The “College Prep for All” Mandate –
An Update on How San Diego’s Class of 2016 Has Fared with New Graduation Requirements

Julian R. Betts, Andrew C. Zau, and Karen Volz Bachofer

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Summary

The San Diego Unified School District (SDUSD) several years ago created a stringent new graduation requirement. Starting with the class of 2016, all students are required to complete the college preparatory coursework known as a-g coursework, with grades of at least a 'D,' to earn a high school diploma. Earlier studies by the San Diego Education Research Alliance at UCSD (SanDERA) and by the district itself showed that many in the class of 2016 were not completing courses at a rate that would lead to their meeting all graduation requirements by the end of their 12th grade year. In a previous study, Betts, Young, Zau and Bachofer (2016) followed the cohort of students in the class of 2016 through the end of summer school in 2015, and projected that, without accelerating their rate of course completion, only about 7 in 10 students in this cohort were likely to graduate in spring and summer 2016.

SDUSD has since announced an official graduation rate of 91.2%. With about 9 out of 10 students graduating, how does one reconcile these two numbers?

The modest but important goal of this report is to update our projections in order to understand what happened between August 2015 and August 2016, with a special focus on the 3 in 10 students in the class of 2016 who had more than a year of coursework to complete during their senior year.

Our calculations suggest that roughly 8 in 10 students in our cohort graduated with a standard SDUSD diploma by August 2016. This represents meaningful improvement for some students, with only 7 of 10 students on track at the end of grade 11. Put differently, 1 in 3 students who were off track to graduate on time did graduate by summer 2016. We cannot know which district interventions helped students the most, but we note several steps the district has taken to help students meet the new requirement. These include multiple pathways to meet the world language requirement, spending on online courses that satisfy the a-g requirements, increased spending on summer school, and detailed student-by-student tracking by central office staff of students’ progress toward completing required a-g coursework. All of these supports may have boosted the completion rate by about a seventh during students’ senior year.

What about the other students? Of those students who were off track at the end of grade 11, roughly one-third graduated on time, roughly one-third left district-managed schools, either enrolling in charter schools in the district or leaving altogether, and roughly one-third dropped out or stayed enrolled but failed to graduate by summer of 2016.

Notably, almost all of those leaving district-managed schools were off track to complete the a-g requirement on time, as Figure S-1 at the end of this summary illustrates.
It should be noted that the final graduation rate of 91%, calculated by both the district and the California Department of Education, removes from both the numerator and denominator any students who left district-managed schools for district charter schools or transferred to other districts. Because the official graduation rate does not include the 1 in 10 students who transferred to a charter or non-SDUSD school in 12th grade, the denominator in the official calculation only includes about 90 percent of the cohort. Since 8 of 9 of these students did graduate on time, the graduation rate is roughly 100% X 8/9, or about 90%.

The district and students clearly deserve recognition for the considerable improvement in course completion among many of the students who were off track at the end of grade 11. However, with 8 out of every 10 students in our class of 2016 cohort actually earning an SDUSD diploma at the end of their senior year, the district has scope to improve further.

We recommend that, in addition to the official graduation rate, in future years the district also report the percent of students in the cohort who left the district each year (i.e., in grade 9, 10, 11 and 12) and what percent of those leaving the district were off-track for on-time graduation. This will provide the public with a much fuller picture of how close SDUSD is coming to its vision of college prep completion for all of its students.

We also recommend that the district adopt or develop an a-g on-track forecasting model that can help it identify students as early as middle school who will need extensive supports to meet the new requirements.

This report also touches upon recent allegations in the media that cheating and lax proctoring of exams in online courses could explain some of the improvement in course completion rate in SDUSD. As we have not observed classrooms, we cannot comment on these allegations. We do summarize some of the steps SDUSD took to accelerate course-taking and to ensure proper security for assessments in the online a-g courses that many students took in 2015-16.

We also outline two simple ideas to help SDUSD shed light on the online course issue. We propose that the district hire educators who are not associated with the district to observe test-taking conditions for online courses in 2017-18, on a random basis, as a way of checking for any potential abuses. Second we recommend capping the share of the final grade in online courses that can be earned through unproctored assessments.
Figure S-1 Following Students in the Class of 2016 between Summer 2015 and Summer 2016

Above, students in green/red in the top panel are on-/off-track in summer 2015 and in the bottom panel green/red students represent those who likely completed/did not complete a-g coursework by summer 2016.
1. Introduction

The gap in earnings between high school and college graduates has widened markedly since the late 1970s, and a college education has become an even more important bedrock of economic wellbeing. Achieve, Inc. recently reported that 23 states and the District of Columbia now require all students to complete a college- and career-ready curriculum. In nine states and the District of Columbia, these requirements are mandatory, with no opt-out provisions.

Several years ago in California, the American Civil Liberties Union (ACLU) campaigned to ensure that all students have access to college preparatory coursework. Ed Trust-West audited student access to “a-g” courses in high schools in San Diego and elsewhere. (In California, high school students must complete a set of college preparatory courses known as the a-g requirements, with grades of C or higher, in order to apply for admission to either of the state’s public university systems – the University of California (UC) or the California State University system (CSU).)

Partly in response, several large California school districts – including Los Angeles, Oakland, San Francisco and San Diego – have adopted policies requiring all students to complete an a-g course of study in order to graduate from high school.

This bold policy change promises to increase the number of youth eligible to attend public universities, but at the potential risk of denying regular high school diplomas to those unable to meet the new standards. Indeed, the San Diego Union Tribune (Magee, 2014) voiced concern that implementation of the new policy could negatively impact the district’s graduation rate which, at 88 percent, was the second highest of California’s large urban districts.

This report is the fourth in a series examining the prospects for students to complete the college prep course requirements in the San Diego Unified School District (SDUSD). The first report, by Betts, Zau and Bachofer (2013) examined the potential effect of the new policy by analyzing the transcripts of students in the Class of 2011 (who were not affected by the new graduation policy that took effect with the class of 2016) to determine how they would have fared had the new a-g requirements been in place. In San Diego’s Class of 2011, 61 percent of graduates would have met the a-g requirements (with a D or higher mark, per the new policy) and 42 percent would have completed the requirements with a C or higher (as required by the UC/CSU).

The second report, by Betts, Young, Zau and Bachofer (2015), showed that on average, students in the classes of 2016 and later were completing slightly more a-g courses in grades 9 and 10 than older cohorts had, but the average student was completing far fewer courses than did those students in older cohorts who ultimately did complete the course requirements. A third report, by Betts, Young, Zau and Bachofer (2016) followed the class of 2016 up through the end of August 2015. The report found that as students prepared to enter
grade 12, only 72% of students were on track to complete the a-g courses by the end of grade 12. That report identified students as off track to graduate on time if they had more than a year’s worth of courses to finish in any of the seven a-g subject areas. vi

Against this backdrop, in spring 2017 the California Department of Education released graduation rates for school districts for the class of 2016. The SDUSD official graduation rate was 91.2%, a new high for the district. This rate is considerably above the 72% graduation rate that SanDERA had projected would occur if students did not accelerate their rates of course completion.

The California Department of Education also reports that roughly 6 in 10 graduates completed the a-g coursework with grades of C or higher, as required to be eligible to attend either the University of California or the California State University system, up from about 5 in 10 graduates in the class of 2015.

Recently, the Voice of San Diego (VOSD) has published a series of articles claiming, among other things, that 1) many students in the class of 2016 left the district between grades 9 and 12 and that this might factor into the graduation rate, 2) some weaker students may have been counseled to leave district-managed schools before grade 12 to avoid the a-g requirement, and 3) some students and current or former teachers reported to VOSD that students were taking online courses to meet the graduation requirement, and that students had discovered ways to “game” or even cheat on the assessments for these courses.

This report follows the progress of the cohort of students who, based on the year they first entered grade 9, were expected to graduate with the class of 2016. We ask how many graduated with a standard SDUSD diploma, meaning that they had met the a-g requirement and all other graduation requirements, and how many left district-managed schools for charter schools or who left the district altogether. Because we use administrative data, but did not observe counseling or testing sessions in schools, we cannot directly address the concerns that some students may have been counseled to leave the district, or that students cheated in online courses. However, to present indirect evidence about the ‘counseling out’ issue, we study whether those leaving the district in the class of 2016 were markedly different academically from those who left in prior years. We also consider the district’s stated policies on assessments for online courses.

The next section outlines the new graduation policy in SDUSD and describes supports the district has provided to students. Section 3 then examines actual graduation rates and a-g completion rates, and looks at those students who departed from district-managed schools in grade 12. Section 4 compares those who left and those who stayed in terms of how many a-g subject areas students were behind. Section 5 explains why the a-g completion rate is not the same as the official graduation rate, the most important reason being that the latter does not include students who leave district-managed
schools. A final section recommends some policies the district might consider to boost students’ completion rates, to document to the public how many students are rising to the challenge of completing the new a-g course sequence and how many are leaving, and suggests steps to take to ensure the fidelity of assessments in online courses.

2. Overview of San Diego’s a-g Graduation Policy

SDUSD’s new graduation policy mandates that all students in the classes of 2016 and later must complete the a-g college preparatory course sequence (with letter grades of D or higher) in order to receive a high school diploma. The a-g requirements, shown in Table 1, are the courses that high school students must complete in California to be eligible to apply for admission to either of the state’s public university systems. San Diego Unified, like the other districts that have adopted the a-g course sequence as a graduation requirement, has decided to allow students to graduate if they earn letter grades of D or higher in a-g coursework. Students who complete the a-g sequence having earned a D in one or more courses are not eligible to attend either state public university system. However, proponents of the policy argue that, because of the new policy, all students will have been given the opportunity to take all the necessary college-preparatory coursework.

The district has implemented several interventions to support students as they strive to meet the more rigorous graduation requirement. Starting in 2014, summer school resources were focused on credit recovery for high school students. Each high school has received graduation coaches. Notably, the district outlined six separate pathways through which students could meet the a-g “Language Other Than English” (LOTE) requirement. These include tests in several of these languages that could substitute for the course requirement, as well as secondary-school instruction in a language other than English. Appendix 2 shows these district pathways. It is likely that this flexible approach has aided current and former English Learners in meeting the LOTE requirement.

The district also recognized several years ago that access to college preparatory LOTE courses varied across middle schools, and took steps to make these language classes available in all middle schools.

Additionally, the district contracted with Edgenuity to provide approved a-g courses online, and multiple district officials have told us that this strategy helped many students to catch up in grade 12.

<table>
<thead>
<tr>
<th>Subject</th>
<th>Course Requirement</th>
</tr>
</thead>
<tbody>
<tr>
<td>a: History/Social Studies</td>
<td>4 semesters</td>
</tr>
<tr>
<td>b: English Language Arts</td>
<td>8 semesters</td>
</tr>
<tr>
<td>c: Mathematics</td>
<td>6 semesters</td>
</tr>
<tr>
<td>d: Laboratory Sciences</td>
<td>4 semesters</td>
</tr>
<tr>
<td>e: World Language</td>
<td>4 semesters</td>
</tr>
<tr>
<td>f: Visual and Performing Arts</td>
<td>2 semesters</td>
</tr>
<tr>
<td>g: College-Prep Elective</td>
<td>2 semesters</td>
</tr>
</tbody>
</table>
At the level of the district administration, perhaps the most comprehensive innovation involved tracking each grade 12 student’s progress using spreadsheets. One column showed courses that students needed to complete in their senior year, and a subsequent column included follow-up information on whether course placement was correct, mechanisms through which the student met the LOTE requirement and related information. This extra level of oversight aimed to reinforce efforts at the school level to help seniors graduate on time.

Finding: Including students who left the district who were on track, we estimate that 80.3% of the class of 2016 completed the a-g coursework.

Of this total, 79.0% graduated with a regular diploma from SDUSD-managed schools. The remaining 1.3% consist of 0.6% of our sample who left the district completely, and 0.7% who left for district charter schools, and who in both cases were on track to complete the a-g requirements when they left at the end of grade 11. We thus assume all students in these two groups completed the a-g requirement.

Note that this 80.3% a-g completion rate is about ten percentage points above the percent on track at the end of grade 11. This represents a major improvement by SDUSD students in their final year of high school.

The next question concerns what happened to the remaining 19.7% of our sample who did not complete the a-g requirement and graduate with a regular SDUSD diploma. They divide almost equally into two groups. The first group, consisting of those who were off track to complete a-g at the end of grade 11 and who dropped out, left the district, or transferred to a charter school, accounted for 9.2% of the sample. The second group, consisting of students who stayed in district-managed schools in 2015-16 but did not graduate with a standard diploma, accounts for 10.5% of the sample.
A simple approximate summary of the fate of the class of 2016 is as follows. As of August, 2015, only about 7 out of 10 students were on track to complete a-g coursework by the end of their senior year. As of August 2016, 8 in 10 had actually earned a standard SDUSD diploma. Of the remaining 2 (in 10), 1 was off-track to complete a-g in August 2015 and either dropped out, left the district, or transferred to a charter school during their senior year, and 1 remained in district-managed schools but failed to graduate with a standard diploma.

Figure 1 illustrates, with the exact percentages.

Figure 1: The Status of the Class of 2016 at the End of Grade 12

4. How Far Off Track Were Those Who Stayed and Those Who Left?

It is crucial to know the a-g status of students who stayed versus students who left the district. In our full sample of 5993 students, 0.9% dropped out before the end of grade 11. None of the dropouts were on track to complete the a-g coursework. Of the remaining 5942 students still enrolled as of June 2015, 4.5% switched to charter schools in grade 12, and 5.2% left the district altogether.

Figure 2: The a-g Status of Those Re-enrolling and Not Re-enrolling in District-Managed Schools in Grade 12 Differed Dramatically

Note: The group “graduated with standard diploma” includes those who left the district or transferred to charter schools and who were also on track to complete a-g at the end of grade 11.

Figure 2 shows the a-g status at the end of grade 11 for those staying in district-managed schools.
versus those leaving (that is, leaving for charter schools or leaving the district entirely). The figure shows that the “stayers” (those who remained in district-managed schools) differed dramatically from the leavers. Only 11% of those who did not re-enroll in district-managed schools were on track to complete the a-g requirements as of the end of grade 11. But 76% of those who re-enrolled in district-managed schools in fall 2016 were on-track to graduate having completed the a-g coursework.

Figure 3: About 15 Percent of Those Graduating with a Standard Diploma in 2016 Were Off-Track in at Least One a-g Subject Area at the End of Grade 11

Of those re-enrolling in district-managed schools, some of those who had more than a year of coursework yet to complete in one or more a-g subject did accelerate their course completion, and so graduated with a standard diploma. Figure 3 shows that while 85% of those graduating with a standard diploma had been on track at the end of grade 11, the remainder of graduates overcame deficits in one or more subject areas. Not surprisingly, it was students who had more than one year of coursework to complete in a single a-g subject area who comprised about two-thirds of the remaining 15% of graduates who had been off track at the end of grade 11.

5. Reconciling the a-g Completion Rate with the SDUSD Graduation Rate

In spring 2017 the California Department of Education released graduation rates for districts throughout the state. For SDUSD the official graduation rate was an impressive 91.2%. But how does this square with our estimate that of students in the class of 2016, 80.3% completed the a-g graduation requirement?

The state’s approach to calculating graduation rates explains most of the difference. In calculating graduates as a percentage of those who enrolled in the district three school years earlier in grade 9, the state excludes any student who left district-managed schools for a charter school or for any other school not managed by the district. Because 89% of those leaving district-managed schools in grade 12 were off track to complete a-g, these students are not included in the calculations, which almost surely boosts the official graduation rate well above our estimate that 80.3% of the class of 2016 completed the a-g graduation requirement.
Perhaps a simpler way to understand this distinction is to go back to our earlier summary approximation, that on average 8 out of 10 students completed a-g, 1 out of 10 remained in schools managed by the district and did not graduate, and 1 in 10 left district managed schools. The a-g completion rate is

$$\text{100\% X (\# graduates + leavers who were on-track for a-g) /((\# graduates + leavers who were on-track for a-g) + \# remaining in district but not graduating + \# leaving district, whether on- or off-track for a-g)}$$

$$\geq 100\% \times \frac{8}{8+1+1} = 100\% \times \frac{8}{10} = 80\%.$$

But the graduation rate excludes those who left in grade 12 from the denominator. The official graduation rate would be:

$$\text{100\% X \# graduates/((\# graduates + \# remaining in district but not graduating)}$$

$$\geq \text{100\% X 8/(8+1) = 100\% X 8/9 \geq 89\%}.$$

Note that the latter percentage is higher because it excludes those who left the district for charters or other non-district schools. This difference matters tremendously because most of the students who left were far behind on a-g course completion in grade 11, and most of them would probably not have graduated had they stayed in district-managed schools in grade 12. xii

Neither of these measures is "wrong", but they measure different things. A 90\% graduation rate does not mean that 90\% of students enrolled in grade 11 actually completed all of SDUSD’s a-g graduation requirements. Departures from the district-managed schools likely acted like a pressure valve to allow these students, most of whom found the a-g requirement a challenge, a different route to finishing high school. Of course, other aspects of the district’s graduation requirements, such as the requirement for a GPA of at least 2.0, may have also played a role.

6. Were Students at Risk of Not Completing the a-g Requirements “Counseled Out” of District-Managed Schools?

Figure 2 suggests that many students who had more than two semesters of coursework to complete in grade 12 in one or more a-g subject areas left district-managed schools, perhaps in the hope that they could graduate from a school or district that did not require a-g coursework for graduation.

Koran (2017a) states that some students reported that district staff may have counseled those students who were quite behind on the a-g requirements at the end of grade 11 to leave district-managed schools. xiii

Because our analysis uses district administrative data, and does not include observations at individual schools, we cannot directly assess this possibility. However, we gathered some indirect evidence about whether the academic achievement of those leaving district-managed schools in the class of 2016 represented a sharp break from that of earlier classes. We did this by calculating the 11th grade Grade Point Average (GPA) of those staying
in district-managed schools in grade 12, those leaving for charter schools in grade 12, and those leaving the district altogether in grade 12.

An important qualification of this analysis is that divergence between the GPA of district stayers and leavers could arise for many different reasons. Although the advice provided by SDUSD counselors and other district staff could play a crucial role in who leaves, other factors to consider are the range of educational options available to families, in the form of other school districts, charter schools and private schools. The availability of these options, their educational profiles, including the rigor of their graduation requirements, and the extent to which they make their availability known to families through marketing or word of mouth could also vary over time.

With these qualifications noted, Table 2 shows the results for three recent cohorts. Over the last half decade the GPA of those leaving district-managed schools has trended down quite markedly. There could be many causes for this trend, as noted above.

For our purposes, what matters is whether students in the class of 2016 who left district-managed schools, look different from students in the class of 2015 who left district-managed schools in terms of academic achievement. In other words, was there a sudden drop in the GPA of students leaving the district during the year the a-g coursework requirement went into effect?

The answer is no. Although this result does not prove in any way that district staff has not counseled the lowest performing grade 11 students to find other schools for grade 12, it does suggest that the imposition of the a-g requirement in the class of 2016 did not increase any such tendency in counseling, should it exist.

Table 2: The Grade 11 GPA of Students Leaving District-Managed Schools in Grade 12 is Relatively Low, but Similar in the Classes of 2016 and 2015

<table>
<thead>
<tr>
<th></th>
<th>Students Staying</th>
<th>Students Leaving for Charters</th>
<th>Students Leaving District Completely</th>
</tr>
</thead>
<tbody>
<tr>
<td>Class of 2016</td>
<td>2.80</td>
<td>1.49</td>
<td>1.64</td>
</tr>
<tr>
<td>Class of 2015</td>
<td>2.73</td>
<td>1.48</td>
<td>1.63</td>
</tr>
<tr>
<td>Class of 2011</td>
<td>2.88</td>
<td>2.32</td>
<td>2.51</td>
</tr>
</tbody>
</table>
7. Allegations Related to Online a-g Courses in SDUSD

As noted earlier, one of the major innovations SDUSD has implemented to support students in meeting the college prep requirement are flexible online courses for those repeating a-g courses or taking them for the first time. Koran reports that many students in SDUSD are completing the a-g requirements by taking these online courses. (2017b,c) xiv

The two articles also quote a teacher and former teacher at SDUSD as witnessing students gaming the online assessment system for these courses, and further, the articles quote students openly discussing how they have manipulated the assessment system to progress towards course completion. The articles include screen shots of websites where students have shared answers to questions from the online tests. Students also reported that the online system would allow them to enter random text when answering questions on assessments. A careful reading of these two articles suggests that concerns center not on the midterm and final, which are proctored in school, so much as on the pre-tests used to determine which elements of a course a student must study, and various interim assessments.

These charges raise questions about the degree, if any, to which the impressive improvement in a-g completion rates over those predicted for the class of 2016 in part comes from “gaming the (online) system” by students.

Given that our data are purely administrative, we have no information on the extent to which the alleged problems are widespread in SDUSD. We can provide, however, some statistics on how common it was for students in the class of 2016 to take online credit recovery courses in their senior year, and how they fared.

In 2015-16, 12% of those re-enrolling in the class of 2016 took at least one online course. Of these students, 89% took 1-2 courses, 9% took 3 courses and 2% took more than 3 courses. English accounted for 46% of the classes, followed by social studies (33%) and mathematics (19%). Science, world languages and electives made up the remaining 2%.

Perhaps the most relevant statistic we can provide, in light of the allegations, is the grade distribution, which appears in Figure 4. The median grade was a C, and about 1 in 9 of the course enrollments led to a failing grade. The grades are typically quite low, suggesting that students did not necessarily find these courses to be easy. That by itself, though, does not disprove the allegations cited above.

We reviewed district protocols governing the various assessments and the online final exams in the online courses that students used. We have reproduced these protocols, with district permission, in Appendix 3. Any cheating on screening tests or formative quizzes should be mitigated by the required proctoring of mid-course and final exams. These latter two tests “re-test” content on the screening
and formative tests, so as long as these proctored tests account for a large part of the final grade, students could not pass a course without meeting expectations across all course content.

Although we can neither verify nor dismiss the claims of cheating on online tests, we offer the following suggestions for the district to consider as ways of increasing the integrity of assessments in the online courses it offers.

- The district could consider engaging educators or education administrators from outside the district to observe randomly the midterms and final exams for online a-g courses. These observations could provide independent verification that standards for academic honesty are being upheld. As part of this process, the district should compare pass rates on classes where the final exam was externally observed and classes where there was no external observer. Lower pass rates in the former would indicate that the presence of an external observer lowered performance. One of several explanations could be that the presence of external observers discouraged cheating.

- The aforementioned reports suggest that the alleged cheating occurs primarily on the pre-test designed to identify course components where students lack mastery and on formative assessments taken during the course, which can be taken in un-proctored situations or even when students are outside school. The district could take several steps to reduce the effects of alleged cheating on these tests and assessments by:
  - requiring that the pre-tests at the beginning of an online course be taken at school under the same proctored conditions as the midterm and final exam.
  - investigating allegations that students can enter random text in short-answer questions in assessments. If necessary, teachers could randomly grade such questions by hand.
  - working with the testing firm Edgenuity to ensure that questions are not repeated when students re-take an assessment.
  - considering capping the percentage of the final grade that can come from un-proctored assessments. For instance, if the less rigorously proctored assessments were capped at 30% of the overall grade for a
course, the proctored midterm and final would take on such weight that it would diminish greatly the chances that alleged cheating in out-of-school assessments could materially influence final course grades. It is not clear whether the weight given to proctored tests varies by course. It could be helpful for the district to standardize at least to some degree the weights given to proctored assessments across online courses.
8. Conclusion and Suggestions for SDUSD

Overall, students in the class of 2016 accelerated their rate of a-g course completion in grade 12. Although only 7 of 10 students in the class of 2016 were on track to complete a-g coursework as of August 2015, about 8 out of 10 likely did complete the college prep requirement. This represents a substantial improvement. Several steps the district has taken could account for this increased a-g completion rate, including increased spending on summer school, online a-g courses, alternative paths to completing the world language requirement, and close monitoring of the courses individual students needed to complete by staff in the district administration.

Of the remaining 2 of 10 students, one stayed in the district and did not graduate in 2016, while the other left district-managed schools, mostly for charter schools, and so did not need to complete the a-g requirement. As noted earlier, the official graduation rate excludes those leaving district-managed schools, and therefore the graduation rate does not provide an accurate measure of how many students fulfilled the college prep goal of the reform.

Indeed, the vast majority of students who left the district after grade 11 were off track, suggesting a need for further modifications to district policy and practice aimed at providing early and targeted support for struggling students and, as we discuss below, an alternative pathway to graduation.

We conclude with some suggestions for further steps SDUSD might consider as it continues to strengthen its a-g program.

- The district should consider publishing both its official graduation rate and the percentage of students in district-managed schools at the end of grade 11 who complete the a-g course requirement with grades of D or better by the end of the following school year – regardless of whether they stayed in district-managed schools, switched to charter schools, or left the district. For those who left, the district could project completion rates based on our approach, in which those who had more than one year of work to complete in any subject in their senior year are viewed as unlikely to have completed the requirement. This dual reporting would greatly reduce public confusion, and provide a clearer picture of how close the district has come to its ultimate goal of providing a college preparatory education to all of its high school students.
- Given allegations that students are gaming the online course system set up to help them complete the a-g coursework, in the prior section we offered several suggestions for checking or limiting possibilities for abuse. These suggestions included hiring outside observers to observe midterms and finals, sharply limiting the percentage of a course grade that can come from un-proctored assessments, ensuring that the pre-tests that determine which parts of a course a student must repeat occur in conditions with
proctoring, random checking of written answers on assessments, and steps to randomize questions in tests when a student is repeating an assessment.

In earlier work on SDUSD’s new graduation policy, with co-author Sam Young, we raised a number of concerns and possibilities. Below we summarize those items that remain most relevant.

- The California Education Code requires districts to allow students who have successfully completed grade 10 to choose either a traditional college preparatory or a career preparatory program (Ed Code 52336.1). It is not clear how SDUSD currently addresses this requirement. Our finding that 1 out of 10 students left district-managed schools before the start of grade 12 suggests that the district should formally allow an alternative Career and Technical Education (CTE) route to a high school diploma. Such a policy reform would ensure that the district is in compliance with the Ed Code, and could staunch the outflow of students in their senior year. It would also acknowledge that not all students need to obtain a Bachelor’s degree, and that rigorous CTE coursework can launch many of these students into a variety of rewarding careers and postsecondary opportunities.

- Betts, Young, Zau, and Bachofer (2016) showed that English and mathematics presented the largest barriers to a-g course completion, and that statistical models can accurately identify at-risk students as early as grade 6. Specific possible actions that SDUSD could take include:
  - Adapting an existing “on-track” model such as developed by the above authors, or developing an updated in-house model to identify students at risk of not completing a-g as early as grade 6.
  - Developing supports for these students as early as grade 6, with a focus on mathematics and English.

Acknowledgements

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About SanDERA at UCSD

The San Diego Education Research Alliance at UCSD (SanDERA) is an independent research entity based at the University of California, San Diego (UCSD). Established in May 2010 by the San Diego Unified School District (SDUSD) and the UCSD Department of Economics, SanDERA formalizes and focuses the longstanding relationship between the district and the university.

More information about SanDERA, and a complete listing of publications can be found at sandera.ucsd.edu.
Appendix 1: Data

Our results are based on the academic records of students in the graduating class of 2016. Transcripts provide grades in individual courses at middle and high school levels. To ensure that the semester course counts and overall completion status recorded are correct, we require that students have a transcript record for every year in SDUSD from grade 7 onward. For students who did not complete the entirety of their grade 7 through 12 education in SDUSD – in some cases entering later than grade 7 or other times leaving SDUSD and later returning – transcript information from out-of-district years is also included when available for calculating a-g course completion. SDUSD calculations for graduation do include students joining after grade 7 (also noted in endnote xii).
### Appendix 2: Pathways to Completing the Requirement for a Language Other Than English

San Diego Unified School District  
Office of Language Acquisition  
Pathways for Meeting the World Language Graduation Requirement

<table>
<thead>
<tr>
<th>Pathway</th>
<th>Guidance</th>
<th>Documentation</th>
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</table>
| 1. Completion of two years of district world language courses*  
2. Completion of two years of district-approved IWLS Courses*  
*Students will earn a grade/graduation credit for each course taken. | Students will earn graduation credit for world language courses taken at an SDUSD school in Grades 7 – 12. Students enrolled in world language courses at District-approved Independent World Language Schools may earn graduation credit while enrolled at a District high school in Grades 9 – 12 (per Title 5 of the California Code of Regulations).  
*NOTE: Validation of a Language Other Than English  
In accordance with the UC/CSU LOTE Validation Policy, in which “the completion of higher-level (advanced) course in areas of sequential knowledge demonstrates proficiency of lower-level coursework in the same subject area for the purpose of satisfying the UC freshman admission subject requirements,” students who complete the equivalent of a second year of a language (or higher) will meet the LOTE graduation requirement. | Student grades will be recorded on SDUSD transcripts. |
| 3. Passing an SAT II, AP, or IB exam  
District grade/ graduation credit may be earned by AP and IB students formally enrolled in the course.  
No district graduation credit or grade will be earned for SAT II exams or AP/IB exams taken by students not formally enrolled in the course. | Score of 3, 4, or 5 on an AP Language and Culture or AP Literature exam.  
Score of 3, 6, or 7 on an IB Language HL exam.  
Scores as follows on the SAT II Subject Test:  
- Chinese with listening – 520  
- French/French with listening – 540  
- German/German with listening – 510  
- Modern Hebrew – 470  
- Italian – 520  
- Korean with listening – 500  
- Latin – 530  
- Spanish/Spanish with listening – 520 | Student grades will be recorded on SDUSD transcripts for students formally enrolled in AP and IB courses.  
For SAT II Subject Test and students taking an AP or IB exam while not formally enrolled in the course:  
Option 3 checked on LOTE Proficiency Certification with principal’s signature. |
| 4. Formal schooling in a Language other than English (LOTE)  
No district graduation credit or grade will be earned. | Students with transcripts documenting a minimum of two years of formal education in a language other than English at or beyond Grade 6 have met the world language graduation requirement. Consecutive enrollment is not required. | School transcripts or other enrollment document.  
Option 4 checked on LOTE Proficiency Certification with principal’s signature. |
| 5. Passing a LOTE Alternative Assessment with Principal Certification  
No district graduation credit or grade will be earned. | Students who have never had the opportunity to take a world language course, or who do not have transcripts to document formal education in a language other than English, may choose to demonstrate proficiency via a LOTE Alternative Assessment.  
Assessments are currently available in Arabic, Cambodian, Filipino, French, German, Somali, Spanish, Swahili, and Vietnamese. | Proficient score on written exam.  
Oral/aural proficiency verified by speaker of the student’s language.  
Option 5 checked on LOTE Proficiency Certification with principal’s signature. |
| 6. Assessment by a college or university  
No district graduation credit or grade will be earned. | Some university language departments will conduct an assessment and issue a statement of competency on official letterhead. This formal document will show that the student has met the world language graduation requirement. Students should contact the college or university directly in order to schedule as assessment. Students will be responsible for any expenses incurred during the assessment process. | College or university verification of proficiency.  
Option 6 checked on LOTE Proficiency Certification with principal’s signature. |

LOTE FAQs

What is LOTE?
LOTE = Language Other than English = World Language. All students, starting with the Class of 2016, need to demonstrate proficiency in English and a language other than English in order to meet SDUSD graduation requirements.

What is LOTE proficiency?
For SDUSD graduation purposes, students must demonstrate proficiency in a language other than English equivalent to two years of formal instruction in that language. This does not mean that students need two years of seat time in a world language class. (See note below)

How do students demonstrate LOTE proficiency?
There are 6 options for students to demonstrate proficiency and satisfy the world language graduation requirement. The majority of students will do this via the first two options:
1. Take 2 years of world language courses in an SDUSD school
2. Take 2 years of world language courses in an SDUSD-approved Independent World Language School

Students may also satisfy the world language requirement through the following alternative means:
3. Passing an AP, IB, or SAT Subject exam
4. Completing 2 years of formal instruction in a language other than English at or beyond Grade 6 (verified by foreign transcripts)
5. Passing a district-designed LOTE assessment (assessments are currently available in Arabic, Cambodian, Filipino, French, German, Japanese, Somali, Spanish, Swahili, and Vietnamese).
6. Receiving a certificate of proficiency from a college or university

Can my student waive the LOTE graduation requirement?
No. Every student who intends to graduate from an SDUSD high school must meet the requirement in one of the six ways listed above.

What if my student has a 504 or an IEP?
Please consult with your student’s counselor and/or SST for additional information.

What if my student already speaks a language other than English?
Please review options 3 through 6 above. Students who already speak a language other than English may be able to satisfy the world language requirement without having to be enrolled in two years or world language courses. (See note below)

*NOTE: The LOTE requirement is about language proficiency, not seat time. Passing a higher-level course validates the course of study for any lower level courses. For example, if a student passes French 5-6, he or she will earn graduation credit for that course and will meet the world language requirement since 5-6 is a third-year course. SDUSD considers a “D” to be a passing grade, but a “C” or better is required for UC/CSU admission.

Source: SDUSD Office of Language Acquisition (Adapted from SDUSD AP 4771), 6/2016
Appendix 3: District Protocols on Academic Honesty in Online Courses

This appendix contains information on the district’s policies for online courses, and, on the final page of the appendix, the online academic honesty form that all students and parents must sign before students take online courses in the district. We thank the district for sharing these protocols and the form.

DISTRICT REQUIREMENTS FOR PROCTORING ONLINE ASSESSMENTS

Requirements for sites administering online assessments at their schools:

1. Teachers should explicitly provide definitions of academic integrity and misconduct (cheating, plagiarism, etc.) to avoid confusion and uncertainty of the students, and clearly state the consequences of cheating in the Academic Honesty Policy. iHigh will provide an updated Academic Honesty policy annually, and it is required that each site will have the student and parent sign the form each semester to be kept at the school site. At the end of the school year, all Academic Honesty Policy forms are to be sent to iHigh.

2. Assessments that are proctored require that outside resources are removed and not accessible to the student. For this reason, students should keep their phones and backpacks outside the testing area.

3. The identity of the student taking the assessment needs to be confirmed to ensure that the student taking the test is the student taking the class. Students need to sign in and sign out of the lab and provide ID if applicable. Proctors need to check the computer monitors of the student to ensure they are taking the correct assessment for their own class, and the proctor should be the one to unlock the exam.

4. Students should be given blank paper by the proctor to ensure outside information is not being brought into the proctor area. All scratch work by the student needs to be completed on the paper provided and the paper should be collected at the end of the exam.

5. In some cases, students will need to use materials other than the computer to complete the assessment. iHigh will annually provide a list of approved supplemental materials.

6. Organization of the room for the proctored assessment is key to a productive outcome. In constructing a space for the student, teachers and coaches need to give thought to the placement of the computer screen to ensure visibility at all times. Students taking exams should be separated from other students to avoid potential copying or assistance.
7. Allocate enough time for the student to finish the assessment in one sitting or class period. If the online exam cannot be completed in one sitting, it is crucial to alert the teacher of record that the student has saved her/his work and intends to complete the assessment during a future class. The student should be made aware that completing any portion of the exam outside of the proctored setting can invalidate the test. Edgenuity includes a feature to hide any questions that have been viewed when the student next opens the exam. When the student resumes working on the proctored assessment, all of the district guidelines need to be enforced again.

8. All work for an online course, including the assessments, needs to be completed before the last day of the term in order to receive credit for the class. After the term has ended, the course will be locked down to avoid student access to the exams in a non-proctored setting.

9. The proctor for the exam should not interact or provide academic assistance to the student unless previously approved by the teacher of record. Student assistance should be limited to procedural questions surrounding the exam and not include assistance in answering the questions.

10. Students should show the proctor they have submitted the online exam before they leave the testing room. The proctor should review the student work to be sure all portions of the assessment have been completed; this includes all spoken, written, and interpretive portions of the exam. An example of this would be the foreign language midterm and final exams that have 3 parts that need to be completed in a proctored setting.

11. If a student does not have an online lab on their main campus, they should reach out to their teacher of record for an approved proctor form. This proctor will be given the procedures for administering the test.

District sites that identify test-taking irregularities shall adhere to the following guidelines:

1. If the proctor notices a potential violation of any of the district requirements during the exam, s/he should question the student. If the breach is not severe and can be remedied without compromising the test security, then the remedy should be completed prior to student resumption of work. An example of this would be a cell phone spotted in a student pocket but no evidence of student use of the cell phone. The cell phone should be removed from the test area.

2. If irregularities are discovered after the exam period has ended, the proctor should collect any evidence and report the discovery to the teacher of record and appropriate iHigh staff member. An example of this would be answers to specific test questions found on the scratch paper. The proctor should alert the teacher of record that the irregularity was discovered.

3. Proctors, teachers, and coaches will provide full disclosure of the events surrounding the irregularity, including observations made before, during, and after the proctored assessment, to administration
and appropriate iHigh staff member.

4. When irregularities of the proctoring guidelines are confirmed by district staff, parent/guardian contact will be made by the teacher of record. The parent or guardian will be provided with accurate details of the offense and the consequences. A meeting will be convened upon parent request to allow the student to provide any additional details that may be relevant.

5. Consequences for cheating during online proctored assessments will be outlined in the school academic honesty policy. A copy of the Academic Honesty Policy will be provided to the parent and student after the offense has been confirmed to outline the consequences.
2016-17 iHigh Virtual Academy

ACADEMIC HONESTY POLICY

Student Name: ____________________ Supervising Teacher: ____________________

Policy Statement: Honesty/Integrity – Academic Honesty is non-negotiable in an online Independent Study program, such as iHigh. Any form of cheating, plagiarism, or academic dishonesty is grounds for withdrawal from the program. Participating students need to clearly understand the difference between submitting an assignment “in your own words” and submitting an assignment that is largely or partially copied from another source. Any language that is copied word for word from any source must include quotation marks and the proper citation (attribution to the original author). The consequences for plagiarism or other forms of cheating include receiving a “zero” on the assignment/assessment in question, and as possible withdrawal from iHigh’s online Independent Study program. If a dual enrollment student is withdrawn from an iHigh course for cheating/plagiarism, then the student will forfeit future privileges to enroll in an iHigh online course.

1. Cheating – Any intentional giving/discussing/using of external assistance relating to an examination, test or quiz, without express permission of the teacher. It is strictly prohibited to take cell phone photos of test questions or to Google answers during an exam. To repeat, cheating is grounds for withdrawal from the iHigh program.

2. Fabrication – Any intentional falsification or invention of data, citation, or other authority in an academic exercise.

3. Unauthorized collaboration – Intentional collaboration of an assignment between a student and another person, if such collaboration is not permitted.

4. Plagiarism – Any intentional use of another’s ideas, words, or work as one’s own. Plagiarism includes the misuse of published/copyrighted material, whether written or visual, and/or the work of other students.

5. Theft or alteration of materials – Any intentional or unauthorized taking, concealment, or alteration of student, teacher, office or library materials.

6. Pattern of test avoidance – A pattern of absences on test days or major assignment due dates for the apparent advantage of performing better at a later date or for gaining extra working/studying time.

7. Pressure for unsubstantiated grade changes – Any student request for a raised grade that is not based on mistakes in correction, recording, averaging, or other clerical error.

8. Abusive conduct with computers and the network – Such conduct includes, but is not limited to, prohibited use, damage or theft of system hardware or software; the altering of any system software or software configurations; placing unlawful information, computer viruses or harmful programs on any computer; and pasting copyrighted software.

Prohibited Use: Transmission of any material in violation of any federal or state law is prohibited. This includes, but is not limited to, distribution of:

a. Information that violates or infringes upon the rights of any other person.

b. Defamatory, inappropriate, abusive, obscene, profane, sexually oriented, threatening, racially offensive, or illegal material.

c. Advertisements, solicitations, or political lobbying.

d. Information that encourages the use of controlled substances, or the use of the system for the purpose of inciting crime.

Warning: Inappropriate use may result in the cancellation of network privileges. The site system administrator(s) or district security administrator may close an account at any time deemed necessary. Depending upon the seriousness of the offense, any combination of the following will be enforced. Education Code, district procedure, school site discipline policy, network use guidelines.

9. Unauthorized electronic entry – Any entry without permission. Any access, downloading and/or printing of materials that would be considered by any staff member to be pornographic, unlawful, obscene, or otherwise objectionable.

The use of Sandi Net (SDUSD network) and the Internet is a privilege, not a right, and inappropriate use will result in cancellation of those privileges. The administration, teachers, and/or staff may request the district to deny, revoke, or suspend specific user access. Please refer to the Technology section in the Focus for Parents handbook for more information.

I acknowledge that I have read and understand the Academic Honesty Policy. I understand the consequences if the policy is violated.

__________________________
Student Signature

__________________________
Date

__________________________
Parent Signature

__________________________
Date
The UC requires that students successfully complete (with a C or higher mark) 15 year long, approved college preparatory courses (that is, 30 semester-long courses) in seven subject areas in order to be eligible to apply for admission. The specific requirements are: Subject A: Social Studies (4 semesters), Subject B: English Language Arts (8 semesters), Subject C: Mathematics (6 semesters), Subject D: Sciences (4 semesters), Subject E: World Language (4 semesters), Subject F: Visual and Performing Arts (2 semesters), Subject G: College Preparatory Electives (2 semesters).


The a-g requirement is not all that students need to graduate. There are additional course requirements, and students must also have a cumulative grade point average of at least 2.0 (that is, averaging a C) in order to graduate.

Note: Students can meet some of these requirements by taking certain college courses or scoring at certain levels on Advanced Placement (AP), International Baccalaureate (IB), or SAT subject area examinations. More information is available from the University of California Office of the President (http://admission.universityofcalifornia.edu/counselors/freshman/minimum-requirements/subject-requirement/index.html).

For example, we did not have access to grades on the Language Other Than English (LOTE) exams, which the district used as an alternative route for students to complete the a-g world languages requirement.

This is perhaps slightly too optimistic as we calculated that 1.8% of graduates in the class of 2016 completed the Joint Diploma Program which does not require a-g completion.

The state’s methodology can be found at http://dq.cde.ca.gov/dataquest/CohortRates/CohortOutcomeDefinitions2016_8_22.pdf.
The above comparison uses approximate numbers. In our class of 2016 cohort, we obtain a graduation rate of 88.3% when we calculate the number of standard diplomas granted as a fraction of those still enrolled in district-managed schools (excluding charter schools) in 2015-2016. There is a more minor distinction between our a-g completion rate and the official graduation rate calculated by the state. The state includes in graduates those who pass the CHSPE test and those who receive an adult education diploma. It is unlikely that these students will have completed a-g and they were excluded from the estimate of the number of a-g completers. But adding these two groups into the list of graduates, our cohort graduation rate rises to 90.4%, which is very close to the official SDUSD graduation rate of 91.2% as reported by the California Department of Education. The remaining difference likely reflects two factors: 1) because we have focused on students enrolled in SDUSD from grade 7 to 11, we exclude those arriving in SDUSD after grade 7, while the state includes students who arrive in any grade up to grade 12, b) because our on-track estimates require full transcripts, we have further focused on students with complete transcript data from grade 7 to 11.
