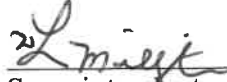


ENDS MONITORING REPORT

May 8, 2024

I certify that the information contained in this report is true and that any assertions made are reasonably based upon available evidence.



Superintendent

5/8/24
Date

Contextual Background

Covid Recovery

The COVID pandemic had a dramatic effect on the validity of statewide academic performance data and on the ability to compare data from year-to-year. Some of the longitudinal data in this report is from the pandemic years.

- 2018-2019 The last normal year for statewide testing.
- 2019-2020 No Statewide testing was performed; start of COVID pandemic.
- 2020-2021 Schools operated using either a remote or hybrid modality. Instruction was constantly disrupted by the need to quarantine; individual schools were often shut down. The state warned that testing during this year was unreliable as most schools did not meet the required participation threshold of 95% (our district exceeded the threshold).
- 2021-2022 Students were in person, but instruction was constantly disrupted by COVID surges, COVID snow days, and class cancellations due to quarantine. The collective state data was unavailable until very recently.
- 2022-23 Ends reports look at the year behind – so the data presented in this Ends Report is mostly from last year. The official state data from the Agency of Education Dashboard was unavailable until recently; apparently due to updates being made to the website platform: <https://education.vermont.gov/data-and-reporting/vermont-education-dashboard/vermont-education-dashboard-assessment> .

Since many of the Ends interpretations were created using state data as evidence, this has created problems both in the timeliness of Ends reporting and in the ability to make final judgements about student performance (as many use the state averages as the standard of comparison).

Looking Ahead

Since student data can fluctuate from year-to-year, looking at trends over time is critical to determining the impact district initiatives are having on student performance. The state has not administered its testing in a consistent enough manner to gain true longitudinal data (it takes 3-5 years to establish a trend).

- In 2015, the state changed the assessments it used for state Testing from NECAP to SBAC.
- In 2018, it changed which high school grades take the statewide assessments.
- In 2019, it adopted a new science assessment, the VTSA (Vermont Science Assessment).
- In 2020, the state did not administer its assessments.

- In 2023, the state did away with the SBAC and the VTSA and replaced them with a new assessment system run by Cognia. This change was made with less than six months' notice to districts.
- In 2024, the state changed when the assessments are given: over a month and a half earlier than previous years – an odd change for what is supposed to be an end of the year summative assessment.

It is difficult to make truly meaningful judgements on longitudinal data from Vermont's state testing because what is being collected and when it is being collected has changes so frequently.

Current Work

Given the uncertainty around the meaningfulness of state data, the district has been onboarding its own internal assessment systems with Track My Progress (TMP) and STAR 360 at the forefront. Both systems evaluate student progress on the Common Core Standards and provide staff with real time data so that they can adjust instruction based on student performance. We use two different systems because individually they do not cover all grades. TMP is used through grade six, and STAR 360 is used at the middle-high school.

OSSD ENDS Statement

Policy Title 1.0 Mission Statement: Students have the knowledge, skills, and tools to be prepared for the next stage of their lives, which justify the resources invested by the community.

Further, our core focus is on the following:

1.1 Critical thinking: Students creatively apply experiences and critical analysis to solve problems and make informed decisions.

1.2 Foundational Knowledge: Students possess comprehensive knowledge of a core curriculum in the following areas:

1.2.1 Reading, writing and communication

1.2.2 Mathematics

1.2.3 Science

1.2.4 Social studies

1.2.5 Life Skills

1.2.6 The Arts

1.3 Ability to Adapt: Students are adaptable, resilient and can manage change.

1.4 Information Technology: Students use and apply information and technology appropriately, effectively and objectively.

Policy Preamble: *Students have the knowledge, skills, and tools to be prepared for the next stage of their lives, which justify the resources invested by the community.*

Interpretation: I interpret the Ends policy preamble as meaning the district will pursue educational activities and programming that will ensure all students grow or acquire proficiency

in the Common Core Standards, the Next Generation Science Standards, and the 21st Century Skills.

I further interpret the clause, “which justify the resources invested by the community,” as a potential constraint to how many Ends the district can afford, in a monetary sense, to pursue at one time. That said, the district in 2022-23, because of the support of the taxpaying community, was able to engage in work on all of the Board’s Ends for the first time.

Therefore, I interpret the preamble as directing the district to pursue as many of the Ends as the budgeting process allows until 1) they have crossed a pre-set threshold of achievement, and 2) they are self-sustaining.

Given this, I interpret that the district complies with this policy when one of the following two conditions are met:

1. Ends that have progressed beyond their achievement thresholds are self-sustaining; that is, they require only minimal additional budgetary support to maintain a steady state above the threshold, and they have exceeded the threshold for three consecutive years. These Ends will be called **Mature Ends**.
2. Ends that are currently the focus of significant improvement efforts, called **Critical Ends**, are showing trend lines that indicate they are approaching or exceeding their pre-set achievement thresholds.

Rationale: During the final decades of the Twentieth Century, corporate, political, and educational leaders recognized that the economic foundation for prosperity in the United States was slowly shifting from a labor and production model to one based on digital information sharing and high technology. Since that recognition, governmental, academic, and corporate entities have worked together to deeply research the skills needed by the next generation of students if they are to succeed in this new economy.

The research identified two separate types of skills that are both equally needed by the modern world. The 21st Century Skills represent the personal abilities and inclinations that are required: analytical reasoning, problem solving, teamwork and communication. While the Common Core and Next Generation Science Standards (NGSS) represent the content-based academic knowledge that is required. It was determined that proficiency in both realms is requisite to preparing students to navigate the current rapidly evolving digital society. These skill and content standards, if mastered, will, by well-researched design, fully prepare students for, “the next stage of their lives.”

Evidence: Because all the Ends are currently above or approaching their threshold targets, I report full compliance.

Provision #1.1 (Mature End) Critical Thinking: *Students creatively apply experiences and critical analysis to solve problems and make informed decisions.*

Interpretation: All graduating seniors whose educational programming has not been modified by an educational plan (IEP, 504, ESP) will achieve a score of proficient or higher on all assessed categories of their senior project: the paper, the portfolio, the product, the display, and the defense.

Rationale: To, "...be prepared for the next stage of their lives," students need to have the requisite skills to survive in the information age. Those skills, often referred to as the 21st Century Skills, are the core competencies students need to possess to thrive in their post-secondary lives with critical thinking being identified as the most needed aptitude.

Assessment of student performance on the senior project is an ideal means to measure achievement of this End as it requires students to apply what they have learned across their OSSD careers to solve unique problems. Further, students must communicate their process and findings effectively using appropriate technology to explain their solutions. Because of this, the senior project rubric evaluates students on all the components related to critical thinking and is uniquely suited to measuring achievement of this End.

Evidence: In 2022-23, all graduating seniors whose programming was not modified by an educational plan or required accommodation achieved proficiency on their senior projects. In addition:

- 59% of graduating seniors earned "Exceeds" on at least one category.
- 18% of graduating seniors earned "Exceeds" on at least two categories.
- No graduating seniors earned "Exceeds" on all five categories.

This provision is a mature End and is in compliance.

Provision # 1.2.1 (Upgraded to Mature End) Foundational Knowledge: *Students possess comprehensive knowledge of a core curriculum in the following areas: reading, writing and communication.*

Interpretation: This provision will be considered a Mature End when the percentage of district students achieving proficiency in grades three-through-nine collectively, are within three percentage points of the state on the English Language Arts assessment for three consecutive years. This provision, as of 2022-23, has transitioned from a critical to a mature End.

Rationale: The state assessment was chosen as it tests student achievement on the Common Core English Language Arts (ELA) standards, and proficiency on the Common Core was interpreted as a requirement for compliance with the overall Ends policy (see preamble rationale).

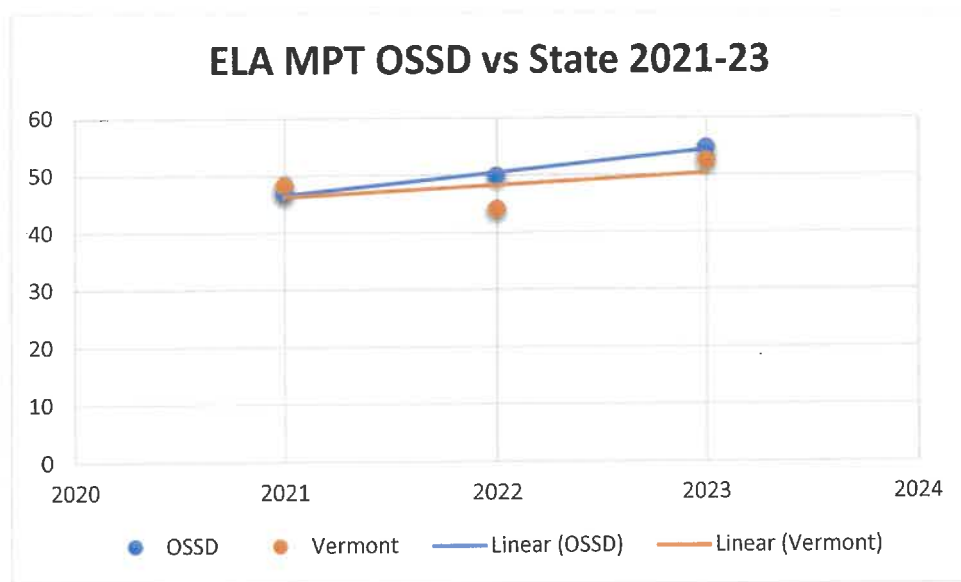
In 1997 Vermont signed into law Act 60, which was designed to equalize spending and educational opportunity across the state. Because funding correlates to student achievement¹, equal funding should also equalize student performance on standardized tests. This is especially true in a state like Vermont that controls and mandates much of the educational process. Therefore, the state average was chosen as the compliance threshold for this provision.

In terms of including the three-percentage point variance, all assessments, including Cognia have measurement error; that is, the total variance in scores that would be seen if the same students took the test several times. In terms of the percentage of students reaching proficiency, that variance typically amounts to about three percentage points². Therefore, no achievement difference can be claimed when, for example, 55% of students achieve proficiency on the one hand, and 58% of students achieve proficiency on the other hand, because both amounts fall within the expected variance range that would be caused by measurement error.

¹Unless significant funding is used to increase the focus on higher order thinking skills.

²Assumption based on MCAS research as the two assessments are very similar and contain similar variance in their raw scores.

Evidence: This most recent data below is from the spring 2023 administration of the English portion of the state assessment.



In the graph above, you can see the percentage of OSSD students who achieved ELA proficiency over the past three years versus the State of Vermont:

- The district has shown continual improvement over time versus the state including the past three years. Eight percent more of the entire student body is reaching proficiency in ELA compared to two years ago.
- The data indicates that ELA performance has transitioned from being a critical to a mature End: OSSD achievement in ELA has exceeded the performance threshold for three consecutive years and continues to increase its lead over the state's performance.

I report compliance.

Provision # 1.2.2 (Critical End) Foundational Knowledge: *Students possess comprehensive knowledge of a core curriculum in the following areas: mathematics.*

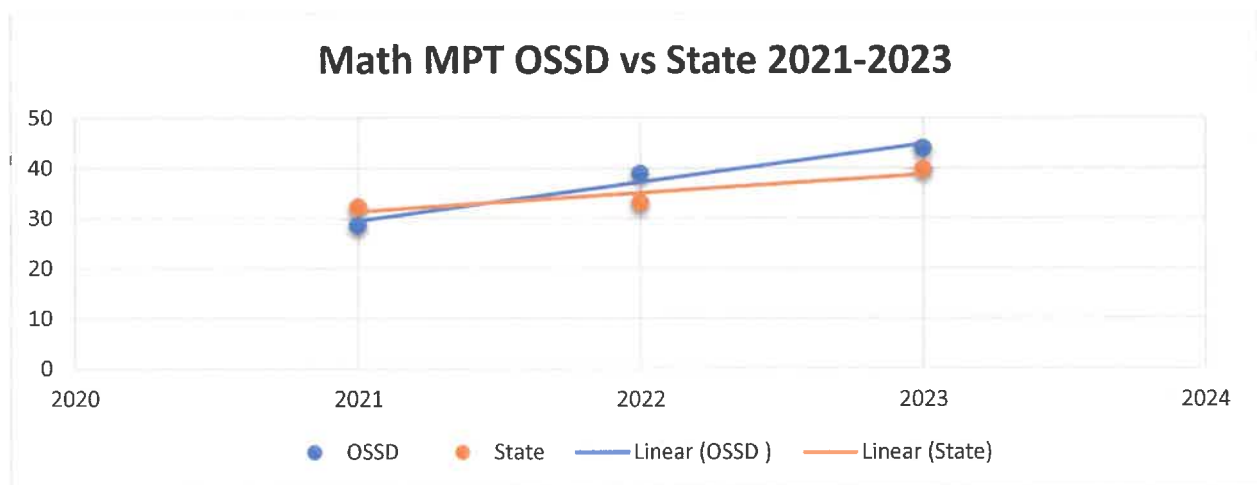
Interpretation: This provision will be considered a Mature End when the percentage of district students achieving proficiency in grades three through nine collectively are within three percentage points of the state on the mathematics portion of Cognia for three consecutive years.

This Critical End will be considered in compliance if it shows improvement over time relative to the achievement threshold outlined in the paragraph above.

Rationale: In addition to the rationale already presented in 1.2.1 above, Cognia is an ideal assessment tool to measure students’ foundational knowledge as it is a criterion-referenced test: it measures how well students have mastered a well-defined set of mathematical skills and content. Further, it is designed to test mastery of the Common Core standards which were created specifically to ensure that students are prepared to either enter the 21st Century workforce or top tier post-secondary programs. Lastly, Cognia is already mandatory, meaning that additional time does not need to be taken from students in order to collect data relative to this End. Its weakness is that in Vermont, it is a “no-stakes” test; therefore, scores on the assessment may not accurately reflect student mastery of mathematics because there is no consequence for poor performance and students may not be motivated to try their best. This has been evidenced in our district by the number of students who spend less than 5-10 minutes on these exams – a remnant of the old culture that downplayed the importance of the state assessments.

A final benefit of Cognia is that it provides both a criterion-reference score (CRS), how much of the total expected content and skills each student has mastered, and a standards-referenced score (SRS), what level of proficiency each student achieved based on the portion of the content they know. The CRS is the scaled score, and the SRS is the achievement level (I, II, III, and IV). The CRS is useful for determining growth over time, the SRS indicates if a student is considered to have mastered the required content in a subject area.

Evidence: This most recent data below is from the spring 2023 administration of the mathematics portion of the state assessment. Remember that the data from 2021 and 2022 was from the SBAC exam and the data from 2023 was from the Cognia exam.



In the graph above, you can see the percentage of OSSD students who achieved mathematics proficiency over the past three years.

- The trendlines show that the OSSD has made great gains over the past three years – fifteen percent more of the entire student body are reaching mathematics proficiency compared to two years earlier. Further, the district has exceeded the state average for two years in a row, meaning that this will become a mature end if this trend continues into 2024.
- 2022 was the first year since at least 2015 that the OSSD has outperformed the state in mathematics.
- It should be noted that in 2021, there was an anomaly in the scores from RES that brought our total score down – RES scores dropped dramatically in 2021 and then jumped back up in 2022. We were unable to find a reason for the drop; the quick return to high scores implies that it was not due to an actual loss of knowledge by the students. It may have been due to how the tests from RES were scored (mis scored) by SBAC that year.

I report compliance because we exceeded the state average in mathematics and because our scores continue to increase year after year.

Provision # 1.2.3 (Critical End) Foundational Knowledge: *Students possess comprehensive knowledge of a core curriculum in the following areas: science.*

Interpretation: This provision will be considered a Mature End when the percentage of district students achieving proficiency are within three percentage points of the state on the Vermont Science Assessment (VTSA) for three consecutive years.

This Critical End will be considered in compliance if it shows improvement over time relative to the achievement threshold outlined in the paragraph above.

Rationale: The VTSA replaced the New England Common Assessment Program (NECAP) in the spring of 2018. The VTSA was replaced by Cognia in 2023. Its benefits are identical to the previous assessments in terms of validity, ability to discriminate between levels of mastery, and minimization of measurement error. It too, is a criterion reference test. In support of the interpretation of the policy preamble and what it means to be in compliance with the Ends policy as a whole, the state assessment incorporates the Next Generation Science Standards (NGSS) as its basis, meaning that it is fully aligned with what current research sets as important for students to know and be able to do in science to prepare them for the, “next stage of their lives.”

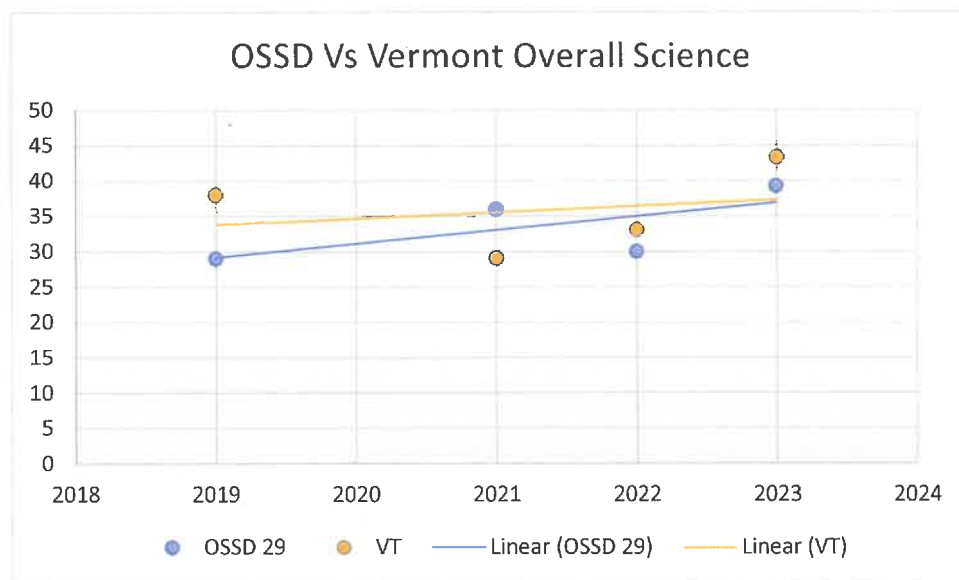
Because the NGSS focuses not just on content but also on process, the state assessment will also evaluate to some degree students’ critical thinking skills, adaptability, and technological literacy, all of which are Board Ends. The process goals of the NGSS are communication, collaboration, inquiry, problem solving, and flexibility.

A final benefit of the science portion of the Cognia exam, is that it provides both a criterion-reference score (CRS), how much of the total expected content and skills each student has

mastered; and a standards-referenced score (SRS), what level of proficiency each student achieved based on the portion of the content they know. The CRS is the scaled score, and the SRS is the achievement level (I, II, III, and IV). The CRS is useful for determining growth over time, the SRS indicates if a student is considered to have mastered the content in a subject area.

Unlike math and ELA, this assessment is administered in grade eleven which is problematic for a district such as ours that sends approximately fifty percent of its juniors to the technical center. Since juniors at the technical center do not take science, they miss a whole year of study prior to taking the science assessment. Therefore, comparison with the state average should not correlate as clearly as does ELA and mathematics considering that the vast majority of eleventh-grade students statewide do not attend a technical center and do take a third year of science. This assessment is given in grades 5, 8, and 11.

Evidence: This most recent data below is from the spring 2023 administration of the science portion of the state assessment. Remember that the data from 2021 and 2022 was from the VTSA and the data from 2023 was from the Cognia exam.



In the graph above, you can see the percentage of OSSD students who achieved science proficiency over the past four years, three of which were impacted by COVID, versus the State of Vermont:

- The trendlines show that the OSSD's science performance has been improving over time relative to the state.

I report cautionary compliance. In 2022-23 significant resources were put into the further development of a K-12 STEM program to bolster the science curriculum work done in 2020. The impact of that investment should be visible in 2024. Further, the interpretation may need to be adjusted to take into account that at least half of our students do not take a science course in

eleventh-grade due to enrollment at the technical center – this makes comparison with the state difficult because the majority of students statewide take an eleventh-grade science course while to majority of OSSD students do not.

Provision # 1.2.4 Foundational Knowledge (Upgraded to a Critical End): *Students possess comprehensive knowledge of a core curriculum in the following areas: social studies.*

Note: This interpretation was adjusted based upon the input of the board evaluation subcommittee for the purpose of setting baseline data for the incoming superintendent.

Interpretation: This End will be considered in compliance when all students have successfully met the standards of the social studies courses required for graduation.

Rationale: The most common way for a district to set foundational learning standards is by prescribing the courses students must take and pass to graduate. Since the OSSD requires three years of high school social studies, the passage of which is how OSSD students prove they have gained foundation knowledge in this subject area.

Evidence: 98.5% of all students met the standards for the social studies courses they took in 2022-23, no student graduated who did not meet the three year requirement. Those courses were AP US History, Introduction to Economics, Modern World History (Grade 10), Racial Justice, Sociology, US History (Grade 9), and US History (Grade 11).

- 50% met the basic standards.
- 27% earned honors recognition for exceeding the standards.
- 22% earned high honors recognition for exceeding the standards.

I report compliance.

Provision # 1.2.5 Foundational Knowledge (Upgraded to a Critical End): *Students possess comprehensive knowledge of a core curriculum in the following areas: life skills.*

Note: Following a series of listening sessions to determine what basic skills the OSSD community felt were essential, it was determined that the best way to deliver these skills was through the resurrection of the “On Your Own” course that had been a mandatory staple for students up until about a decade ago. The teacher has updated the course curriculum using the essential skills identified during the listening sessions. It should be noted that many of the critical skills identified are already embedded in current courses – those that are not, or which cannot be easily embedded – are the focus of this initial course.

The on your own course was implemented at the start of the 2023-24 school year. If future budgets are willing, the plan would be to create a series of semester courses that are taken at three different grade levels that focus on the skills most pertinent to each age of student: 1) study and executive functioning, 2) social interactions and taking care of oneself, and 3) financial,

interview, and application skills. Since this may have a significant budgetary impact, we will need to balance this desire with what can be justified by the community.

Interpretation: All students will meet the required standards of the “On Your Own” course as evidenced by a passing grade.

Rationale: It was clear during the strategic planning session that the school community values the idea of the district providing training in basic life skills. The best way to provide these skills is by embedding them in our current curriculum where appropriate and teaching those not already embedded in a standalone course or courses. Students earning a passing grade in such a course is an effective means of evaluating student success; making the course mandatory for all students ensures that all students acquire these skills.

Evidence: Since the Ends report looks at the year behind, in this case 2022-23, and since this course was implemented this year – there will be no data until next year’s ends report.

I report that the first data will be available in the fall of 2024 and that this End is in compliance because it is progressing towards the achievement threshold.

Provision # 1.2.6 Foundational Knowledge (*Upgraded to a Critical End*): *Students possess comprehensive knowledge of a core curriculum in the following areas: the arts.*

Note: This interpretation was adjusted based upon the input of the board evaluation subcommittee for the purpose of setting baseline data for the incoming superintendent.

Interpretation: This End will be considered in compliance when all students have successfully met the standards of the fine and practical arts courses required for graduation.

Rationale: The most common way for a district to set foundational learning standards is by prescribing the courses students must take and pass to graduate. Since the OSSD requires one year of high school arts, the passage of which is how OSSD students prove they have gained foundation knowledge in this subject area.

Evidence: All students met the standards for the arts courses they took in 2022-23. Those courses were 2D vs 3D – Finding the Artist Within, 3D Construction Art, Art and Artists, Drawing and Painting, Exploration in Art, Middle School Art, Digital Music, Digital Music Performance, Introduction to Guitar, Junior Chorus, Middle School Band, Senior Band, Senior Chorus, Introduction to Theatre Arts, Puppets for President, and Technical Theatre.

- 53.8% met the required standards.
- 39.7% earned honors recognition for exceeding the standards.
- 6.4% earned high honors recognition for exceeding the standards.

I report compliance.

Provision # 1.3 Ability to Adapt: *Students are adaptable, resilient and can manage change.*

Interpretation (Upgraded to Mature End): This End requires multiple data sources to ensure that information from all students contributes to the evaluation of compliance.

- On average, students in the OSSD will have an attendance rate of 90% or higher – this is based on the state’s threshold for acceptable attendance.
- The four-year graduation rate will meet or exceed the state average.
- The overall percentage of students served by an individualized education plan (IEP) will not exceed the state average by more than 1%, or the average severity of the district IEPs on a six-point scale will decline over time.

This provision will be considered a Mature End when each of the enumerations bulleted above have been achieved for three consecutive years.

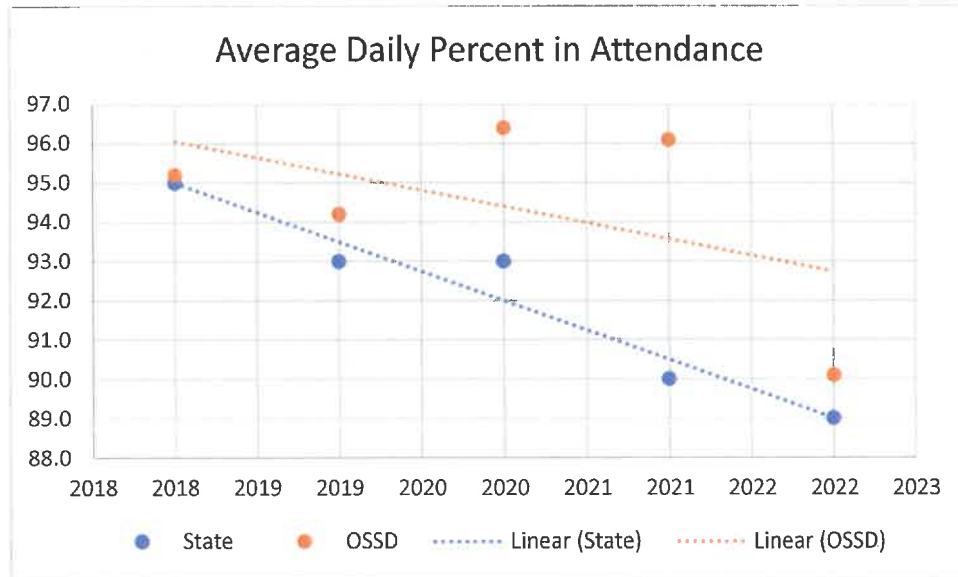
This Critical End will be considered in compliance if it shows improvement over time relative to the achievement thresholds outlined in the bullets above. This provision has been upgraded to a mature end as of 2022-23.

Rationale: Educational research is clear that the most effective means for students to achieve mastery of content and skills is to spend time with highly qualified teachers. Therefore, it makes sense that attendance is the most important component when it comes to student mastery of the Board’s ends. Hence, attendance is incredibly important, and students who have high rates of attendance show their ability to adapt to one of the primary needs of adult life: consistency and dependability.

During their high school years, students face an enormous number of challenges academically, socially, and developmentally. Their ability to navigate those challenges is easily measured by the percentage who make it through to graduation, making a district’s graduation rate an effective measure of their adaptability.

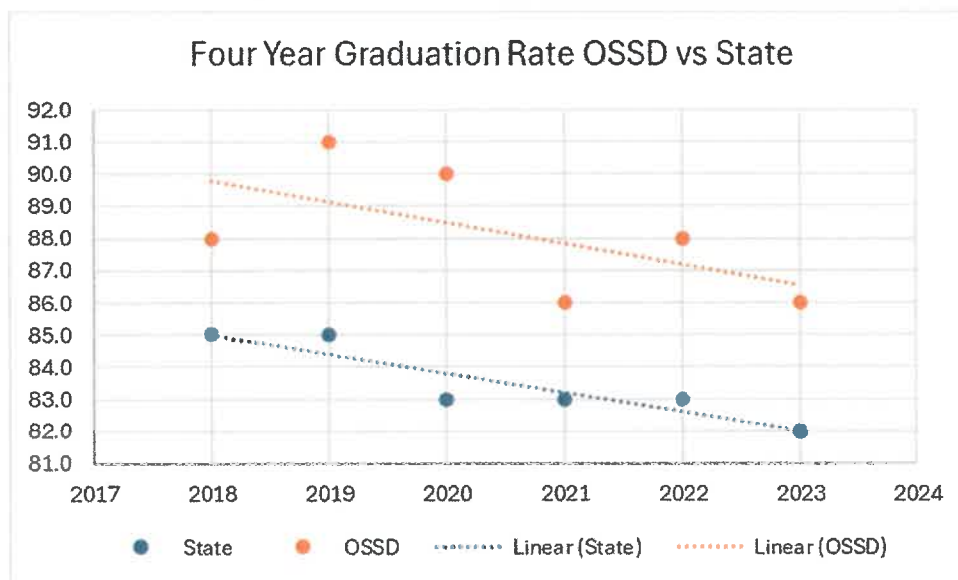
In general, students with disabilities often need assistance identifying and internalizing strategies for learning that allow them to compensate for the effects of their disability. The act of learning those strategies and using them effectively enough to either no longer need an IEP or to move along the continuum towards a less restrictive IEP is by its very definition adaptation.

Evidence: The state has not published attendance data beyond the 2021-22 school year, so the most recent data is included below.

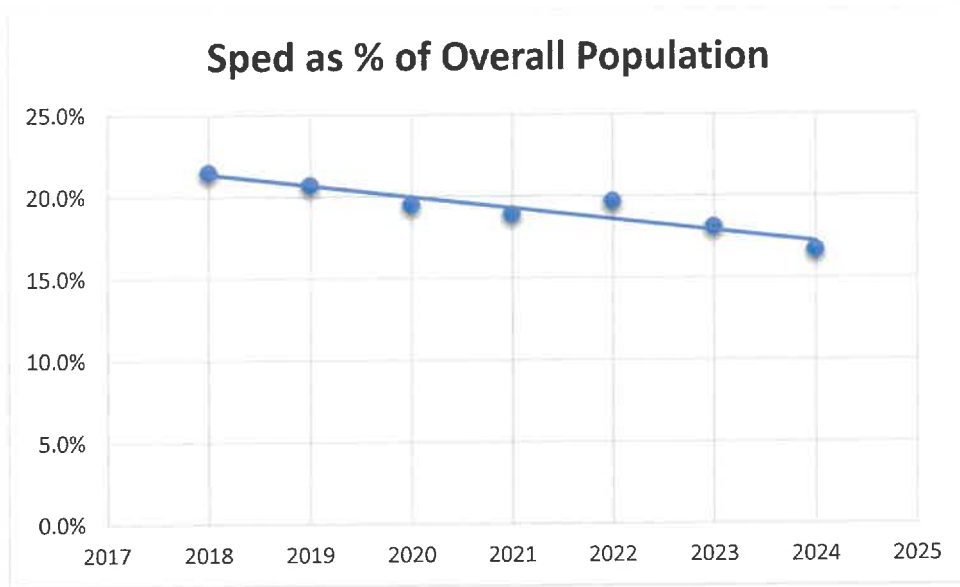


- During the 2021-22 school year, districts were still shutting down classes and schools due to COVID outbreaks, even in the midst of the pandemic with all students attending in person where exposure was highest, the district was in compliance with this standard.

The state has recently released the 2022-23 four-year graduation rates. This data is represented in the chart below.

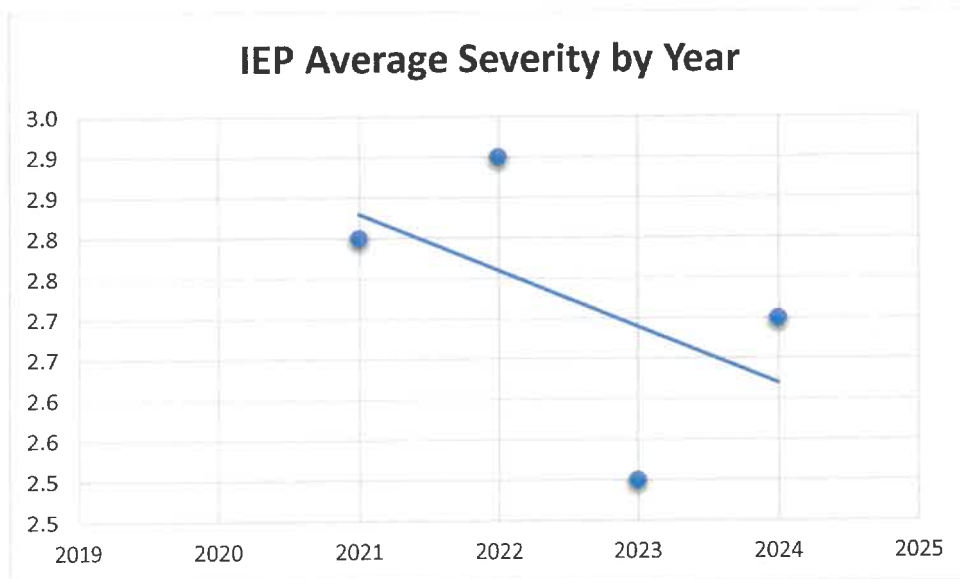


- Orange Southwest’s four-year graduation rate far exceeds that of the state and has for many years.



The above graph shows the percentage of the district's overall population that is served by an IEP. The state average has not been updated recently, but historical trends place it at 14% which is closely aligned with the historic national average.

- The number of students served by an IEP has been decreasing over time for the past six years since the implementation of our updated service delivery model.



The above graph shows the average severity rating of student IEPs; a higher number indicates a greater level of service required across the district to serve student needs. The score can range between one and six, but an IEP scoring higher than four is a very rare occurrence; therefore, the effective possible range is between one and four.

- The chart shows that over time student need, as defined by the services provided, has been declining. This indicates that the service delivery model implemented in 2019-20 has been effective at providing students with the skills they need to gain independence.
 - It should be noted that the number of IEP students as a percentage of the overall district population has been declining. In other words, they have acquired the skills to be successful without the need for continuing special education services. Since these students would likely have a low severity score when they exited the program, this would shift the remaining average towards more severe. All things being the same, if we remove the lowest scores from an average – the average that remains will increase even though the remaining individual scores have not changed. This means that if our severity score is declining, the positive impact of our work is greater than this data shows.

This standard is in compliance because the percentage of students on IEP's is declining over time and the average severity of rating is also declining over time.

Note: This interpretation should be updated to not include students on IEP's who move in during the course of a school year. Only students the district has had at least a full year to work with should be included in this data set as we are trying to measure the impact of the district's programs on these students. Tracking this level of data however would be extremely time consuming.

I report full compliance on this provision. Since all components of the provision have been in compliance for more than three years and are self-sustaining – this is now a mature End.

Provision # 1.4 (Mature End): *Students use and apply information and technology appropriately, effectively, and objectively.*

Interpretation: All students will use a Chromebook, computer, or tablet in a developmentally appropriate manner as the primary means of producing, managing, enhancing, and delivering their school-related work.

Rationale: Since the Board's description of this End relates to digital literacy, it makes sense to use the American Library Association's (ALA) definition of digital literacy as the guide to what constitutes compliance with this end: "the ability to use information and communication technologies (ICT) to find, evaluate, create, and communicate information."

Evidence: The best way to measure the acquisition of a defined skill set is to require the effective use of that skill set. By switching to a one-to-one model as the district has done which requires students to use ICT devices as a primary means of learning and engagement, each student every day demonstrates compliance with this end. Further, students were solely

dependent on ICT for two years during the COVID pandemic (2020-2022) while they attended school remotely and despite this hardship their overall academic performance increased.

I report full compliance with this End.

Data Presented: This Ends report only focuses on a limited set of data, just those data sets required to measure achievement of the Ends. There is plenty of other data that is important for the district that is worth reviewing, but if it's not directly tied to the Ends interpretations, it will not be in this report.

This report includes data from years when COVID was still very active – during those years our performance continued to increase; those increases were dramatic compared to the state and the nation as a whole – a testament to the good work and dedication of the staff and leadership team.

Lastly, because the data used is closely aligned with that of the Ends, it would be remiss not to point out the exceptional work of the OSSD staff taking one of the state's poorer performing districts and turning into one where three of its schools are not just in the national rankings, but are considered some of the best schools in the state – the high school was recently ranked in the top twenty five percent of public high schools nationally. This work was accomplished during the most difficult of times both within the district and globally. The OSSD has much to be proud of and given that all the Ends are currently moving in the right direction, the district should continue to improve for some time to come.

Final Thought: These interpretations were created by the current superintendent and have been consistently approved by the board as reasonable. The incoming superintendent may decide to change these interpretations as is allowed under policy governance. It is highly recommended that the board review the Portrait of the Graduate work and change these Ends if necessary to accommodate the priorities established by the community.

