assignment to assignment. For example, a teacher might not expect to be able to observe all skills or all levels of a given skill in the same assignment. In the early months of teaching writing, a teacher might emphasize mechanics, starting to emphasize analysis only later.

FIGURE 3

Example Rubric to Measure High School Student Writing Skill

			Explains the significance of the paragraph's point to the overall response.	ANALYZES
Topic sentence contains argument which links to contention/claim.	Develops the point/ theme identified in the topic sentence to further argument	Embeds quotations within own words and the point being made.		APPLIES
	Presents supporting sentences relevant to the paragraph's main idea.	Inserts quotations from the text(s) into paragraph.	Inserts quotations from the text(s) into paragraph.	DESCRIBES
Identifies the point/ theme of the para- graph in topic sen- tence.		Places examples that are relevant in paragraph.		IDENTIFIES
Insufficient evidence	Insufficient evidence	Insufficient evidence	Insufficient evidence	
Topic sentences	Supporting sentences	Textual evidence	Concluding sentences	TAXONOMY OF SKILLS
Internal paragraph structure conventions (Structure of Writing)				

SOURCE: New Visions for Public Schools.

NOTE: The arrow indicates that skills higher in the table are considered to be more advanced.

that found her teachers did not use the tracker and stopped using it herself shortly thereafter.

TAKEAWAY: Coaches adapted their pacing and content for teachers, just as teachers need to adapt pacing and content for their students.

Teachers Use Technology Differently

When the pilot year started, some teachers were more fluent with and open to technology than others. For example, at the start of the 2016-2017 year, more than half of them were already using online grading tools (such as Skedula) or even Google Classroom. Some teachers went from being occasional to being regular users of online tools, while others remained light users throughout the year. As the year progressed, teachers who started by distributing and collecting paper-based assignments moved more and more toward distributing and collecting them online.

For example, Ms. G did not start using Google Class-room until a few months into the school year, but once she started, she used it every day. She liked that the online format gave students the chance to mark up and highlight documents before they started writing, to help organize their paragraphs. She said that the technology supported not only her organization as a teacher, but her students' writing processes too.

Ideally, an assignment completed online in Drive to Write follows the steps described in Box 2. Teachers in the program schools followed this process to different degrees. All 16 of the teachers participating in the program reported on a survey that they used Google Classroom at least occasionally. But to make comparisons among teachers it is useful to consider the final assignment of the year, which was scheduled to take place at a similar time in most classes. Only 10 of the 16 teachers (63 percent) used Google Classroom to distribute that final writing assignment, which suggests that online distribution still had not become part of day-today practice for all of them, or that they might not even have had time in the school year to give the assignment at all. Some teachers used Google Classroom for some of their history sections, but not all.

Of the 51 class sections taught by program teachers, Google Classroom was used for the final program assignment in 32 (63 percent); of those 32 sections, teachers returned rubrics with the final assignment in only 16. Students in the remaining sections did not receive structured comments with their final grades. Even when teachers did provide comments or rubrics, they did not necessarily do so for all students. The fact that even at the end of the year the online assignment and commenting tools were being used so little shows how hard it can be to integrate technology and writing instruction.

Figure 4 shows that even among teachers who used Google Classroom for that final assignment, there was a great deal of unintended variation in the percentages of students who got comments or edits from either a teacher or a peer. The differences among teachers are not necessarily explained by differences in class size. Although comments were usually delivered within two days of the initial assignment, it is not clear whether all students revised their writing based on those comments. These results suggest that students with different teachers might have had quite different experiences, and that there was not necessarily a standard approach

for providing comments.

By the end of the year, though, most teachers noticed a change in their practice that they could attribute to Drive to Write. Teachers were asked to reflect on their changes in writing, and 12 teachers responded, representing eight schools. Seven teachers wrote that Drive to Write brought them to focus more on writing instruction, constructive comments, and student revision, and five said that they were using technology more and had transitioned to a "digital classroom." Several teachers also noticed that students were writing better and more, and had become more comfortable with technology.

TAKEAWAY: After a year of coaching and professional development, not all teachers in the program were using the online tools to teach writing in the same ways, but all teachers reported incorporating more writing or technology.

The Challenge of Teachers' Time

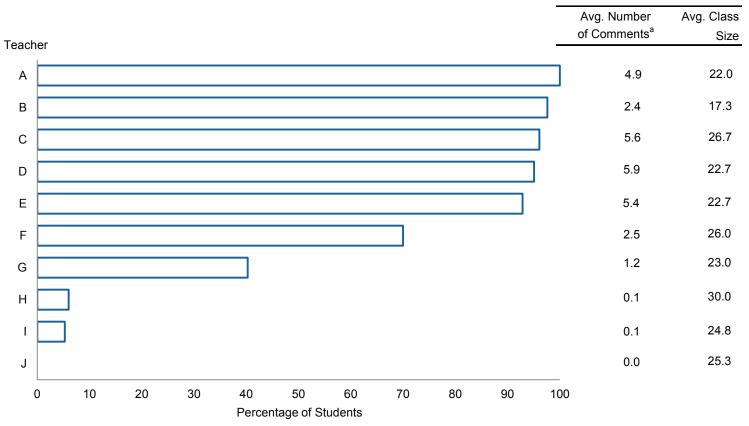
Whether or not they are contending with a new program, high school teachers often have trouble finding time to plan lessons, meet different students' learning needs, and grade all students' work. Adding new technology and more attention to writing to these routines involves even more time. New Visions tried to make it as easy as possible for teachers to learn these new skills by offering coaching, technological tools, and curricular resources.

Online tools did make teachers think differently about organizing classroom lessons and delivering comments on writing. But the tools did not necessarily save all teachers time. In fact, throughout the year teachers consistently said that they had too little time. Even tech-savvy teachers need time to learn new tools and to figure out how to incorporate them into their existing work. New Visions tried to anticipate these time concerns by providing support to help teachers incorporate

10 Hutchison and Reinking (2011).

FIGURE 4

Percentage of Students Who Received Comments and the Numbers of Comments
They Received from Teachers and Peers on the May 2017 Drive to Write Assignment, by Teacher



SOURCE: Data collected by New Visions for Public Schools from Google Classroom

NOTES: The percentages shown in this figure are among those teachers who administered the May 2017 Drive to Write assignment using Google Classroom. Data for an additional 6 teachers are not shown in this table because they did not distribute the assignment.

°This statistic represents the number of comments and replies to those comments by peers and teachers that each student received, as well as edits made by teachers, averaged across all of a teacher's course sections.

the new technology into their routines.

Drive to Write works best if teachers provide timely comments and grades, and doing so quickly proved difficult for teachers. Two teachers from the same school noted that providing comments on writing, especially "individualized feedback," required a major investment

of time. A Drive to Write teacher from another school described her overall workload as "absolutely crazy." Yet another said she had fallen behind on grading because of the workload. The timing of this assignment coincided with other end-of-year projects, which may have limited teachers' time for online distribution. It was new for some teachers to provide substantive

comments and suggested changes for each student, and doing so online was an additional new expectation on top of that. While learning these skills of their own, it took more time for teachers to identify the skills students needed to develop, to help them work on those skills to improve their drafts, and then to grade all of the assignments.

Many teachers also needed help with basic issues like charging the laptops and giving students time to return them at the end of class. Some schools only received laptops a couple of months after classes started. The logistical challenges also affected how fast classes got through their material, according to one teacher: "I'm finding that it takes a little longer to get through certain things.... The technology has slowed me down a little." (The teacher did feel capable of adjusting "to improve pacing for next time.") Even in March teachers were still figuring out how to leave time for the logistics of laptops.

In addition, it took time before teachers were ready to use in class the skills they learned in professional development sessions. For example, teachers learned about optional tools such as Doctopus and Goobric (the online rubric format) in a January 2017 session. Coaching logs and interviews showed that many teachers did not feel ready to use those tools until March, perhaps because they were optional.

Some teachers, like Ms. G, ended up falling behind on the Global History lesson plan. Once that happened, Ms. G focused on catching up on the Global History content — which delayed when she could adopt all of the technology and thus the Drive to Write plan for giving students comments online.

TAKEAWAY: As with any new initiative, an integrated technology program like Drive to Write demands time and energy from teachers. Its collaborative approach means teachers need to interact with students intensively.

Drive to Write Versus Business as Usual

The research team examined how much contrast there was between Drive to Write and usual teaching practice. To make the comparison as strong as possible, MDRC used a randomized controlled trial design. Thanks to random assignment, program and comparison schools were not different from each other at the start of the 2016-2017 school year in a statistically significant way. For example, in both groups the average attendance rates were about 88 percent, the average eighth-grade English scores were 2.1 out of 4, and about 21 percent of students had Individualized Education Programs.¹¹

Generally, by the spring of 2017, the end of the pilot year, program and comparison school teachers reported similar approaches to writing instruction and supporting students, and similar perceptions of student needs related to writing. (During the pilot year, survey and outcome data came from some but not all schools or students, so these results are merely suggestive. Below, the brief describes data to be collected during the evaluation year.)

Google's G Suite is available for free, and comparison group teachers who responded to a program survey or participated in an interview reported at least occasionally using some of its tools. Comparison teachers also reported at least some access to laptops. Some teachers said they had laptop carts in their classrooms, just like Drive to Write teachers did. Drive to Write teachers did say they used technology for commenting and grading more often than comparison teachers.

Teachers at comparison schools said that they, too, offered students constructive criticism and gave them

11 Individualized Education Programs are education plans for students with disabilities who are eligible for special education.

chances to revise their writing. Their comments sometimes highlighted areas that were done well and areas for improvement. One teacher noted that she was trying to keep her comments "focused on the guts of the writing." Several of them said that they used grading rubrics to guide their comments on bigger, end-of-unit assignments, but did not always discuss them on smaller, day-to-day assignments; comparison school teachers also did not mention using skills-based rubrics or more fine-grained skills assessments like the ones in Drive to Write.

In the evaluation year, the research team will collect data to document more specifically the ways the program and comparison schools use technology, how often they use technology, the writing instruction techniques they use, and the way they integrate writing and technology, to capture more nuance than is possible in the current brief. See <u>Box 3</u> for more detail on plans for the evaluation.

TAKEAWAY: Many teachers use technology to some extent, and many offer constructive criticism on writing. But the average teacher may not use technology as often or as intensively as Drive to Write teachers, and their comments may not focus as closely on specific skills.

Plans for the Evaluation Year

New Visions used the pilot year to figure out in what order it should introduce ideas to teachers, to track teachers' needs, and to develop resources and tools related to writing and technology that could help teachers. Because of the needs New Visions discovered and addressed in the pilot year, the evaluation year of the program will include clearer timelines, tasks, and milestones. For example, in the pilot year teachers said that they wanted a clearer sense of what was expected of them at different times, so coaches are providing a calendar that includes all Drive to Write activities and

Global History content and that describes how to build students' skills.

As discussed above, in the second year coaches are also putting increased emphasis on writing instruction itself, using technology to facilitate that instruction. As one coach said:

[In Year 1] we were looking at ... the way that technology can aid in feedback and revision and peer review, and that was sort of our arc, looking at it under a technology umbrella. Really now, what we've done is make technology a more minor part of the arc and the umbrella is really writing instruction: the skills, the feedback and revision cycle, the peer review.

Drive to Write is now specifying that the four preset writing assignments should occur online in a four-day "writing workshop," which should include a cycle for comments and revision before the student turns in an assignment and receives a grade. Teachers will use an expanded version of the rubric introduced in the spring of 2017 (the one in Figure 3); the expanded rubric now assesses 19 writing skills in five main categories. Rubric scores will be tracked with an online tool developed by New Visions that will help teachers see their students' progress and remaining gaps. Teachers will have the chance to give their students more pointed comments and suggest next steps for revision — all integrated into online assignments. In this second year, teachers' comments will initially focus on sentence-level revisions, which research shows are easier for students than revisions related to an entire assignment. 12 Over the course of the year, the plan is for teachers to offer broader and broader recommendations for revisions.

MDRC will use many kinds of data to analyze Drive to Write's implementation and effectiveness and the extent to which Drive to Write strengthens instruction.

¹² Flower and Hayes (1981); Butler and Britt (2011).

Box 3

How the Drive to Write Evaluation Will Unfold

The U.S. Department of Education's Office of Investing in Innovation awarded New Visions a development grant in late 2015, with MDRC as the evaluator. In early 2016 the two organizations designed a plan to roll out Drive to Write that included recruiting 24 schools with a ninth-grade Global History curriculum in place. These schools included large high schools, small schools, and two charter schools, with 32 teachers total.* MDRC randomly assigned 12 schools to receive Drive to Write and 12 to continue with business as usual.

The 2016-2017 school year was the pilot year. The Drive to Write program was launched then with the expectation that it would evolve and some elements would be refined. The following year (2017-2018) the full program should be in place, and MDRC will evaluate how well it is operating and the impact or change related to it.

For the evaluation year, the team will collect data from 23 schools and 30 teachers, including data on how teachers are putting Drive to Write into practice, how students are using its technology, and how students perform on a year-end test. In the pilot year, MDRC worked closely with New Visions to decide on aspects of Drive to Write implementation for the evaluation year — how much should be spelled out about the program's details and how to connect the program's goals with the professional development coaches were giving teachers. During the pilot year, MDRC also observed classrooms and surveyed some teachers in program and comparison schools, and analyzed the Drive to Write professional development surveys and coaching logs to figure out how the program might be improved.† In the role of evaluator, MDRC drew attention to the need to distinguish Drive to Write services from what the comparison schools already use or implement. This working relationship will continue during the evaluation year.

- * For random assignment purposes the 24 schools in the pilot year were divided into four blocks defined by past student performance on the state Global History Regents exam.
- † MDRC also interviewed a subsample of teachers in the pilot year, and coded interviews using themes that corresponded to the program's design. MDRC interviewed three of four coaches, and coded interviews according to their job description and the program's design. In addition, MDRC will use professional development surveys and coaching logs as data sources for the evaluation year.

The research team will use coaching logs and observe professional development sessions to assess coaching practices and to determine where teachers need support. MDRC will attempt to study how teachers use data from the rubric and whether teachers use those data to address different students' needs. Data from Google's G Suite will show how often and how much teachers comment on students' work, and how many chances students have for revisions. Interviews in some schools and surveys in all schools will reveal teachers' experiences with writing and technology, as well as students' experiences in the classroom and feelings about writing. Interviews with coaches also will shape the story of how Drive to Write worked in practice.

For the main measure of impact, MDRC will see whether Drive to Write ninth-grade students perform better at the end of the year on an in-class writing test than comparison students do. The test consists of an essay question similar to the Global History Regents exam. (Ninth-graders do not take the Regents exam until tenth grade, so the team chose this measure to get results more quickly.) In late 2018, MDRC will release results from the evaluation year and insights about ways to help teachers use technology to improve student writing. As one of the few evaluations that has been conducted of an integrated writing and technology program, this study should offer valuable insights into the effort involved in combining these approaches and on its potential for impact.

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