

Module Script “Longitudinal View of EL Students”

Slide 1

Welcome everyone. I am Kim Shinault, EL data analyst from the Department of Education's Accountability team. Today I am going to share with you, some new analyses that we have been working on in partnership with ASU researcher Momoko Rai.

Slide 2

Today will be looking at students' academic pathways via their mathematics courses in middle school and high school. We will see where students are on target in these courses, what percentage of students graduate on time, and how many go on to college or university. In addition, we will compare these academic pathways between EL and non-EL students, and between ethnic subgroups of students.

Slide 3

Some background information before we get started:

All of these students began 7th grade together in 2013, and we followed them through 12th grade in 2018, then looked at their college enrollment status in 2019. Students were identified as being an EL or former EL based on their fiscal year 2015, or 9th grade status. We chose this year because changes were made to AZELLA cut scores just prior to that. Looking for EL status or former EL status in this year also allowed us to identify all students who had experienced being an EL at some point in their education. It is very unlikely that a student who began 7th grade with this group of students had not been identified as an EL at some point before 9th grade in 2015.

Slide 4

As a disclaimer, many sources of data had to be used for this analysis, causing us to face some data quality issues. The goal today is to show teachers, testing coordinators, and other practitioners what the long-term academic pathways for EL and non-EL students look like. Hopefully this can inspire conversations relevant to your schools, your districts, and your student populations.

Slide 5

The data presented will be color coded. The major color patterns to look for are green, yellow, and orange. Green indicates that students were advanced in their academics, yellow were on track, and orange were delayed. Because this data follows mathematics courses, students who are on track are those who began Algebra I in 9th grade. Students who were advanced began Algebra I before high school, and those who were delayed began Algebra I later in high school. The bottom rows on this table indicate that some students will have no math or will no longer be identifiable in the system. As you will see, these students will show in the graphics as a dark blue. Now we will move into the data graphics.

Slide 6

There is a lot of information in this graphic and I will take some time to walk through all of the major pieces. Here we are presenting non-EL students who began 7th grade in 2013. These

students have never been identified as ELs. There were 64,848 of these non-EL students included in this data. The vertical bars separate the fiscal years included in this data. The far left vertical bar is fiscal year 2013 and the far right bar is fiscal year 2019, when the student is past their scheduled graduation period. On this far right vertical bar, there are three outcomes presented, the bottom green bar are the students who entered a university. Above that in the middle yellow bar are the students who entered a community college. The top blue bar are the students who did not go to a university or community college and are classified as an 'unknown' outcome. 69% of these non-EL students graduated on time, 22% went to community college, and 18% went to a university. As a reminder, the yellow ribbon shows the students that were on track in their math academics. The orange ribbon shows students who were delayed, and the green ribbon shows students who were advanced in their studies. Also remember that the blue ribbon are students not enrolled in a math course or have left the system. Take a moment to study these patterns and then we will move on to discuss some general patterns that are revealed in this graphic.

Slide 7

The first thing to notice in this graphic is the green color, or advanced study courses, appear to not be widely available in 7th grade, but increases substantially in 8th grade, and again in 9th grade. These advanced studies then steadily decline throughout the high school years. This raises the question as to whether advanced courses are as widely available in those later high school years.

Slide 8

The second thing to notice in this graphic is the change in color flow from green to yellow as the students transition from 8th to 9th grades. In 8th grade these students took advanced math courses, but then repeated those same courses in 9th grade. Could this be due to schools or districts not accepting the 8th grade advanced course as the student entered high school? This effect seems to have a big impact on the number of students who are able achieve advanced math placements again the following year.

Slide 9

The third thing to notice in this graphic is that many students are not enrolled in math courses in 12th grade, which is the far right 'zone' of this graphic. Could this be because 12th grade students are encouraged to take other courses in place of traditional math courses, such as finance courses?

Slide 10

The fourth thing to notice in this graphic is that the percent of graduates going to college or university are low. 22% of non-EL students go to community college and 18% go to university. The 3 Arizona university systems find that the number one reason why students don't apply for college is because of the lack of adequate high school math credits. Here we can see contribution of math coursework to college or university enrollment.

Slide 11

Now we will see the results for EL and former EL students who began 7th grade at the same time in fiscal year 2013. There were 17,406 of these students who were still EL by the time they

reached 9th grade or had reclassified at some time in the past. There are many similarities between these EL students and the ones we looked at earlier who had no history of being an EL. We do see however, that the size of the green, or advanced, ribbons are smaller than those of the non-ELs. And although 24% of these EL students went on to community college, which is higher than the percent of non-ELs, the percent who attend university after graduation is about 5% lower than that of non-ELs. In the next slide I will present break down the EL students into current and former ELs.

Slide 12

In this slide we can see the students who began high school as EL students at the top, and students who had already reclassified at the bottom. The top graph shows that students who began high school as English learners had increasingly more delays in mathematics coursework as they approached graduation and less than 2% went on to a university enrollment. There is also less on-time graduation than those who reclassified prior to high school, by about 26%. In the bottom graph we can see that former EL students attended university about 14.5% of the time, which is roughly 4% less than students who were never ELs but is far greater than students still identified as ELs at the start of high school.

Slide 13

Here we see on-time graduation percentages for non-ELs, ongoing ELs, and former ELs. In this cohort of students who began 7th grad together in 2013, about 68% of non-ELs, in the blue bar, went on to graduate on time. In the yellow bar we see students who were ELs at the beginning of high school graduated on time just over 50% of the time, but those who became fluent in English proficiency, or FEP in the red bar, had graduation rates that matched non-ELs by the time they were 2 or more years past their reclassification point.

Slide 14

When we look at post-secondary enrollment, we can compare these same groups. On the left we have community college enrollment and on the right we have university enrollment. We can see that the students who were still ELs at the start of high school went to community college and university with the least frequency, but those who reclassified prior to high school went to college at the same or higher rates than non-EL students. I want to point out that we are speaking about the percent of students in this cohort that started 7th grade together, and as a reminder, some of them left the Arizona education tracking system at some point in their education and that does impact the counts we see here.

Slide 15

Next we will see the how ethnic subgroups compare between non-EL students and EL or former EL students. We will cover white, Hispanic, Native American, African American, Asian, Native Hawaiian/Pacific Islander, and Other/Multiracial subgroups.

Slide 16

First, we compare the white ethnic subgroup of non-EL, EL, and former EL students from this same cohort that began in 7th grade together in 2013. We want to focus our attention on the same patterns that we looked at earlier. In the table below the graphs we can see the groups' percentages for on-time graduation, and community college or university enrollment. I have also

placed the statewide FY18 graduation rate for all students at the bottom of this slide. You can see the differences in on-time graduation vs. the statewide graduation rate.

One reason for the differences between these values is that statewide graduation rate has all students combined, regardless of their ethnicity or EL status. And again, the students in the graphics who are no longer identifiable in the school system are not included in the statewide graduation value, but they are included in the counts here to demonstrate all of the possible pathways that took place for this cohort of students. In other words, that not all of the students in the graph are included in the final statewide graduation rates for fiscal year 2018, and not all of the students in the statewide graduation rate are included in these graphs. The number of non-EL students who left the school system may be giving the *appearance* that those who were former EL students graduated on-time more often or attended colleges more often, when the counts may actually be much closer.

Slide 17

In the comparison of the Hispanic ethnic subgroups we can see many similarities in the non-EL and former EL groups. One notable similarity is college attendance in these two groups. Also, on the top right, you can see the amount of EL students who are no longer in the system or no longer taking math as they approach the end of high school, and the impact that has on their college attendance.

Slide 18

Here we see Native American ethnic subgroups. On the top right, those who were still identified as ELs at the start of high school show substantial delays in math courses beginning in 10th grade, which is two years earlier than those who were never ELs or were formerly ELs.

Slide 19

Next we present the African American ethnic subgroups. On the bottom right we can see that those who were formerly ELs have a large green ribbon of students in advanced math courses from 8th grade through to graduation. Those who are still ELs in 9th grade, on the top right, only have a band of advanced students in 10th grade. Many of them appear to become delayed the following year, which may be a data reporting issue and should be looked into further to determine what is happening.

Slide 20

Immediately we can see that the academic performance of students in the Asian ethnic subgroup are more often advanced than their non-Asian peers, particularly for those who are non-EL or former EL. At first glance it appears that this is more pronounced in the non-ELs, although with closer examination, the former EL subgroup also has a large ribbon of advanced students, but there were fewer of them in 7th grade. The non-EL and former EL students are more likely to enroll in university than other subgroups. They are also more likely to attend some kind of post-secondary education than not. Unfortunately, we see that those who are still ELs at the start of high school are more likely to not be identifiable in the system as they get higher in grades.

Slide 21

Next we have the Native Hawaiian/ Pacific Islander subgroup of students. As you can see there were not enough of the EL group to graph here. Although we can see the former and never ELs. Right away we can see that the former ELs are most likely to be on track in their academics. At least until 12th grade when more start to fall behind. Although very few of this group are taking no math or leaving the system.

Slide 22

In the multiracial or other subgroup, we again have too few students in the EL category to graph. The formerly EL have a large number of students in advanced courses in 8th grade, and this group stays consistent in size through much of high school.

Slide 23

I want to show you some very preliminary findings on English courses in the whole cohort of students who began 7th grade together in 2013. We are currently sorting through the wide variety of English language courses that are available in these state level datasets. At this time, we have started to classify high school courses as college prep or other. We can see the transition into mainly college prep type English courses in 9th grade. We will continue to clean this data as the summer progresses and bring you more on this topic in the fall.

Slide 24

Looking at historical statewide academic data is complex because of changes to assessment cut scores, academic standards, data storage systems, and changes in the population of students over time. We aimed to present you with a snapshot of those who began 7th grade together as a cohort of students that followed various paths toward graduation and beyond. We continue to work toward improving our ability to provide these kinds of big-picture views of statewide data and hope that they can inspire conversation about student's needs and outcomes. Thank you for your time.

Slide 25

If you would like to reach the Accountability team with any questions or comments, please email us at Acieve@azed.gov.