COLORADO
Department of Human Services

July 1, 2020

The Honorable KC Becker
Speaker of the Colorado House of Representatives

The Honorable Leroy M. Garcia, Jr.
President of the Colorado Senate

Dear Speaker Becker and President Garcia:

The Colorado Department of Human Services, in response to reporting requirements set forth in Section 19-2-203 (6), C.R.S., respectfully submits the attached information concerning educational outcomes for juveniles in the custody of the Department.

"...on or before each July 1 thereafter, the department of human services shall collect...the educational outcomes for juveniles committed to the custody of the department who complete their parole sentences and discharge from department supervision."

Please see attached report for the response to this requirement. If you have any questions, please contact Kevin Neimond, Legislative Director at 303-620-6450.

Sincerely,

Minna Castillo Cohen

Minna Castillo Cohen
Director, Office of Children, Youth, and Families

3rd Annual

Educational Outcomes Evaluation of the Colorado Division of Youth Services

Regarding Committed Youth

Discharged in

Fiscal Year 2018-19

July 1, 2020

COLORADO
Division of Youth Services
Office of Children, Youth & Families

Table of Contents

Index of Figures and Tables

Statutory Reporting Requirements

Section 19-2-203(6), C.R.S.

The Colorado Department of Human Services (CDHS or Department), Office of Children, Youth and Families (OCYF or Office), Division of Youth Services (DYS or Division) has prepared a report on educational outcomes for discharged youth in response to Section 19-2-203(6), C.R.S.. Associated legislation (House Bill 18-1010) was signed into law on March 7, 2018.

> *On or before July 1st 2018, and on or before each July 1st thereafter, the Department of Human Services shall collect the recidivism data and calculate the recidivism rate and the educational outcomes for juveniles committed to the custody of the department who complete their parole sentences and discharge from department supervision.*

Introduction

This report serves as the third annual report on educational outcomes, for committed youth served, and subsequently discharged from the Division of Youth Services. The inaugural report was released in July 2018.

Educational Programming in Juvenile Justice Settings

In 2015, the United States Department of Education and United States Department of Justice collaboratively published "Guiding Principles for Providing High-Quality Education in Juvenile Justice Secure Care Facilities" which indicates:

> *"…on any given day in 2011 there were still more than 60,000 young people detained or committed to juvenile justice residential and secure care youth centers. Many of these youths have experienced abuse or neglect, unsafe neighborhood environments, homelessness, and/or involvement in the child welfare system. A large percentage of committed youths exhibit mental health conditions and have, historically, failed to receive mental health services. In addition, there are three to four times more students with disabilities who require special education and related services—such as those identified with emotional disturbance or specific learning disabilities—in the adjudicated youth population than among students in community schools." (p. 1)*

Furthermore, it is estimated that over half of justice-involved youth are below grade level in reading and math, that sixty percent (60%) have repeated a grade, and (as quoted above) one-third (⅓) require special education services. Another complicating factor was found in a 2008 study by Krezmien, Mulcahy, and Leone that cited eighty percent (80%) of incarcerated youth had been, prior to their incarceration, suspended from school, and 50% of youth had been expelled.

As these figures demonstrate, it is probable that incarcerated youth have experienced several negative school encounters prior to reaching the DYS school doors.

DYS Educational Programming

The Division of Youth Services (DYS) is responsible for the care and supervision of detained youth, committed youth and paroled youth. At each youth services center, juveniles are provided access to educational services; however, the oversight and implementation of the educational services is differentiated based on the specific population that is served by the youth center. The Division operates three general youth center types: detention-only, commitment-only, and multi-purpose youth centers.[1]

YOUTH CENTERS SERVING DETAINED YOUTH

Per the Children's Code, "the school district in which the facility is located [will] cooperate to ensure that each juvenile who is in **detention** is offered educational services at the grade level identified for the juvenile" (Section 19-2-402 (3), C.R.S. 2016). [bold font added for emphasis]

Detention education is managed and staffed by the school district which works in cooperation with the Division of Youth Services youth center administration. The youth are enrolled in the school district until their release from the detention facility. The detention youth at each youth services center are provided education services as follows:

[1] Assessment centers are included in the "multi-purpose" youth center category.

- Adams Youth Services Center: Brighton 27J School District
- Gilliam Youth Services Center: Denver Public Schools
- Grand Mesa Youth Services Center: Mesa County School District 51
- Marvin Foote Youth Services Center: Cherry Creek School District
- Mount View Youth Services Center: Jefferson County School District
- Platte Valley Youth Services Center: Weld County 6 School District
- Pueblo Youth Services Center: Pueblo 60 School District
- Spring Creek Youth Services Center: Harrison School District 2

YOUTH CENTERS SERVING COMMITTED YOUTH

Committed youth are also provided access to educational services. The oversight and implementation of those services is the responsibility of the Division of Youth Services, as opposed to local school districts. DYS either contracts with educational providers or hires state teachers and staff at the following secure, state-owned and operated youth centers serving committed youth:

- Grand Mesa Youth Services Center
- Lookout Mountain Youth Services Center
- Mount View Youth Services Center
- Platte Valley Youth Services Center
- Zebulon Pike Youth Services Center

Once a youth is committed to the Division of Youth Services, DYS conducts a battery of assessments at one of two assessment centers. Following the assessment period (on average, less than a month), most youth are placed in a secure, state-owned and operated commitment facility, which is overseen by DYS; a smaller percentage of youth are placed in a contract program and enrolled in a Facility School overseen by the Colorado Department of Education (CDE). CDE Facility Schools are overseen by the Office of Facility Schools, which is one of three offices under the Exceptional Student Services Unit at CDE. These schools are licensed by the CDHS Office of Early Childhood as Residential Child Care Facilities (RCCFs). Currently, there are forty (40) Facility Schools within the state of Colorado, which marks a decline from previous years.

During Fiscal Year 2018-19, following assessment, seventy-three percent (73%) of newly committed youth were placed directly into a secure, state-operated facility for their first treatment program, while 27% were placed directly into a contract program; this leaves less than 1% that were placed directly into the adult system, under the purview of the Colorado Department of Corrections[2].

[2] These are typically dual-sentenced youth, receiving both a juvenile sentence and an adult sentence.

IMPORTANT NOTE: The remainder of this report pertains to the educational outcomes of **committed youth** served by the Division. To provide a complete and clear picture of Division-wide educational programming, detention education services were briefly summarized on previous pages.

DYS Educational Program - Challenges

Overlapping Education Systems, Information Systems, Reporting Requirements, Privacy Laws, and Data Sharing Limitations

The overlap between public (or traditional) education, alternative school education, and DYS education, in serving justice-involved youth is evident; however, the systems are trifurcated in their student information systems and reporting requirements, while also being bound by data and education privacy laws prohibiting some information sharing. These are just a few of the many challenges faced by the juvenile justice education systems nationwide, including those within Colorado.

Transient Youth

An added complexity is the inherently (highly) mobile nature of DYS youth; specific to this report's cohort, the average number of residential placements is 5.4 placements. This means that youth in this group experienced between five and six placements, alone, while committed to the Division. On-going research continues to indicate that mobility impacts learning and education outcomes. A 2017 report released by CDE, titled "High Mobility Youth," indicates that students who change high schools *only once* are less than half as likely to graduate as their peers.

Complex Population

The DYS committed population mimics national trends as it relates to the youth served in commitment youth centers. These youth are, in general, committed at older ages, and are under-credited upon arrival, when compared to their similar-aged peers attending traditional public/private schools. Generally, a secondary student earns five to six credits per school year, with students earning less considered under-credited and at-risk of not graduating in a four-year time frame. Those same traditional schools serve approximately 13% of their students who have Individual Education Programs (IEPs) necessitating special education services, whereas **31% of the youth in DYS schools have IEPs** and require special education services. The demonstrated complexities of this population only continue when examining mental health and substance abuse treatment needs. For instance, when examining youth newly committed to DYS during fiscal year 2018-19, **sixty-three percent (63.4%) had mental health treatment needs** requiring professional health intervention (as measured by the Colorado Client Assessment Record or CCAR), and **eighty-three percent (83.3%) were assessed as having substance abuse needs** that required treatment (as measured by the Juvenile Automated Substance Abuse Evaluation or JASAE).

HIRING AND RETAINING QUALITY STAFF

The gaps in youth education and learning, the need for additional supports to learn effectively and access content, coupled with the need to address social emotional learning within the classroom, requires highly qualified teachers. DYS hiring practices include assuring core content teachers are content experts and are Highly Qualified as defined by the No Child Left Behind Act of 2001 (NCLB). However, there is a noted teaching shortage in Colorado, which has created ongoing struggles impacting the Division's ability to hire in a timely fashion. In fiscal year 2018-19, DYS had a 25% vacancy for classroom teachers, which was a slight increase from FY 2017-18. These vacancies were across the three facilities which use state teacher positions.

This ongoing state-wide teaching shortage prompted CDE to collaborate with the Colorado Department of Higher Education (CDHE) to respond to legislation (Colorado House Bill 17-2003), concerning a strategic action plan to address teacher shortages in Colorado. Part of this work resulted in data indicating:

- *"Approximately 81 percent of urban/suburban districts, 60 percent of rural/small rural districts, and 63 percent of BOCES ... had vacant educator positions unable to be filled at the beginning of the 2017- 2018 school year."*

- *"Approximately 66 percent of urban/suburban districts said they had filled vacancies with long-term substitutes at the beginning of the 2017-2018 school year. Forty percent of rural/small rural districts and 25 percent of BOCES said they had staffed vacancies with long-term substitutes."*

Specific to DYS, only three classroom teachers had ten or more years of service within the Division; only two Special Education coordinators had ten or more years of service. Additionally, sixty percent (60%) of the principals were entering their second year of principalship with DYS during FY 2018-19, and 75% of the current DYS Education Central Office staff had two years or less of experience in their respective positions.

DYS Educational Reporting - Challenges

EDUCATIONAL COHORTS VS. DISCHARGE COHORTS

A cohort, by definition, is a group of people who have something in common. In the field of education, the term more explicitly describes a group of students that progress through an academic program together; start together, end together, and look to achieve a similar end-result. In the research field, however, the term "cohort" often reverts back to the more basic sense of simply sharing a commonality. The cohort studied for this report is not an educational cohort, but rather a group of youth that discharged from the Division of Youth Services during the same fiscal year (FY

2018-19). The cohort is defined by having discharge dates in a common time frame. Table 1 outlines the factors that differentiate an educational cohort from a discharge cohort.

Table 1: Educational Cohorts vs. Discharge Cohorts

Factors that Differentiate	Educational Cohort	Discharge Cohort (used in this report)
Cohort Formulation	Dependent upon start date and grade entered	Dependent upon end date (discharge date)
Age	Largest differential is 1 year	Varies drastically
Expected Graduation Year	Same for all students in cohort	Varies drastically
Cohort Meaning	A group of students that progress through an academic program together, sharing a similar end goal.	A group of youth that merely share the same discharge date (1-year time frame)
Time Spent Progressing Towards Goal	Same/similar for all students; most often aligning with academic calendar year	Varies drastically

When educational outcomes are calculated and reported (i.e., progress, growth, achievement), the most common approach utilizes educational cohorts. The literature, norms, and resources available to conduct a study using an educational cohort is vast; and very much to the contrary when using a discharge cohort. Due to many factors and complexities that make DYS educational outcomes reporting different than traditional public/private schools and districts, the Division must report outcomes using a discharge cohort approach. The committed youth served by DYS, and their case circumstances, do not allow for an educational cohort study design.

Specific challenges to educational outcomes reporting by discharge cohort include, but are not limited to, the following:

- Youth age varies drastically at start date (youngest was 12.1 years old; oldest was 20.0);
- Youth age varies drastically at end date (youngest was 13.8 years old; oldest was 21.0);
- Many youth reached DYS already multiple grade levels (or credits) behind, with expected graduation years varying drastically--even within the same age groups;

- Time spent progressing towards an educational goal varies drastically (minimum time spent with DYS was 84 days for a youth in the cohort; maximum time spent with DYS being over seven years for a youth in the cohort).

In addition to these four examples, justice system-involved youth pose additional and unique challenges which not only impact educational reporting (record tracking, data collection, analyses, comparisons), but also have a real impact on programming and learning. As the youth demographics are conveyed in the following section, the connection between serving a complex population and reporting issues is apparent.

In summary, three main topics contribute to the challenges related to reporting on the educational outcomes of committed youth:

- Discharge cohort complexities;
- Youth-level complexities; and
- System-level complexities (as cited in the previous section) including various student information systems that do not interface, privacy laws, and inter-agency data sharing limitations.

Knowing and understanding these reporting difficulties prompted the Division to seek and obtain expert advice for recommended reporting options. The experts, the adopted advice, and outcomes are described fully, starting in the MAP Assessments: Methodology & Analysis section of this report.

Youth Demographics (Youth Discharged in FY 2018-19)

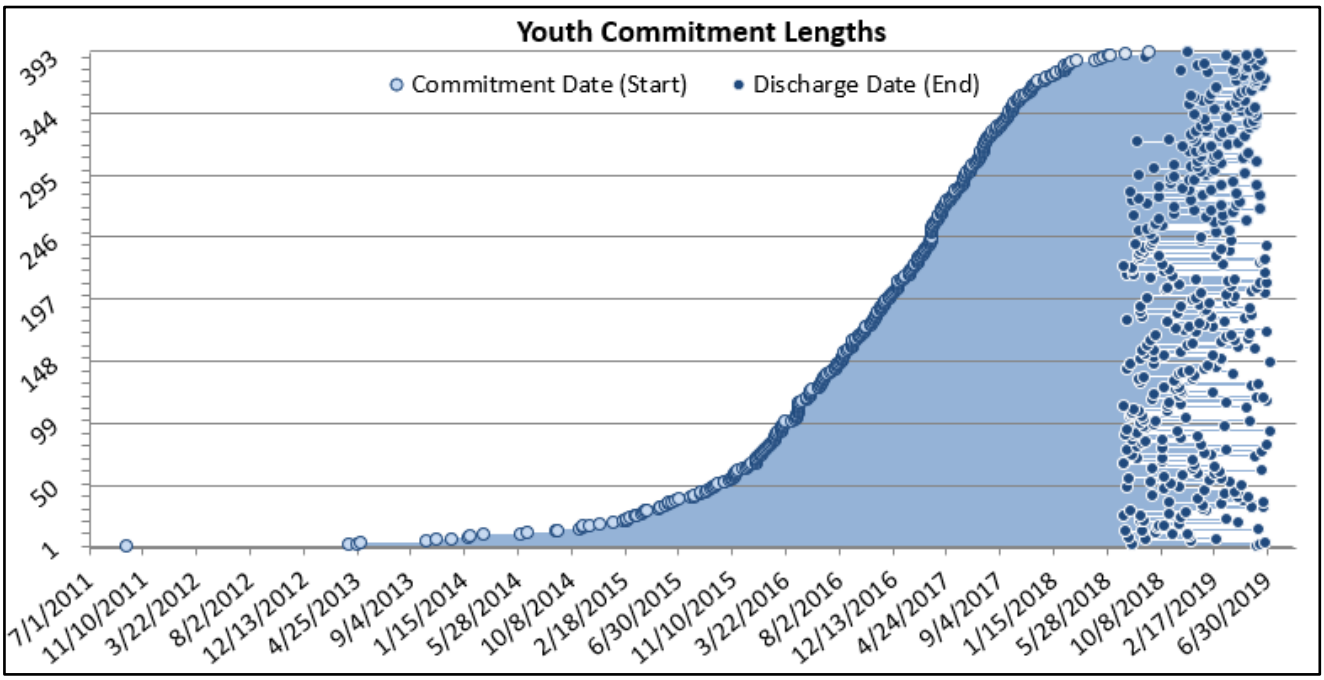
Cohort Summary

The Division of Youth Services serves three general population types: detained youth, committed youth, and paroled youth. This report focuses on three hundred ninety-four[3] (394) unique committed and paroled youth who were discharged from the Division's supervision during Fiscal Year 2018-19 (July 1, 2018 - June 30, 2019). These 394 youth most likely[4] completed two separate court sentences: their commitment sentence and their parole sentence.

[3] Cohort size is 394 unique youth, but 395 discharges; as 1 youth discharged twice within the same FY.
[4] Some cohort youth discharged without completing their commitment or parole sentences. Examples include: youth who were deported; youth that discharged to adult corrections mid-sentence; youth who had their sentences reconsidered by the court; youth who turned 21 years of age mid-sentence.

While this group of youth ended their supervision in the same one-year timeframe, the start dates for these youth vary drastically. For instance, one youth was committed (i.e., start date) in September 2011 while another youth was committed in September 2018; however, since both youth were discharged (i.e., end date) in FY 2018-19, they are part of the same discharge cohort. Figure 1 helps to illustrate the variation in cohort start dates, end dates, and length of time spent under DYS supervision.

Figure 1: Youth in Cohort and Corresponding Commitment Lengths



When the youth start dates (light blue circles), length of service (blue lines), and end dates (dark blue circles) are shown in the aggregate, the Length of Service (LOS) variations are apparent, as well as the commonality that defines this cohort; all the dark blue circles occur within the FY 2018-19 time span. Figure 1 shows that some cohort youth were committed to the Division in late-2011, while some cohort youth were not committed until 2018. This creates a marked difference in youth start dates, which in turn creates extensive variation in length of service or LOS. To reiterate from the previous section, one youth spent two *months* with DYS (cohort minimum), while another youth spent over seven *years* with DYS (cohort maximum).

While it is clear that time spent under DYS supervision varies immensely within the cohort, total LOS does not easily translate into the amount of time youth received DYS educational services. As summarized in earlier sections, the Division is directly responsible for educational services provided to committed youth residing in secure, state-operated youth centers. The amount of time a youth

spends in a secure, state-operated youth center does not equate to his/her total LOS as shown in Figure 1. In fact, these youth (on average) spent 40% of their total LOS in secure, state-operated care[5]. The remaining time was spent in less secure, residential placements operated by contractors (9.2 months, on average) and in the community on parole (7.0 months, on average).

YOUTH DEMOGRAPHICS

Of the youth in this reporting cohort, the vast majority were male (85%), with females representing fifteen percent (15%). In terms of ethnicity and race, 37.3% were Caucasian youth, while 62.7% were minority youth (Hispanic 42.1%, African American 19.0%, American Indian/Native American 1.0%, Asian 0.3%, Native Hawaiian/Other Pacific Islander 0.3%, Unable to Determine 0.3%)[6]. On average, youth were 16.8 years old at time of DYS commitment, and 19.0 years old at the time of discharge. Tables 2 and 3 contain a summary of this demographic information.

Table 2: Cohort Demographics (N=394)

Demographic	Percentage of Cohort (or Average for Age)		Number of Youth
Gender	Male:	84.8%	334
	Female:	15.2%	60
Minority Status	Minority:	62.7%	247
	Caucasian:	37.3%	147
Ethnicity/Race	Hispanic:	42.1%	166
	White:	37.3%	147
	African American:	19.0%	75
	American Indian/Native American:	1.0%	4
	Asian:	0.3%	1
	Native Hawaiian/Other Pacific Islander:	0.3%	1
Age at Commitment	16.8 years (youngest 12.1 years; oldest 20.0 years)		See Table 3
Age at Discharge	19.0 years (youngest 13.8 years; oldest 21.0 years)		

[5] Forty percent (40%) equates to 10.9 months out of 27.1 total months.
[6] Due to rounding, totals may not sum to 100% throughout the report.

Table 3: Cohort Age at Commitment

Age at Commitment (Years Old)	Percentage of Cohort	Number of Youth
12	0.5%	2
13	3.0%	12
14	5.6%	22
15	16.2%	64
16	28.2%	111
17	30.7%	121
18	13.2%	52
19	2.3%	9
20	0.3%	1
Total	100%	394
Average Age at Commitment: 16.8 Years		

YOUTH TREATMENT NEEDS

Youth committed to the Division arrive with an array of unique treatment needs. Often times, these treatment needs are complex, co-occurring, and relate to mental health, substance abuse, offense(s) committed, and specific risk factors of re-offending. Table 4 provides a summary of these treatment needs, for youth in the cohort examined.

Table 4: Cohort Treatment Need Summary

Area of Treatment Need	Percentage of Cohort		Number of Youth
Mental Health*	Formal Intervention Required: Formal Intervention not Required:	61.9% 38.1%	240 148
Substance Abuse*	Treatment Required: Treatment Not Required:	86.7% 13.3%	338 52
Co-Occurring Treatment Needs (Mental Health and Substance Abuse)	Co-Occurring Treatment Needs: Non Co-Occurring Treatment Needs:	54.1% 45.9%	213 181
Sex Offense (SO) Specific Treatment	Youth Requiring SO-specific Treatment: Youth not Requiring specific treatment:	12.7% 87.3%	50 344
Commitment Offense Type	Person: Property: Weapon: Drug: Other:	51.8% 25.6% 11.2% 5.1% 6.3%	204 101 44 20 25
Commitment Offense Category	Felony: Misdemeanor:	56.3% 43.7%	222 172
Risk to Recidivate*	High Risk: Moderate Risk: Low Risk:	95.6% 3.9% 0.5%	368 15 2

*Recidivism risk measured at time of commitment. Valid percentages shown.

YOUTH SYSTEM INVOLVEMENT AND PLACEMENT HISTORY

In addition to demographics and treatment needs, another defining factor of youth served by the Division is prior "system" involvement and out-of-home placement history. System involvement, for purposes of this report, includes juvenile justice system involvement (e.g., probation, diversion, detention and commitment) and child welfare system involvement (e.g., social services). For this cohort of youth that discharged from DYS in FY 2018-19, a majority had previous child welfare out-of-home placements (70.1% or 276 of 394 youth). Of the 276 with child welfare out-of-home placements, the average number was three (2.62), and these occurred prior to DYS commitment.

In terms of juvenile justice system involvement, nearly all cohort youth (99%) had prior DYS detention admissions, with the number ranging from 0 to 19 admissions, and an average of 5.8 prior

detention admissions per youth. A majority of youth also experienced probation (78%) prior to their commitment, with an additional 3% having experienced some form of diversion. Lastly, relatively few cohort youth (7.1%) had served a prior DYS commitment sentence (28 youth).

During their commitment, youth are served at various residential programs with varying security levels, depending on their individual treatment needs, case circumstances, and treatment progression. As such, most youth experience several placements and programs while serving their commitment sentence. In fact, for this group of youth, the **average number of residential placements experienced while committed was 5.4** (maximum was 20 placements; minimum was one). This 5.4 average is conservative, as it excludes stays in jail, parole placements, and escapes that may have landed a youth in another state or country.

Within each placement, all youth receive a free and appropriate education. Educational services are provided at all residential programs, regardless of security level. The commitment continuum consists of state-operated and privately-operated youth centers (maximum security), staff-supervised programs (medium security, run by contractors), and community programs (minimum security, run by contractors). Ideally, as youth progresses through his/her commitment sentence, they "step down" to residential programs that are less secure than the previous program level. While stepping down may be beneficial to youth in some ways (community re-integration, parole transition, behavioral benefits), it's problematic when it comes to ensuring that educational records are transferred and shared appropriately. As cited earlier in the report, mobility has been shown to negatively impact learning and education outcomes, with youth who change schools being less likely to graduate, when compared to their peers who have not changed schools.

Students with an Individualized Education Program (IEP)

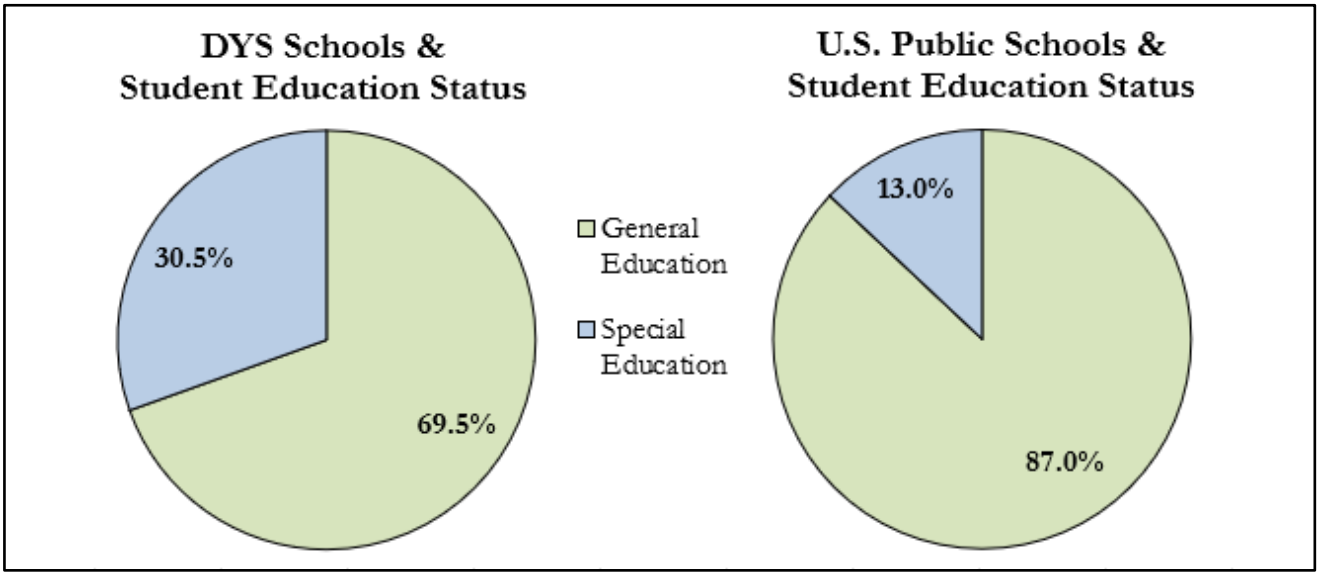
The vision of the Division of Youth Services Special Education Team is to provide individualized support and rigorous education opportunities, utilizing a holistic approach in order to develop resilient, independent, lifelong learners achieving their best personal outcomes. The Individuals with Disabilities Education Act (IDEA) and Colorado's Exceptional Children's Education Act (ECEA) have established the Individualized Education Program (IEP) as the structure for planning and implementing goals and objectives for children with disabilities.

Each IEP indicates a primary disability that is impacting the youth's ability to access general education, and the IEP may include a secondary disability. The Colorado Department of Education (CDE) recognizes fourteen disabilities that have been identified under Exceptional Children's Education Act.

Of the 394 cohort youth, 120 were involved in Special Education programming (30.5%) and had an Individualized Education Program (IEP). For context, the National Center for Educational

Statistics reports 13% of all public school youth as being provided special education supports and services. This means that DYS schools have nearly three times the percentage of students requiring special education programming in public schools. This comparison is illustrated in Figure 2 that follows.

Figure 2: Youth Receiving Special Education Services



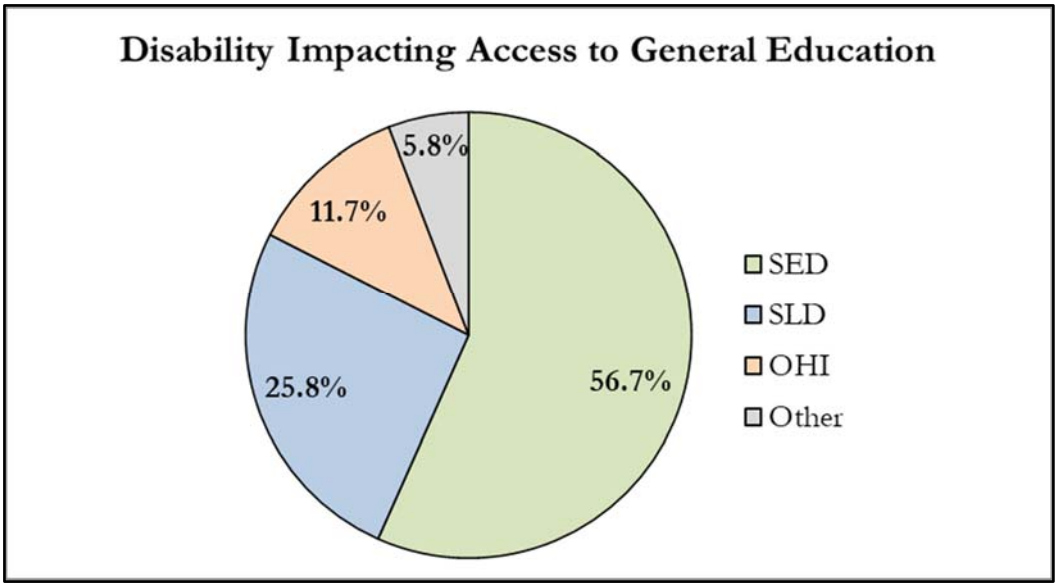
Among those receiving special education services nationally in public schools, the most predominant disability category is specific learning disability (SLD). However, among this specific cohort of DYS youth (N=120 with an IEP), the data show that serious emotional disability (SED) is the predominant disability, with sixty-eight (68) youth or 56.7% having this listed as the primary disability on their IEP. Thirty-one (31) youth or 25.8% had a specific learning disability (SLD), fourteen (14) youth or 11.7% had an other health impairment (OHI), and seven (7) youth or 5.8% had another type of disability. In addition to these primary disabilities, many youth had a secondary disability listed on their IEP.

For a count of cohort youth, listed by the primary disability found on individual IEPs, see Table 5. To view a more general breakdown of primary disabilities within the cohort, refer to Figure 3.

Table 5: Disabilities Recognized by the Exceptional Children's Education Act

Disability Category	Number of DYS Special Education Youth with Primary Disability	Percent of DYS Special Education Youth with Primary Disability
Autism Spectrum Disorder (ASD)	1	0.8%
Deaf-Blindness	0	0.0%
Developmental Delay (DD)	0	0.0%
Hearing Impairment, Including Deafness	0	0.0%
Infant/Toddler with a Disability	N/A	N/A
Intellectual Disability (ID)	2	1.7%
Multiple Disabilities (MD)	1	0.8%
Orthopedic Impairment (OI)	0	0.0%
Other Health Impairment (OHI)	14	11.7%
Serious Emotional Disability (SED)	68	56.7%
Specific Learning Disability (SLD)	31	25.8%
Speech or Language Impairment (SLI)	0	0.0%
Traumatic Brain Injury (TBI)	3	2.5%
Visual Impairment, Including Blindness	0	0.0%
TOTAL	120	100%

Figure 3: Primary Disability Listed on Individualized Education Program (N=120)



Average Age at Commitment and Expected Grade-by-Age

As described in the demographic section, the average age for this cohort of students, at the time of their DYS commitment (start date), was 16.8 years old (youngest 12.1 years old; oldest 20.0 years old). For a youth of that average age, the corresponding expected grade-by-age was 11th grade. Generally speaking, the expected grade-by-age can be thought of as the grade level at which a student would typically be expected to perform, based *solely* upon age. In general terms, this usually amounts to a youth's age minus five. So, a 16-year-old would be expected to be in the 11th grade.

Educational Pathways for DYS Committed Youth

An array of assessment data are synthesized to understand each youth's unique circumstances upon DYS entry (or commitment), and those circumstances guide the development of their education plans. One tool utilized by DYS educational staff is the "DYS Educational Pathways" flowchart. Please refer to Appendix B for a visual depiction of this tool.

The goal of the DYS Educational Pathways tool is to help standardize and determine appropriate educational paths for youth newly committed to the Division of Youth Services. The resulting pathway is based on previous educational attainment, applicable IEP plans, scores on national standardized educational tests, and a youth's age at commitment. The pathway is specifically designed for youth committed to secure placement, but is considered best practice for all youth

committed to the Division. The educational pathway that best fits a youth's circumstances upon commitment is used *only* as a guideline; individual needs of youth are always considered, and youth may (and do) change paths as they progress through the commitment continuum. The three (3) educational paths available to DYS youth are the Post-Secondary Path, the High School Diploma Path, and the GED Path.

EDUCATIONAL OUTCOMES

The mission of DYS educational programming is to assure students have the skills and aptitudes to access the lives they dream of having, while concurrently supporting DYS' vision to achieve youth success and safer Colorado communities. In order to meaningfully measure the educational outcomes of committed youth, two indicators are presented in the following pages: one measure of academic achievement, and one measure of academic growth.

Academic achievement and growth are both important in the education realm, but each provides different information. Achievement shows a student's point-in-time accomplishment, measured against a specific standard, while growth shows student progress made over time. When achievement and growth are measured and reported together, it lends deeper insight into the impact educational programming has on student learning (2013; Emily Douglas).

The data used to determine the educational outcomes for youth, who have been committed to the Division, complete their parole sentences, and discharge from department supervision, includes two quantifiable measures:

(1) Academic Achievement:
Academic Achievement in the form of a High School Diploma (HSD) signifying that high school requirements have been completed, or in the form of a General Education Diploma (GED) signifying the successful completion of the suite of GED tests. Meeting this end-result promotes access to the workforce and access to college for youth.

(2) Academic Growth:
Academic Growth in the form of standardized test score results acquired from the Measures of Academic Progress (MAP) assessments. The DYS Education Program uses these standardized test scores from the MAP assessments to better understand student strengths, and areas of need in the classroom, while also monitoring for educational growth.

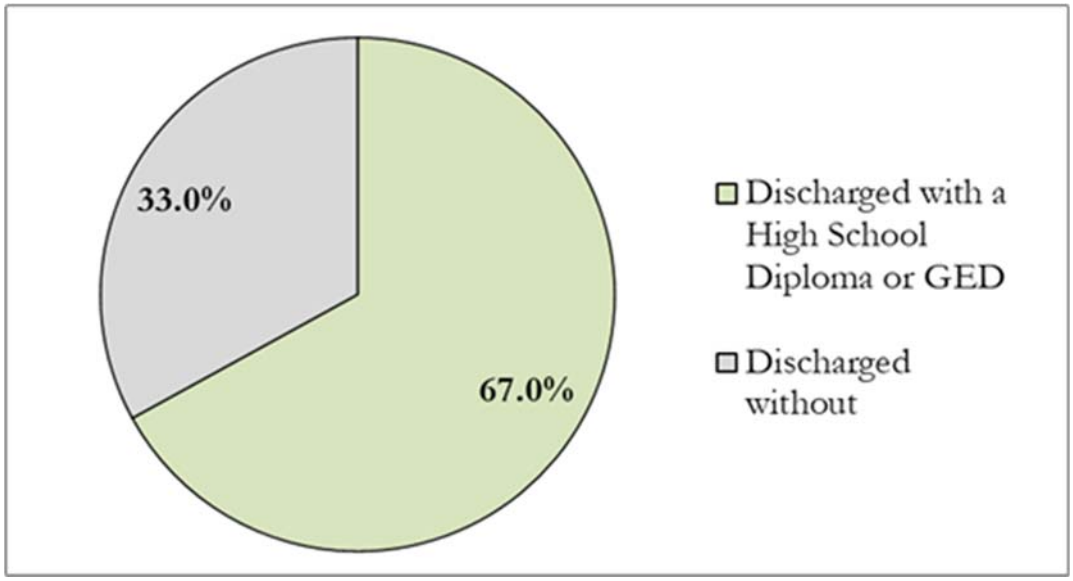
While all DYS commitment schools prepare students for and offer students state-mandated testing (e.g., the ACT - now replaced by the SAT; the PARCC - which is no longer given in Colorado; and the CMAS), the refusal rate for these tests is high, and the high mobility of students often prevents the testing results from being used in meaningful ways. As such, these tests are not used to measure student educational outcomes, nor are they used for internal accountability purposes.

ACADEMIC ACHIEVEMENT: Attainment of a High School Diploma (HSD) or General Education Diploma (GED)

For the 394 youth that discharged in fiscal year 2018-19, the following results emerged in regard to educational attainment.

- Sixty-seven percent (67.0%) discharged with a High School Diploma or a General Education Diploma (264 in total; 143 with a HSD and 121 with a GED)
- Thirty-three percent (33.0%) discharged without a High School Diploma or a General Education Diploma (130 in total)

Figure 4: Youth Achieving a High School Diploma or GED (N=394)



Of the 130 youth that did not attain a HSD or GED prior to Division discharge, one hundred twenty-one (121) met circumstances to be considered and discussed. These circumstances pertain to age at discharge, school/class enrollment upon discharge, and discharge placement.

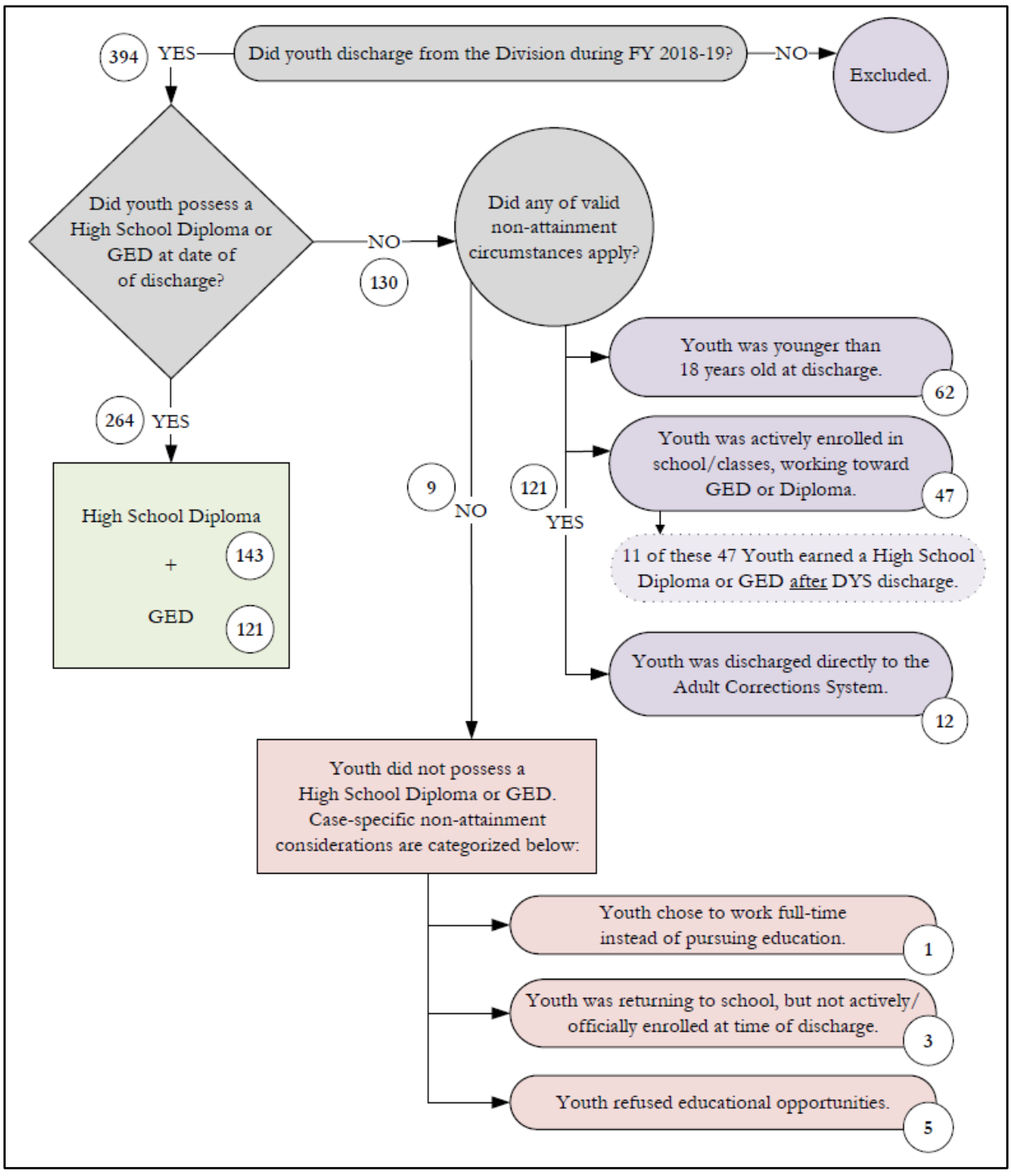
- **Age:** a youth would generally be too young to possess a High School Diploma or GED if younger than 18 years of age. In the U.S. public school system, the majority of students are age 18 at time of high school graduation. On average, youth in this cohort were 19.1 years old at the time of discharge (youngest in cohort was 13.8 years old; the oldest in cohort was 21.0 years old).
    - 62 (of 121) youth were under the age of 18;
- **School or Class Enrollment**: many youth are actively working towards their High School Diploma or GED at the time of discharge. Youth often discharge back into traditional schools, alternative schools, or are enrolled in college courses.
    - 47 (of 121) youth were actively enrolled in school or classes, working towards HSD/GED attainment;
        - In fact, 11 of these 47 youth earned a HSD/GED after DYS discharge;
- **Discharge Placement:** in the days and months leading up to either an adult system transfer (e.g., DYS discharge) or deportation, youth often reside in detention or jail placements awaiting movement. In these circumstances, the Division has reduced opportunity and access to youth to provide educational services that would meaningfully impact educational attainment. Furthermore, youth who discharged directly into the adult corrections system (Department of Corrections, or DOC), or have been deported, are not released back into the community; where educational attainment directly influences successful reintegration.
    - 12 (of 121) youth were discharged directly to the adult corrections system.

Taking these circumstances into account, one hundred twenty-one (121 of 130) youth had valid reasons for non-attainment. The remaining nine (9) youth that discharged without a HSD or GED did not fall under the same aforementioned circumstances. Their case-specific considerations, in relation to non-attainment, are as follows:

- One (1) youth chose to work full-time instead of pursuing an education;
- Three (3) youth were returning to school, but were not actively enrolled at the time of discharge; and
- Five (5) youth refused educational opportunities.

Figure 5 provides a visual flowchart of educational attainment results and non-attainment considerations.

Figure 5: Academic Achievement Flowchart



Career and Technical Education Opportunities

In addition to the three educational paths available to DYS youth (refer back to page 19), the Division also offers an array of Career and Technical Education (CTE) opportunities. Career and technical education programming give students an opportunity to prepare for college and careers; it provides the students who have already attained a High School Diploma or GED with additional skills, knowledge and training to be successful in future careers; and it also widens career choices for individuals that participate in programming. In total, one quarter (25%, or 98 of 394 youth) of cohort students obtained a certification or participated in various CTE classes while committed to the Division.

When specifically examined, twenty (20) youth in the cohort entered DYS commitment with a High School Diploma or GED already in-hand. With attainment already achieved, each of these students are confirmed to have participated in CTE programming, completed certifications, or pursued college credits (see following section) while under the Division's care.

Of the twenty students, fourteen (14) completed or worked towards specific certificate programs, four (4) enrolled in college courses and/or had applied for admission and financial aid, and two (2) students were enrolled in college courses *and* obtained CTE certificate(s).

An inclusive list of CTE classes available to this cohort of DYS youth included:

- A+/Computer Technician
- Adams State University Distance Learning Program
- American Hotel & Lodging Educational Institute (AHLEI) Certifications
- Bring Your "A" Game Workplace Skill Builder
- Bicycle Technology
- Business Principles and Management
- Career Exploration
- CareerReady 101/WorkKeys
- Character and Leadership Development
- Colorado Department of Transportation Flagger Safety Certification
- Computer Applications
- Computer Technology
- Construction Trades Program
- Culinary Arts Program
- Driver's Education with Simulator
- Employability Skills
- Family/Life Skills
- Financial Literacy
- Graphic Design
- Hairstyling
- Horticulture/Landscaping Program
- Introduction to Network Cabling: Copper-Based Systems
- Introduction to Network Cabling: Fiber Optic-Based Systems
- Introduction to Telecommunications
- Life Choices
- Life Skills
- Marketing
- On-Campus Work Experience/Kitchen
- OSHA General Industry Certification
- Personal Finance
- Photography
- Principles of Management
- Rosetta Stone
- Screen Printing Technology Certification
- Serv-Safe
- Virtual Welding

Post-Secondary Opportunities

The Division had twenty-one (21) students in the cohort of interest who pursued post-secondary education opportunities, specifically college. Of the 21 students:

- Eleven (11) students were enrolled at Adams State University and working toward completing college credits;

- One (1) student was enrolled and attending college at Pikes Peak Community College;

- One (1) student was enrolled and attending college at Arapahoe Community College;

- Seven (7) students had applied, worked on applications and financial aid, or had the intention of applying for enrollment into various local colleges and universities, including: Adams State University, Arapahoe Community College, Pikes Peak Community College, Red Rocks Community College, and Western State University; and

- One (1) student obtained a CNA license.

The number of DYS students in pursuit of a college education upon discharge appears to be growing. For instance, in last year's report four (4) students were confirmed to have participated in collegiate opportunities. This year's report cohort included 21 students.

MAP Overview

Academic growth for students served by the Division is measured using the Measures of Academic Progress (MAP) Growth assessments from NWEA™. These assessments "offer educators efficient and very accurate estimates of student achievement status within a subject." The test results "compare achievement status—and changes in achievement status between test occasions—to students' performance in the same grade at a comparable stage of the school year."

In concert with the Division's decision to centralize assessment centers[7] in the spring of 2013, the Woodcock Johnson (WJ III or WJ) educational assessment was retired from use and the MAP was adopted and implemented in its place. The decision to replace the WJ with the MAP assessment was based on data correlation and continuity. The WJ data, which was collected during a youth's initial assessment phase, did not directly correlate to the MAP data, which was collected at various intervals throughout a youth's commitment. With any assessment, continuity allows for correlation and comparison between initial and subsequent re-assessments, which in turn, allows for academic growth to be measured appropriately.

The Division chose the NWEA MAP product for a variety of reasons, chief among them being that the tool is recognized by CDE for Colorado-identified Alternative Education Campuses (AECs) as a means of reporting student growth. Additionally, NWEA MAP assessments are widely used and understood by education providers. Lastly, DYS schools and the education system overall must provide annual data to CDE for Title 1 Delinquency funding received. This federal funding comes to DYS through CDE and is used to "improve educational services for children and youth who are neglected (N) or delinquent (D) so that they have the opportunity to meet challenging State academic content and achievement standards." Annual Title 1 reporting requirements include grade-level improvements for youth who are in the facility for 90 days or more, as determined by a pre- and post-test in both reading and mathematics. Utilizing NWEA MAP assessments fulfills this reporting need.

While DYS has been using NWEA MAP assessments since 2013, other education providers throughout the state do not use the same interim measures. CDE Facility Schools began mandating the use of the iReady assessment suite in 2017 for interim monitoring at their schools, in addition to the state-mandated testing required of all Colorado public schools. Ultimately, as Colorado schools have local control and their own budgetary considerations influencing tools purchased and implemented, the choice of assessments varies and creates a disconnect in the ability to compare student growth, in and between systems.

[7] DYS transitioned from four (4) assessment centers prior to the spring of 2013 to two (2) beginning in the spring of 2013. The two assessment centers are Mount View Youth Services Center and Grand Mesa Youth Services Center.

To assure connection and continuity at DYS, the MAP assessment (subsequently referred to as "test" or "exam") is administered to all newly committed youth at the youth centers which provide initial assessment services, as required by the Colorado Children's Code and the Child Find process. The Division's assessment centers are located at Grand Mesa Youth Services Center (GMYSC) in Grand Junction, CO; and at Mount View Youth Services Center (MVYSC) in Lakewood, CO. The tests given have included three subject areas: (1) Reading, (2) Language Usage, and (3) Mathematics.

Expert Consultation

For purposes of this report, coupled with the agency's overall ability to relay student academic growth outcomes to various audiences, DYS sought the expert advice of several entities. These entities included NWEA (MAP tool authors); leading researchers at New America Schools in Denver, CO; the Colorado League of Charter Schools; Momentum Strategies and Research; and the Colorado Department of Education. In consultation with these experts, the Division received advice in regard to recommended MAP data usage, analysis approach, methodology, comparative data sets, and results presentation.

In terms of placing DYS student MAP growth in context with other student populations, one primary comparison is included in this report:

1) Student growth comparisons using norms generated from national Alternative Education Campuses (AEC norms).

In general terms, the DYS committed population most closely mirrors the "high risk students" or alternative school population (i.e., AEC), which allows for a valid and defensible comparison. Following consultation with AEC evaluators in 2019, DYS obtained and utilized national growth norms for AEC students. This year's report incorporates growth norms developed in 2017[8] by Alternative Education Campus evaluators and NWEA.

Prior analyses, presented in the 2nd annual educational outcomes evaluation, indicated student growth calculations normed on the Alternative Education Campus have increased rigor, setting higher growth expectations while accounting for a broader array of achievement levels. Therefore, the Division presents AEC growth comparisons within this report. The Division will continue to use NWEA achievement percentiles until more rigorous options applicable to a population with diverse academic needs for gauging achievement are available.

[8] DYS transitioned from 2009 norms utilized in the 2nd annual report to 2017 norms to ensure accurate comparisons, aligning with analyses conducted by Colorado AEC schools. Publicly-available AEC norms distributed by CDE via the AEC accountability site (https://www.cde.state.co.us/accountability/revised-nwea_map_growth_norms).

MAP Assessments: Methodology & Analysis

This section provides the methodology used by the Division of Youth Services to prepare the academic growth results presented in this report. MAP calculations and comparisons require a variety of statistical techniques (see: J. Ernst, 2012; J.L. Ernst, n.d.; NWEA, December, 2018). Therefore, a detailed Technical Methods section is available in the report appendices (Appendix C).

The DYS educational services programming conducts ongoing testing of students using the MAP. All MAP assessments completed by DYS youth are stored in the online MAP Administration and Reporting Center (MARC) system, maintained by NWEA. The MARC system represents the central exam administration and collection site for all DYS student exams. DYS staff conduct regularly scheduled downloads of all data from the MARC system, and transfer data to an intra-organizational database to support internal data tracking, and reporting.

Academic achievement and growth calculations shared in this report include data stored in the NWEA MARC system, extracted following the end of the traditional school year (July 24th). Summer term 2019 data were extracted from the MARC system on September 24th, 2019. As aforementioned, the select population for this report cohort includes 394 committed youth discharged from the Division during Fiscal Year 2018-19. A total of 18,167 exams were collected from academic years 2013-14 to 2018-19, of which 2,914 exams were specifically associated with the cohort youth. These exams were completed in six (6) Youth Services Centers (YSC):

- Grand Mesa YSC
- Lookout Mountain YSC
- Mount View YSC
- Platte Valley YSC
- Spring Creek YSC
- Zebulon Pike YSC

RIT Norms

How are RIT scale norm scores calculated?

MAP exams are comprised of several concepts. For example, when completing a Math MAP exam, a student may be required to demonstrate knowledge in concepts like algebraic methods, data analysis, and probability, along with other concepts. RIT student status scale scores are the foundation of MAP Growth exam, and they are available for grades K-11 in Reading Information (Reading), Mathematics, and Language Usage. MAP Growth National Achievement Norms are not available for 12th graders and DYS coded all RIT scores exceeding 11th grade proficiency to indicate the RIT score projected proficiency at or above the 12th grade. The Division used 2015 RIT scale norms to prepare this report. The Division used proportional rate growth logistic

regression computations to extrapolate grade proficiency using RIT scale norm scores. The goodness of fit for calculations, used to determine grade level proficiency for each academic subject, was strong[9].

How are RIT scale norm scores used by DYS educators?

DYS educational staff members use academic proficiency references to determine the appropriate curriculum for youth, a standard method utilized by Alternative Education Campuses.

When is the initial MAP exam given to students?

Per statute, the initial educational assessment (i.e., MAP exam) must take place within 45 days of commitment. To standardize, and expedite the MAP assessment administration process for all newly committed youth, administrators assign an *initial* designation of school grade, utilizing birthdate and academic year. Student grade level is essential to the process of determining the MAP Growth achievement norm for each student upon commitment, as well as categorizing growth within a national context for each youth during their time in Division of Youth Services custody. Without an accurate baseline grade level, it is impossible to place student growth in a national context. School transcripts are not universally-available at the time of the initial MAP assessment.

As outlined in Table 6 that follows, and using academic year 2018-19 as a reference point, DYS educational staff would indicate all youth born on or after August 15th, 2004, but before August 15th, 2005, as 9th graders in the MARC data system.

[9] Language Usage (R^2=.9929, $F(2, 12)$=325.6, $p<.001$); Math (R^2=.9865, $F(2, 12)$=218.6, $p<.001$); Reading (R^2=.9873, $F(2, 12)$=232.3, $p<.001$).

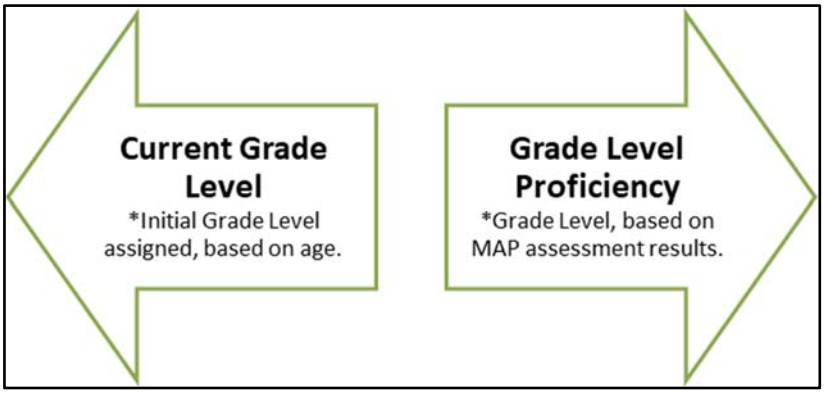
Table 6: Initial Grade Assignment by Dates and Age

Grade	Grade Start Date	Grade End Date	Age
K*	8/15/2013	8/14/2014	5
1*	8/15/2012	8/14/2013	6
2*	8/15/2011	8/14/2012	7
3*	8/15/2010	8/14/2011	8
4*	8/15/2009	8/14/2010	9
5	8/15/2008	8/14/2009	10
6	8/15/2007	8/14/2008	11
7	8/15/2006	8/14/2007	12
8	8/15/2005	8/14/2006	13
9	8/15/2004	8/14/2005	14
10	8/15/2003	8/14/2004	15
11	8/15/2002	8/14/2003	16
12	8/15/2001	8/14/2002	17

*Grade assignments not applicable to DYS committed youth, per the age of population served.

For purposes of this report, the initial grade assigned to students is referred to as the "current" grade level. This is not to be confused with a student's grade level proficiency. A student's grade level proficiency is determined by his/her performance on the MAP assessment.

Figure 6: Grade Level References



Quality Assurance Indicators

An evaluation of the Division's education processes, coupled with technical support provided by Northwest Evaluation Association in 2013, generated a series of data quality assurance recommendations employed by DYS. The Division incorporated the following data quality assurance recommendations into the cleaning, coding, and review process. For additional insight into the application of these indicators, please see the Technical Methods write-up, available in Appendix C. Quality control processes are designed to examine the following indicators, which ultimately ensure the validity of MAP exam data collected and reported by DYS:

- **Low Performance**
  When a student answers a question incorrectly, the subsequent MAP exam question is an easier question. Recommendations shared by NWEA specify it is appropriate to assume that students will answer at least 50% of the questions correctly. MAP exams with 40% or fewer test questions answered correctly do not represent accurate measures of growth and were removed from analysis.

- **Brief Duration**
  MAP Language Usage exams completed in less than 20 minutes, and MAP Reading and Math exams completed in less than 25 minutes are not likely to represent accurate measures of growth. MAP exams were flagged for retest due to insufficient exam duration, and exams completed in less than 20-25 minutes are not included in this report.

- **Significant Decline from Prior Maximum Measured Achievement Level**
  A decrease in the RIT scale score of more than eight points, within a school subject, from a preceding RIT scale score, indicates the student did not show adequate effort or engagement, and does not represent an accurate measure of growth.[10]

ADDITIONAL DATA CONSIDERATIONS

In addition to the aforementioned quality control indicators, subsequent data structuring and decisions made during the production of this report are described under the following headings.

Commitment Date & Discharge Date

Only those MAP exams associated with youth discharged in FY 2018-19 are included in this report. Additionally, exam data beyond the range of the DYS commitment and parole window were excluded from analysis.

[10] Due to the sequential nature of student growth measurements, the Division evaluated drastic decreases in RIT scale scores sequentially by removing all successive exams within each discipline demonstrating a decrease of more than eight points from a previous maximum RIT scale score achievement level.

Academic Terms Defined
The Division's Data Management & Analysis staff re-coded all MAP exams according to the following academic timeline (i.e., terms):

- Fall term: August 15th - November 30th
- Winter term: December 1st - February 28th
- Spring term: March 1st - June 15th
- Summer term: June 16th - August 14th

To address changes to term timepoint designations employed by NWEA in 2015, all MARC system-defined academic terms were re-calculated and re-coded according to this term schedule. The Division also constructed academic year designations (i.e., 2014-15, 2015-16) to ensure accurate calculations across all years of MAP exam collection.

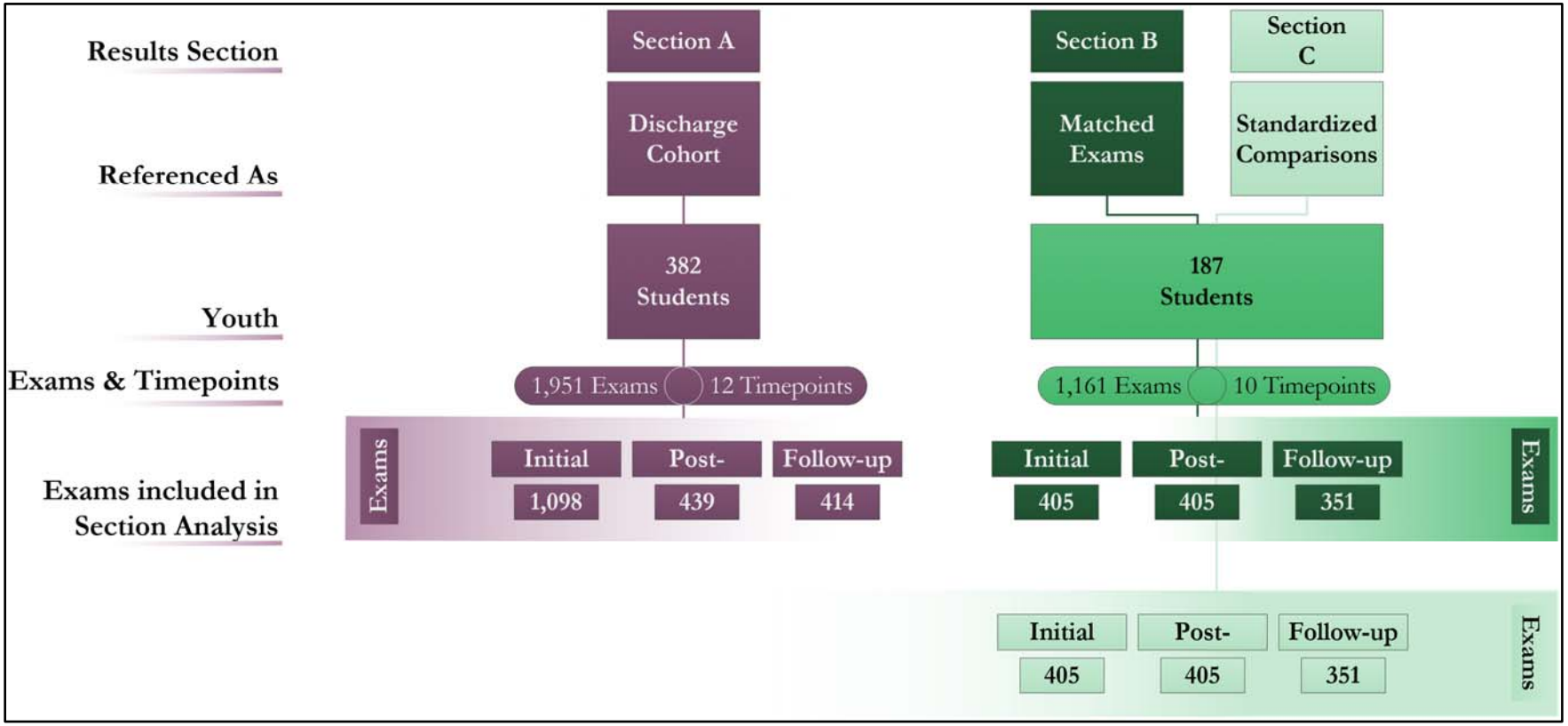
Summer Exams
Initial exams completed during the summer months can be used to gauge academic achievement; however, exams collected in the Summer term do not represent valid measures of growth and must be excluded from the matched analysis. Initial exams completed by students beginning their commitment during the Summer term were retained for reporting of cohort-level academic characteristics, but not included in academic growth results analyses (i.e., the "matched analysis" section).

Analysis Software and Data Storage
DYS Data Management & Analysis staff reviewed, coded, and conducted all computations, merges, and data re-structures in IBM SPSS 26.0 (statistical software). The results include all valid data retained for analysis. The initial MAP exam results, or pre-tests, for each student are available in the NWEA MAP database and are included with a grade equivalency in the universal education assessment report designed by and completed by the Division of Youth Services Education staff.

MAP RESULTS

The MAP assessment results are presented in three distinct ways: (Section A) by all youth in the cohort with at least *one* valid exam, which allows for a general presentation of student academic characteristics and status when committed to DYS; (Section B) by a subset of youth in the cohort that have at least *two* valid exams, which allows for a general presentation of academic characteristics of students with matched exams, providing a backdrop for the examination of student growth; (Section C) as compared to standardized norms, which allows DYS student growth to be presented in context with student growth norms witnessed within other populations.

Table 7: MAP Results Presentation and Interpretation Guidance

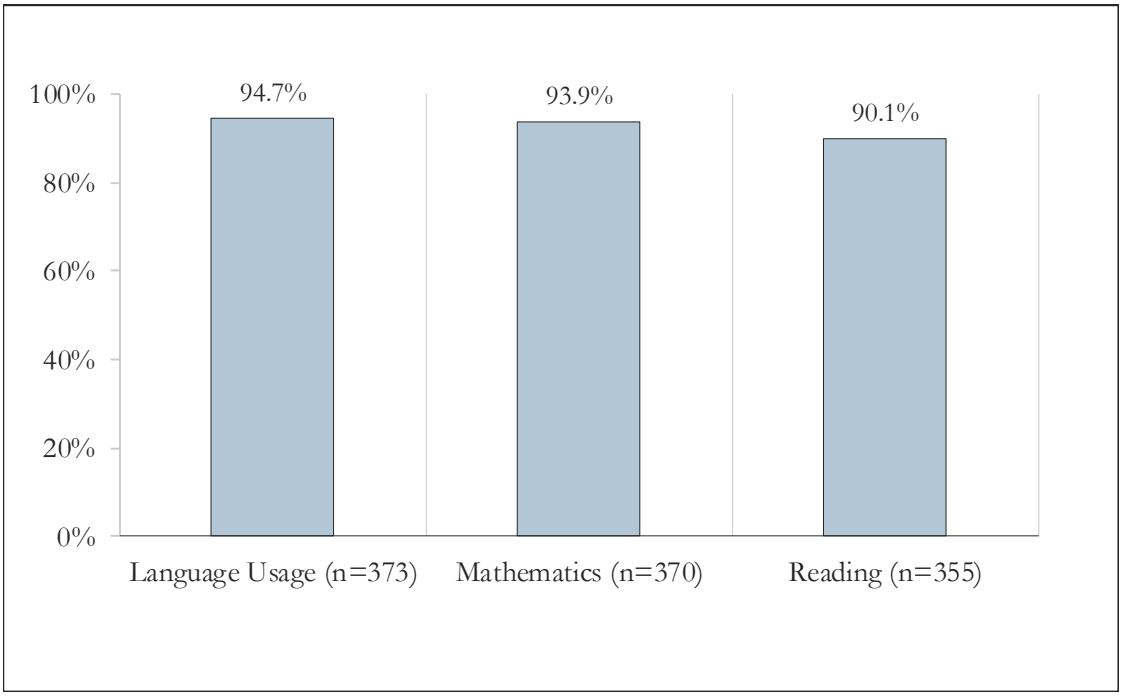


SECTION A: DISCHARGE COHORT & ACADEMIC STATUS/CHARACTERISTICS (N=1,951 EXAMS; N=382 YOUTH)

This section of the results presentation provides a summary of the academic characteristics presented by all students discharged from DYS commitment in FY 2018-19. All data presented in this section of the report include valid MAP exams completed by youth as an initial assessment (1,098), and this section is also designed to generally identify and understand the needs of committed youth. Of the 394 discharged students, 382 students completed an initial exam that was deemed valid (96.9%)[11]. As detailed in Figure 7 that follows, the number of valid initial exams ranged across academic subjects.

In Language Usage, 373 students from the discharge cohort completed an initial exam (94.7%), 370 students from the discharge cohort completed a Math exam (93.9%), and 355 students completed a Reading exam (90.1%).

Figure 7: MAP Exams by Academic Subject | Discharge Cohort



[11] 388 students completed an initial exam; however, six (6) students had multiple exams not meeting the standards for inclusion in this report. Valid initial exams for 382 students are included in this report.

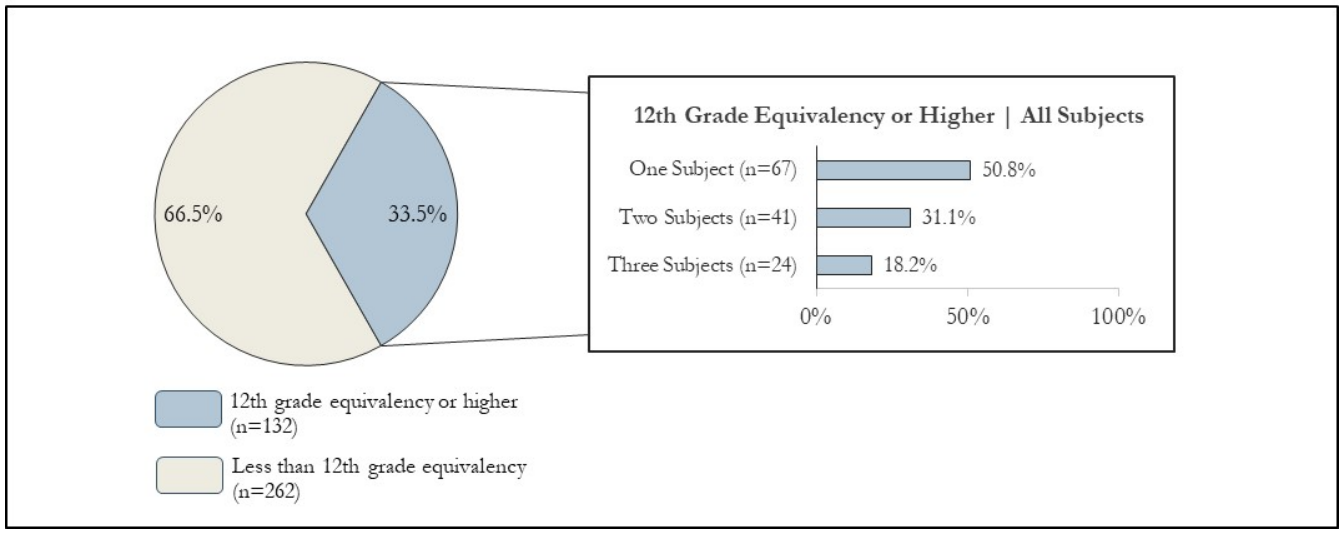
The students without a valid initial exam included those who:

- had a verified HSD or GED;
- had scored at a 12th grade equivalency or above;
- had consistently refused testing;
- were transferred from DYS to the Youthful Offender System (YOS), operated by the Department of Corrections (DOC).

In future reporting, collaboration with CDE will allow the Division to more closely examine the educational growth of these students, absent valid MAP data. For additional details on the CDHS-CDE data sharing agreement, see the report section titled "Educational Programming Improvements at DYS," subsection titled "Partnership Between CDHS and CDE."

As described in a previous section of the report, 5.1% of students (or 20 of 394) had already attained a High School Diploma (HSD) or General Equivalency Diploma (GED) at the time of DYS commitment. As of the 2018-19 fiscal year, students that tested into the 12th grade or higher were technically considered exempt from additional MAP exam testing. However, students currently falling under these circumstances are still offered additional testing and are included on exam rosters; ultimately though, it is the student's decision to participate or refuse. In total, the initial exams of 132 youth, or 33.5% of the cohort, demonstrated 12th grade equivalency in at least one subject. As displayed in the following chart, equivalency was most frequently identified in one subject.

Figure 8: Students Demonstrating 12th Grade Equivalency or Higher | Discharge Cohort

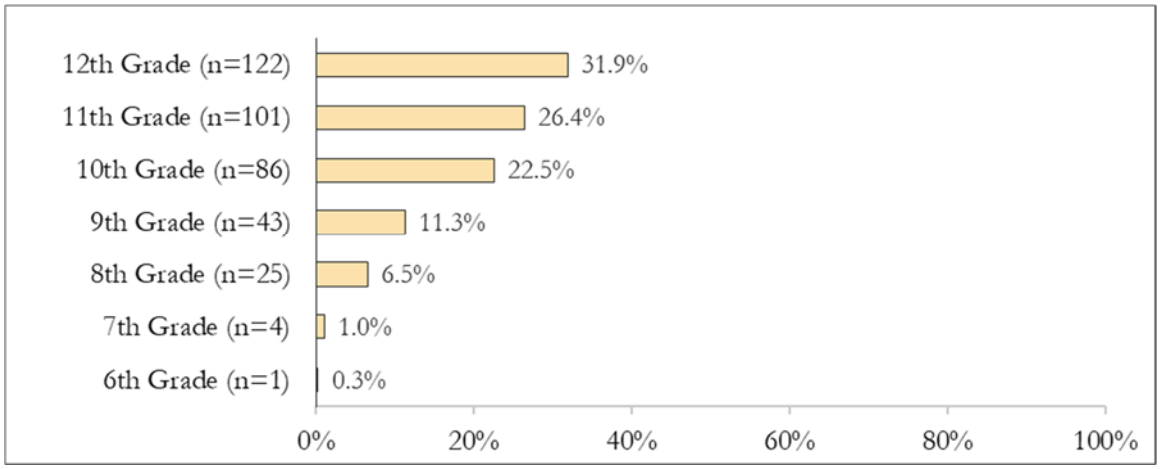


Among students demonstrating 12th grade equivalency or higher, 50.8% conveyed proficiency in one subject, 31.1% in two subjects, and 18.2% demonstrated proficiency in all three subjects (Reading, Math, and Language).

Student Grade Level Proficiency

To calculate student grade level proficiency, DYS used the grade level each student demonstrated upon completion of their initial MAP growth exam (the earliest-dated exam, across school subjects). After completing their initial exams, subject matter proficiency among students in the FY 2018-19 discharge cohort spanned from the 6th to 12th grade or higher. As Figure 9 illustrates, a majority of cohort students (58.3%; 31.9% and 26.4%) were in the 11th and 12th grade upon completion of their initial exam.

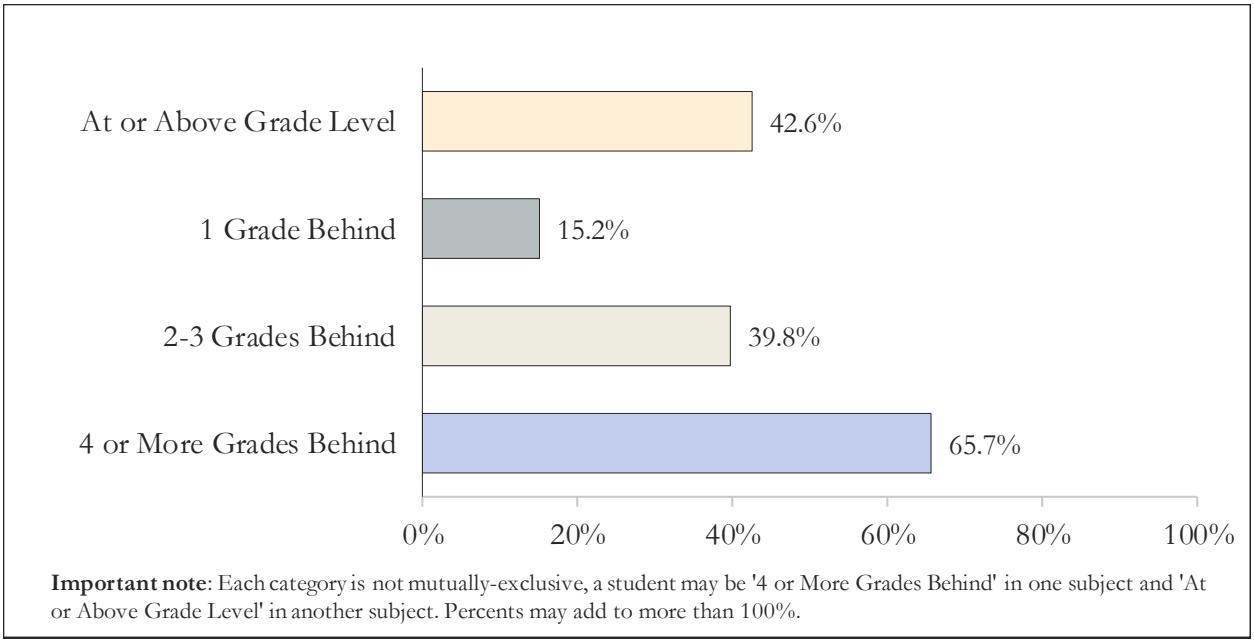
Figure 9: Student Grade Level Proficiency | Discharge Cohort



Across all academic subjects, nearly 70% of youth in the discharge cohort (259 of 394 youths; 65.7%) presented a deficit of four or more grade levels behind their current[12] grade level, in at least one subject. Overall, 42.6% of students tested at or above grade level. See Figure 10 for a visual.

[12] Initially assigned grade level, based on age.

Figure 10: Academic Proficiency Across Subjects | Discharge Cohort

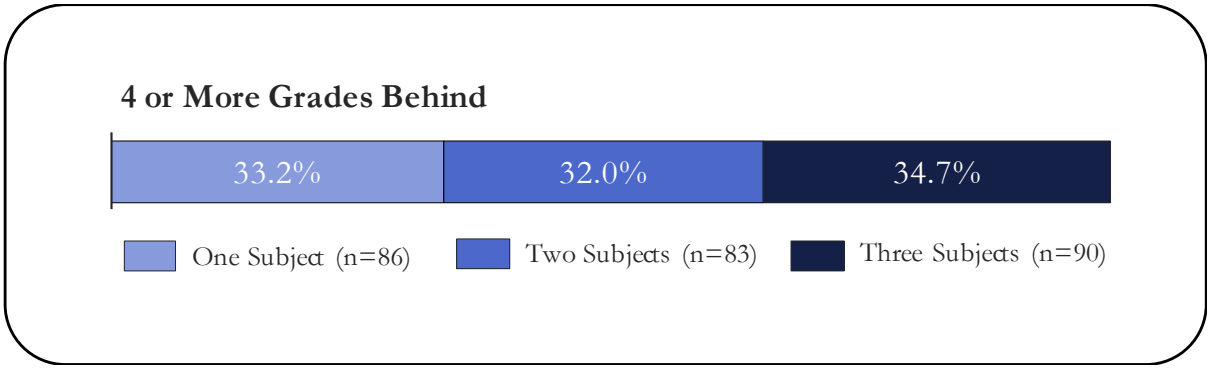


Important note: Each category is not mutually-exclusive, a student may be '4 or More Grades Behind' in one subject and 'At or Above Grade Level' in another subject. Percents may add to more than 100%.

Details on Deficits (Below Grade Level)

For those students demonstrating a deficit of 4 or more grades behind (across subjects), the likelihood of a deficit in one, two, or three subjects was approximately similar (33.2%, 32.0%, and 34.7%; respectively).

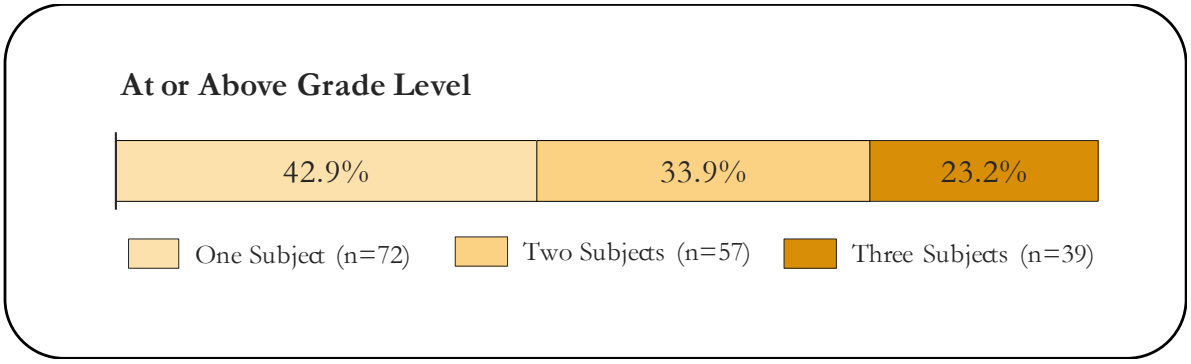
Figure 11: Academic Deficit of 4 or More Grades Behind | Discharge Cohort



Details on Proficiency (At or Above Grade Level)

Of the 40.6% of students demonstrating proficiency at or above grade level in at least one subject, the majority of students (57.1%; or 33.9% plus 23.2%) were proficient in more than one subject.

Figure 12: At or Above Grade Level | Discharge Cohort

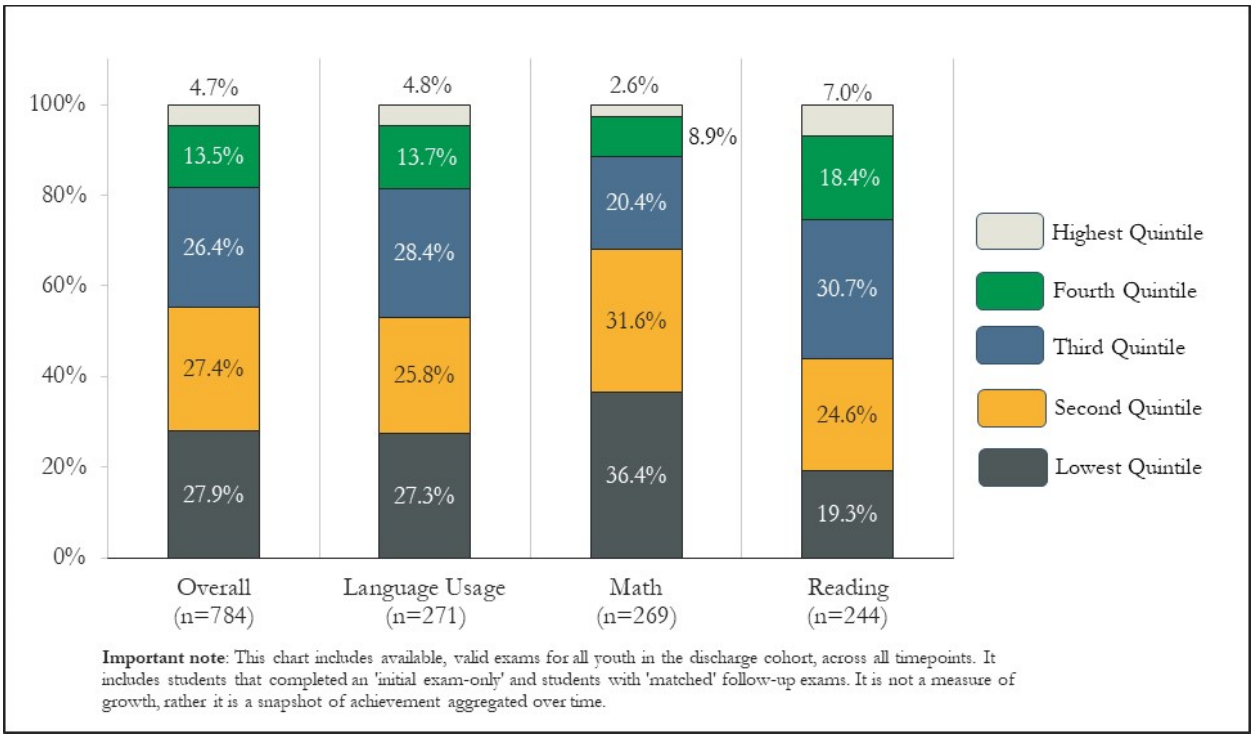


Median Achievement Percentile

Of the 1,098 initial valid exams completed by youth in the discharge cohort[13], the MARC system reported a national achievement percentile for a total of 784 MAP exams (71.4%). Presented in quintiles in Figure 13, 26.4% of all exams represent a MAP score within a range considered 'typical' (41st to 60th percentile), and 18.2% of median scores collected for all youth during their commitment to DYS demonstrated academic proficiency above the 60th percentile (13.5% in the fourth quintile, and 4.7% in the 80th to 99th percentile). A majority of student scores (55.3%) fell in the lowest set of quintiles, representing tests scoring in the 40th percentile and lower. Similar to the first and second annual Educational Outcomes reports, MAP Math scores presented the subject as particularly challenging for students, as 67.9% of the cohort fell within the lowest two median achievement quintiles, or stated otherwise, within the 1st to the 40th percentile.

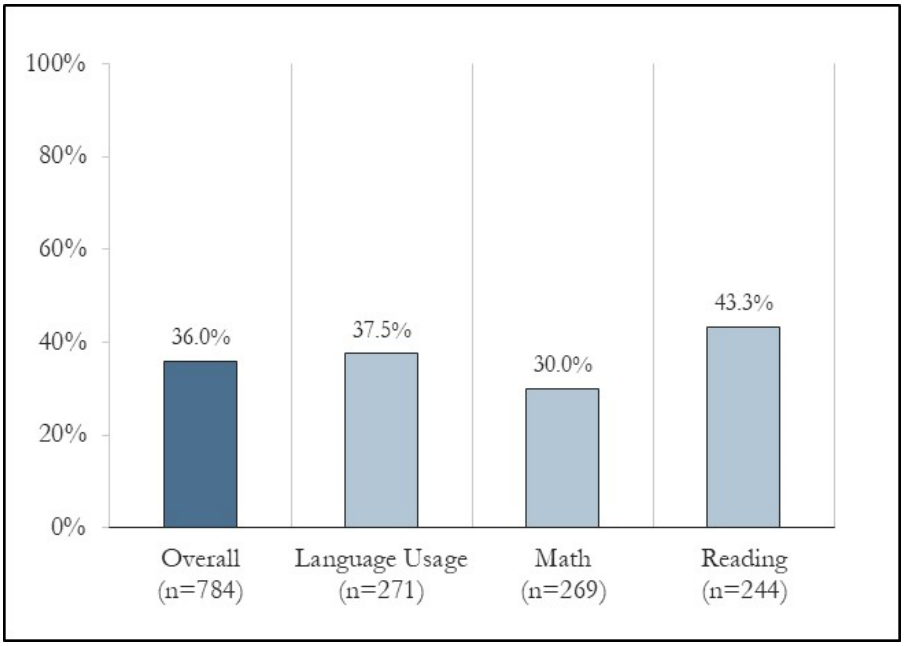
[13] Depending on the youth, some students had one valid exam, some students had as many as eight.

Figure 13: Median Achievement Quintiles | Discharge Cohort



Across all students, subjects, and school years (as shown in Figure 14 that follows), the median achievement percentile was the 36th percentile. Student achievement in Reading reached the third quintile with the median achievement percentile falling in the 43rd percentile, followed by Language Usage, which approached the third quintile (37.5%). Median Math achievement trailed all subjects, in the 30th percentile; equivalent to 70% of MAP exams collected in a traditional academic environment exceeding the scores collected for students in this cohort.

Figure 14: Median Achievement Percentile | Discharge Cohort



SECTION B: MATCHED EXAMS & ACADEMIC GROWTH (N=405 EXAMS; N=187 YOUTH)

Data Consideration: Defining the Initial Exam

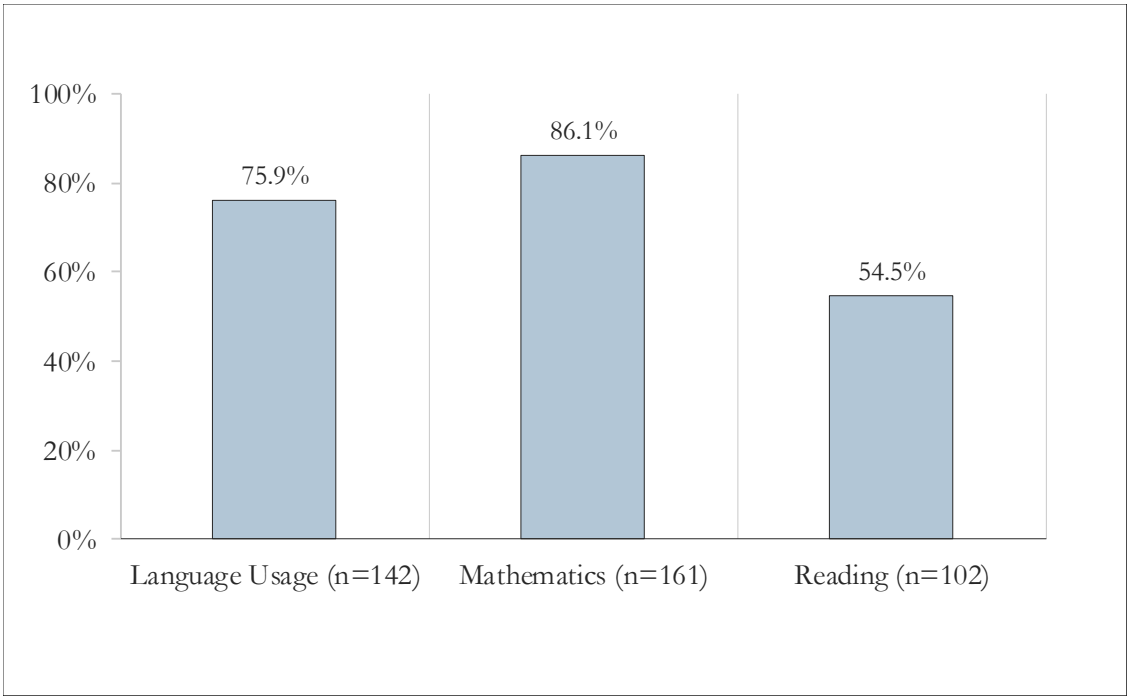
Section B details the matched analyses conducted, and include students with (at least) two valid exams: an initial valid exam and a subsequent valid follow-up exam. Importantly, the earliest *valid* exam completed by each student, whether it represents the initial MAP exam (completed during the assessment process, when first committed to the Division of Youth Services), or a subsequent exam completed when students were admitted to a Youth Services Center, may represent a valid initial exam. When possible, the initial MAP exam administered *during assessment* was deemed the "initial" exam and used as such for analysis. However, if invalid, the next valid MAP exam was deemed the initial exam.

Following the exclusion of initial exams completed in the Summer term, DYS matched all remaining time points in the sample and removed exams without a successive exam in the same subject.

Results

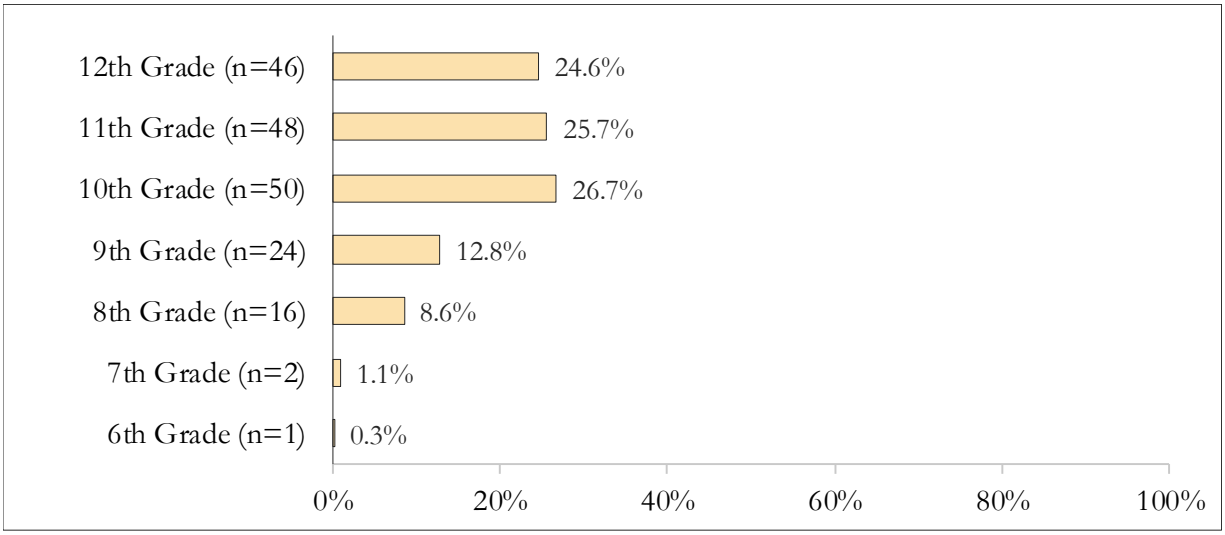
Of all youth included in the FY 2018-19 discharge cohort, the initial and follow-up exams of 187 students (47.5% of the cohort) met sufficient validity standards for inclusion in calculations of student academic growth. Data included in matched analysis include 1,161 exams. Across academic subjects, 405 valid exams had at least one matched exam (810 matched exams total). A total of 351 exams (30.2% of valid matched exams) represented MAP follow-up exams, collected following the initial post-exam to monitor continued academic progress. The number of exams completed by students ranged from two paired exams, to a total of ten valid MAP exams completed over the course of academic years 2013-2014 through 2018-19. All paired data are included in analysis. Distributed across subjects, the Division collected valid, matched MAP exams for 142 youth in Language Usage (75.9% of the 187 students with matched MAP data), 161 youth with matched Math exams (86.1%), and 102 youth with matched Reading exams (54.5%).

Figure 15: MAP Exams by Academic Subject | Matched Exams



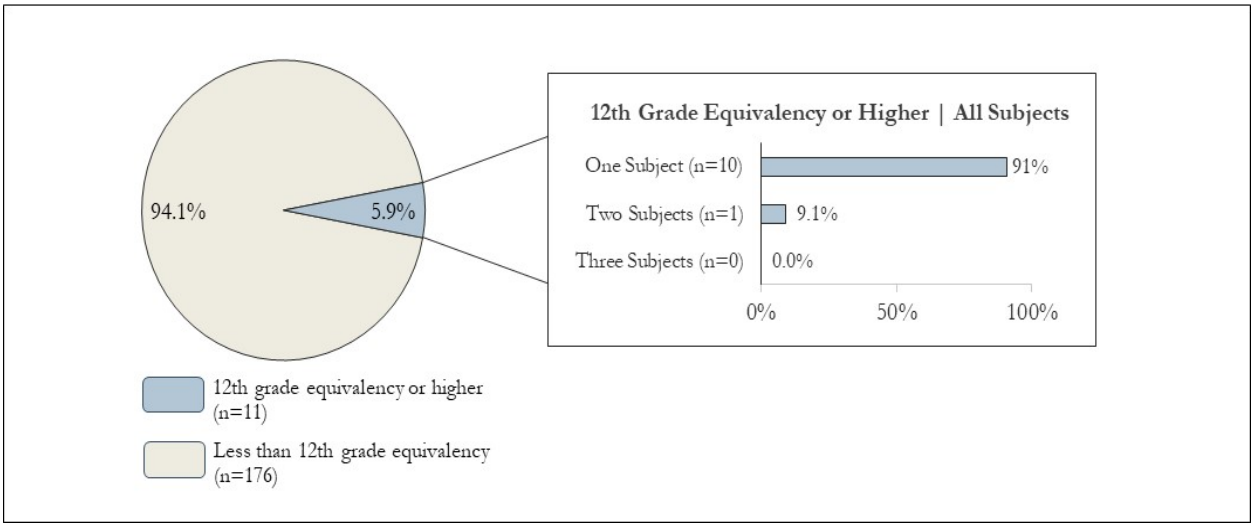
Valid matched exams were available for students ranging from the sixth to 12th grade. More than three-quarters of students with matched data were in the 10th grade and higher (77.0%) when completing their initial exam.

Figure 16: Student Grade Level Proficiency | Matched Exams



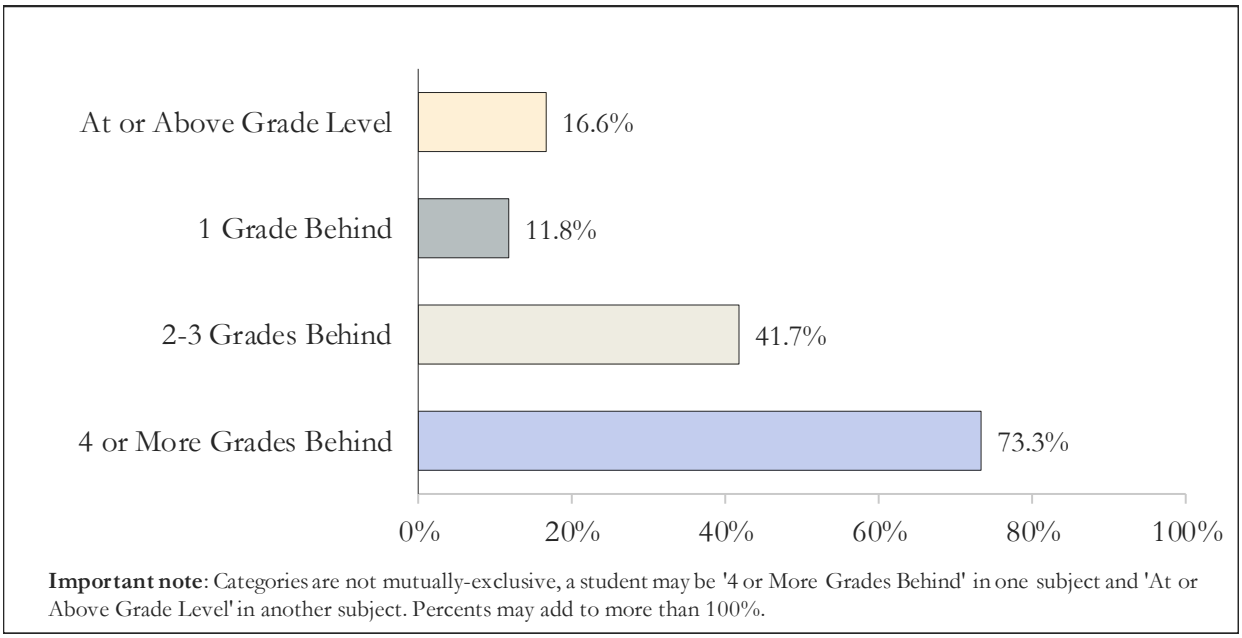
In contrast, few students performed at the 12th grade or higher on their initial MAP exam. Eleven students demonstrated 12th grade equivalency or higher in at least one subject (5.9%). Despite this level of proficiency, none of the students sustained scores indicating 12th grade proficiency or higher in all three academic subjects (see Figure 17).

Figure 17: Students Demonstrating 12th Grade Equivalency or Higher | Matched Exams



Of students for whom matched data were available, 16.6% of exams demonstrated proficiency at or above grade level. In contrast, 73.3% of exams showed students were 4 or more grades behind when entering commitment.

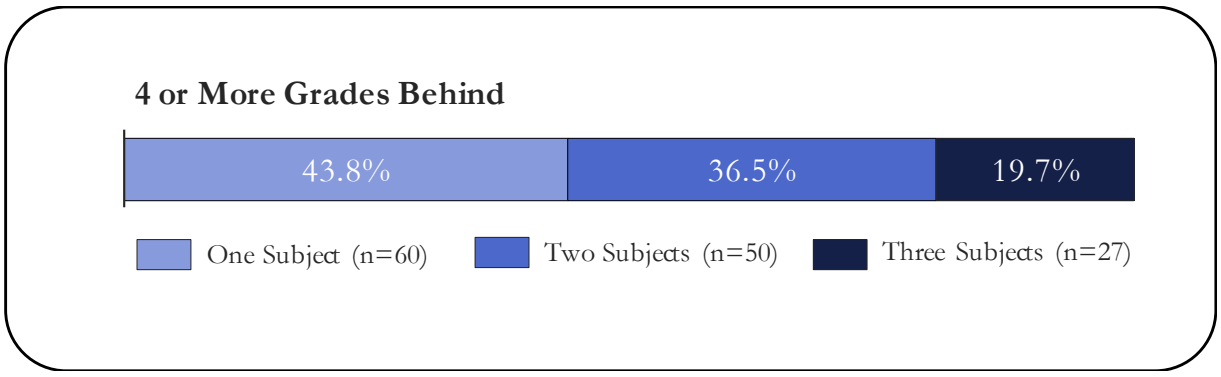
Figure 18: Academic Proficiency Across Subjects | Matched Exams



Important note: Categories are not mutually-exclusive, a student may be '4 or More Grades Behind' in one subject and 'At or Above Grade Level' in another subject. Percents may add to more than 100%.

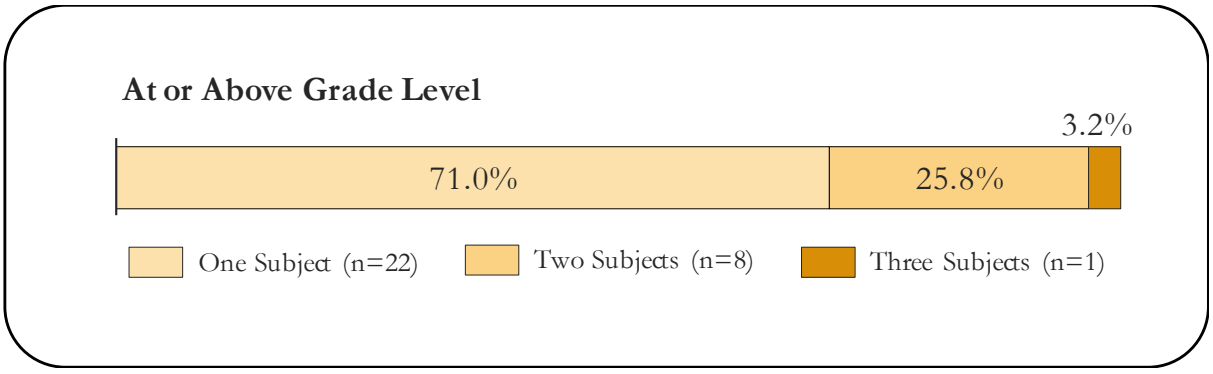
Of those students with matched exams that performed more than 4 or more grades behind on their initial exam, many were likely to show similar deficits in more than one subject. More than half of students with at least one exam four or more grades behind their peers demonstrated a similar deficiency in another school subject (56.2%; 36.5% and 19.7%).

Figure 19: Academic Deficit of 4 or More Grades Behind | Matched Exams



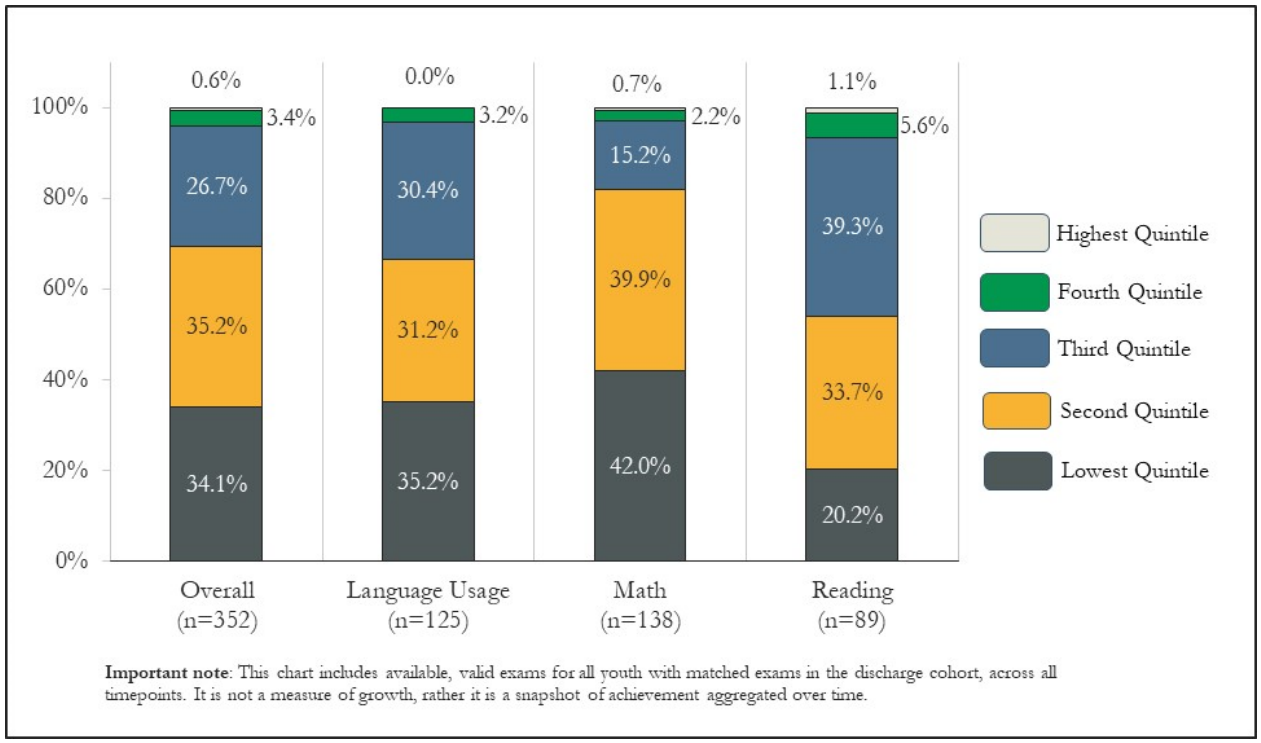
Of the few youths that performed at or above grade level on the initial exam (n=31), 71% performed at or above grade level in one subject. One youth with matched data (3.2%) performed at or above grade level on the initial exam in all three subjects.

Figure 20: At or Above Grade Level | Matched Exams



A majority of exams (69.3%) fell in the lowest or second quintile (see Figure 21). Few students performed in the highest quintile in any subject (0.6%). Overall, 3.4% of exams demonstrated performance in the highest or the fourth quintile.

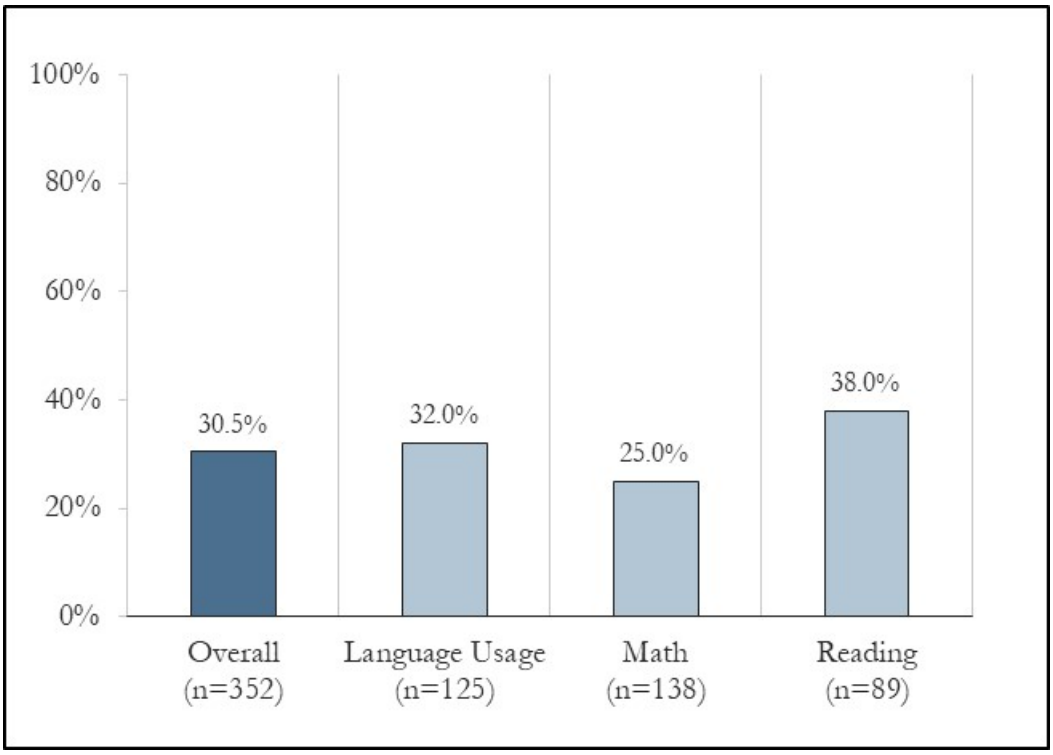
Figure 21: Median Achievement Quintiles | Matched Exams



Median Achievement Percentile

Overall, students in the matched sample showed less than typical achievement. Across subjects, exams, and time points, students performed in the second quintile, specifically the 30th percentile. Performance in Mathematics was lowest, in the 25th percentile, meaning approximately 75% of peers in a traditional academic setting performed as well or better in Math. In comparison to peers in traditional schools, students performed in the 38th percentile in Reading (see Figure 22).

Figure 22: Median Achievement Percentile | Matched Exams



SECTION C: HOW DOES DYS STUDENT GROWTH COMPARE? (TO ALTERNATIVE SCHOOL STUDENT GROWTH)

Data Considerations for Contextual Comparisons

Matched Analysis[14]

As recommended by NWEA, the second annual Educational Outcomes Report released by the Division employed a series of reporting steps aligned with standardized methods commonly recognized in the Education field. The Division's calibration of MAP data analyses to existing standards applied in the field of education provides multiple benefits: a broader insight into the characteristics of youth committed to the Division of Youth Services; greater comparability to traditional school populations; and increased rigor for determining outcomes of committed youth during their time with DYS. Steps taken to measure student academic growth through the analysis of matched data points is described throughout Sections B and C.

[14] Students included are those with both a valid initial exam (pre-test) and at least one valid follow-up exam (post-test or post-tests).

Time Periods

Valid initial exams and follow-up exams may cross academic quarters, and academic years. Further, the exclusion of Summer term MAP exams from matched analysis creates additional data gaps, hindering the provision of accurate insight into the breadth of academic success shown by this target population (report cohort). Following the removal of all MAP exams completed during the Summer term, all exam time points were re-coded in successive order, by subject and academic year, and re-designated as initial (pre-) and follow-up (post-) exams. To address changes to term timepoint designations employed by NWEA in 2015, all MARC system exam term identifiers were also re-coded to reflect successive timepoints of exam administration. For the purposes of this report, the initial exam represents the starting RIT student status score, in alignment with a traditional school model. However, each successive exam represents both a timepoint for measuring growth from the initial exam, and a starting point for measuring continued growth. Each point is assessed separately, and student growth is determined according to the expected growth associated with each successive score.

Standardized Adaptations to Annual Calculation Methods

Matched exams crossing academic years, comprising annual academic growth measurements including Fall-to-Fall, Winter-to-Winter, and Spring-to-Spring term designations are incorporated into these analyses. When annual and quarterly growth were available for the same exam (i.e., Fall-to-Winter growth was available, and Winter-to-Winter growth was available), in accordance with recommendations available from AECs to utilize the longest academic period of growth available, DYS utilized ***annual*** academic growth (Ernst, July 2012, p.4). For comparison, academic growth within a school year provides context regarding periodic growth. However, aggregate growth for the cohort, incorporating all available measurements of growth, is also included in this report.

AEC Growth Calculations (National Alternative School Norms for Comparison Purposes)

The Division used student growth norms developed by administrators supporting Alternative Education Campuses to understand growth relative to typical academic growth for youth in a non-traditional setting. Student growth norm scores were measured from the beginning of the academic year (Fall term) to the second term of the school year (Winter term), and subsequently, to the third term (Spring term). Analysis consisted of identifying growth for each student, across each of the academic periods, and comparing academic growth to the standardized growth norms developed in 2017 and available from the Colorado Department of Education. All available norms were combined and indexed in SPSS 26.0, according to RIT scale scores, academic term, and student grade. To ensure uniformity in comparisons with standardized norm calculations (NWEA), student growth norms and growth targets were calculated on the current grade of the student (assigned initially, based on age), rather than the demonstrated grade-level proficiency.

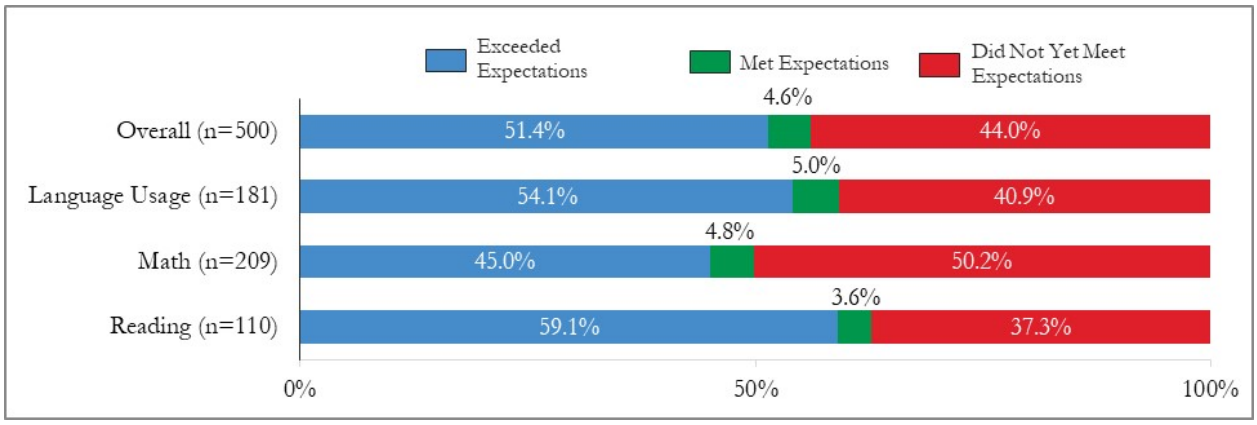
COMPARISON RESULTS

Following the process of validating, and excluding invalid MAP exams, the Division of Youth Services removed all records deemed inappropriate for this report, including Summer term records and General Science records. Following the removal of invalid exams completed by youth, retained records were re-coded according to time point across academic subjects, academic years, and other parameters. Of the 1,161 MAP exams included in the matched sample (810 matched across two time points, and 351 follow-up exams), 500 exams collected across school subjects (43.1%) included an initial MAP exam and subsequent follow-up exam(s) sufficient for inclusion in this report's comparative data section.

ALTERNATIVE SCHOOL STUDENTS (AEC NORMS)

Across subjects, students demonstrated the highest levels of growth in Language and Reading. Overall, across all exams and academic years, 56.0% of exams met or exceeded expectations, including 51.6% of exams which exceeded expectations, and 4.6% that met expected growth. This varied across exams completed in each subject, with 59.1% of exams meeting or exceeding typical growth in Language Usage (see Figure 23).

Figure 23: Student Growth Across Academic Subjects |AEC Norms

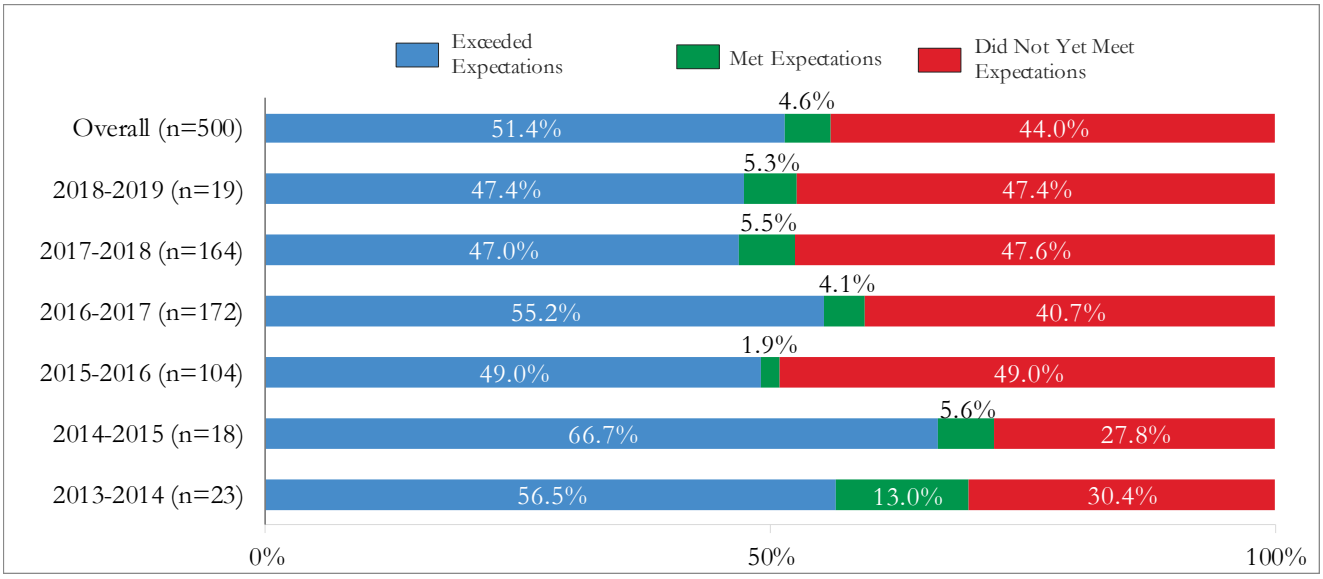


The strongest patterns of growth were exhibited in Reading, 59.1% of exams exceeded expected growth, and 3.6% met the AEC growth standard. While exams met or exceeded AEC expected growth targets in Language and Reading, approximately half of all Math exams (49.8%) did not yet meet typical growth (n=207).

Across academic years, and including both quarterly and annual growth totals, patterns demonstrate aggregate measurements of growth are sensitive to population fluctuations. For instance, exams collected during academic years 2013-14, and 2014-15 show extraordinary academic growth. Respectively, and importantly, exams collected in these years represent 4.6%, and 3.6% of the 500

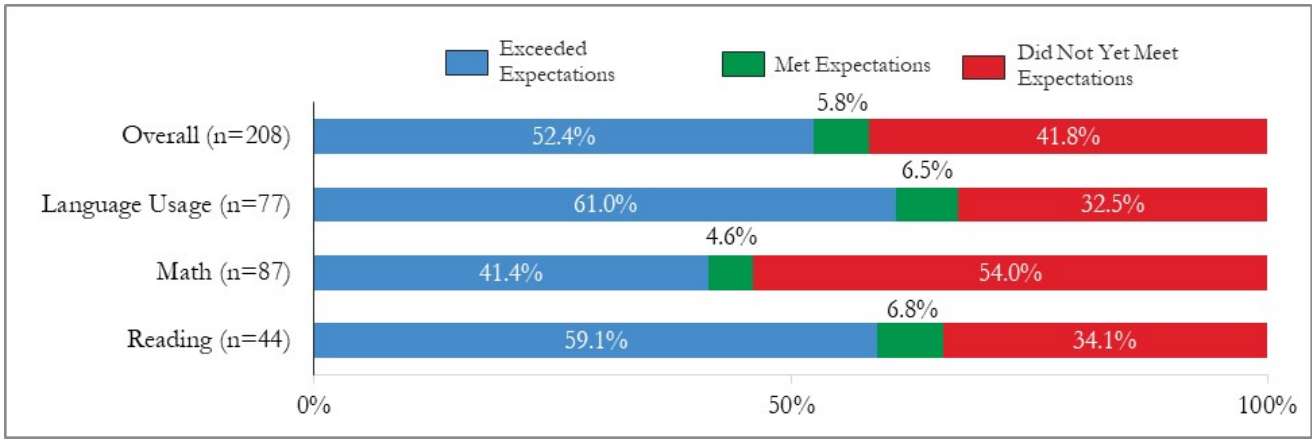
matched MAP exams. During these academic years, academic growth ranged from 69.5% of exams meeting or exceeding typical growth (56.5% exceeding typical growth, and 13% meeting typical growth) to 72.3% of exams meeting or exceeding growth in 2014-15 (66.7% exceeding, and 5.6% meeting). As shown in the following chart (Figure 24), exams completed by students in this cohort from academic years 2015-16 to 2017-18 demonstrate moderated academic growth calculated across academic years, with the strongest growth demonstrated in 2016-17, a year in which 59.3% of students met or exceeded typical academic growth.

Figure 24: Student Growth by Academic Year | AEC Norms



As illustrated in Figure 25, isolating annual measures of growth, collected over the span of one academic year (i.e., Fall-to-Spring, Spring-to-Spring, etc.), similar patterns of academic growth emerge with 58.2% of exams meeting or exceeding typical growth (n=208). Annual measurements of growth indicate levels slightly exceeding typical levels of growth measured across terms in all subjects except Math. When measured over the course of an academic year, students were more likely to approach expectations without meeting or exceeding typical growth expectations, as demonstrated by 54.0% of exams matched across annual academic time periods not yet meeting expectations.

Figure 25: Student Growth | AEC Norms (Annual Growth Only)



Student Growth, Using AEC Growth Percentile

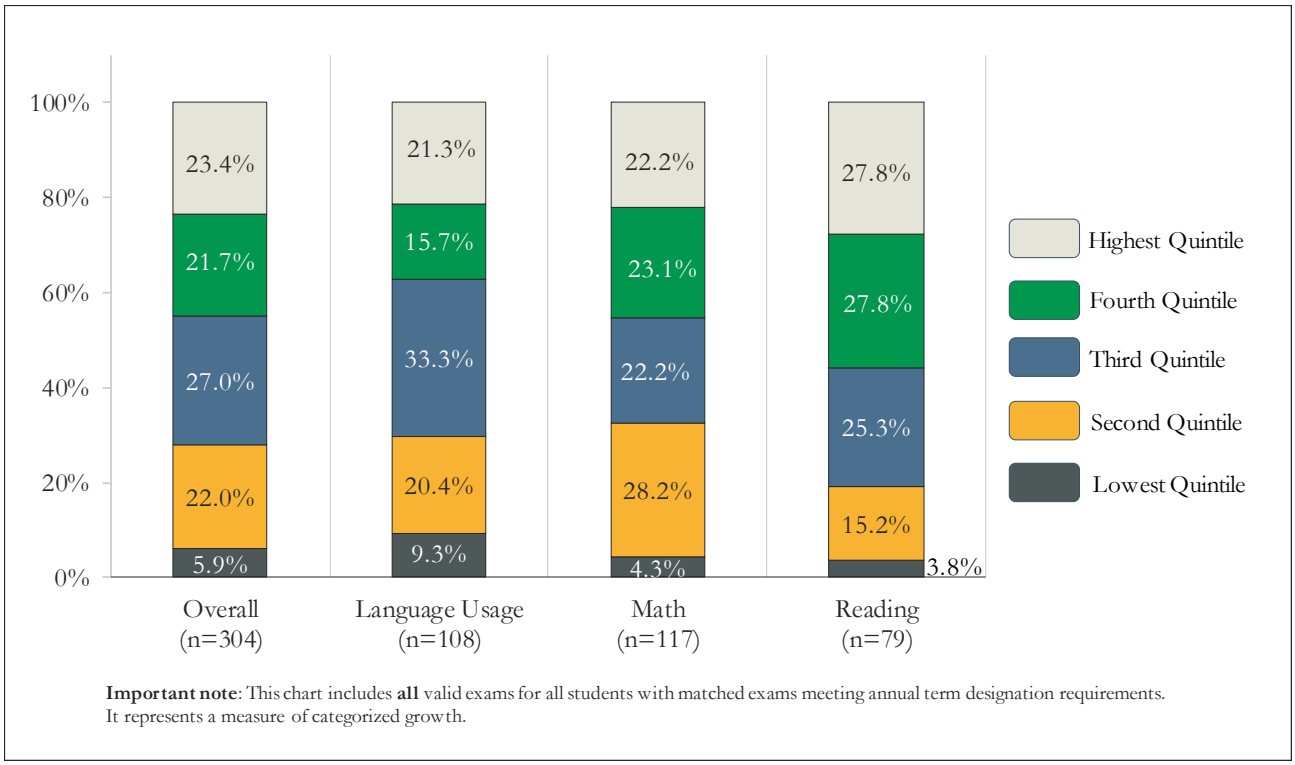
Overall, academic growth exhibited by students is best examined through shifts in percentile growth. To paraphrase the Colorado Department of Education, "A student growth percentile defines how much relative growth a student made. [It] compares each student's current achievement to students in the same grade...It is **not** about how that recent test score compares to all the other test scores. Even students with test scores that are very low can receive high **growth** scores" (Colorado Department of Education, 2016). Similar to other data points presented for comparative purposes, growth percentiles denote the magnitude of change in RIT scale score. In contrast, growth percentiles expound growth according to traditional growth.

To expand the scope of analysis in this report, the Division of Youth Services utilized AEC MAP growth percentiles distributed by AECs via the Colorado Department of Education website (Colorado Department of Education, May 2017). AEC growth percentiles provide insight into each student's level of growth relative to students exhibiting comparable levels of risk, youth served by Alternative Education Campuses. Initially developed and distributed in 2009 by AECs, the growth percentiles were most recently updated in 2017 and released broadly in 2018. Importantly, 2017 percentile calculations include both annual and term growth calculations across all subjects, whereas 2009 percentile calculations included only annual growth calculations. The incorporation of term growth calculations vastly expanded opportunities to incorporate growth percentile calculations, increasing the number of available data point estimates from approximately 650 to nearly 4,000 data points.

Across 187 students, AEC growth percentile calculations were not available for three exams. 2017 AEC growth percentiles were developed for students between the 7th and 12th grade, therefore growth calculations could not be computed for three exams completed as a 6th grade student while committed to the Division of Youth Services and discharged with the cohort of interest.

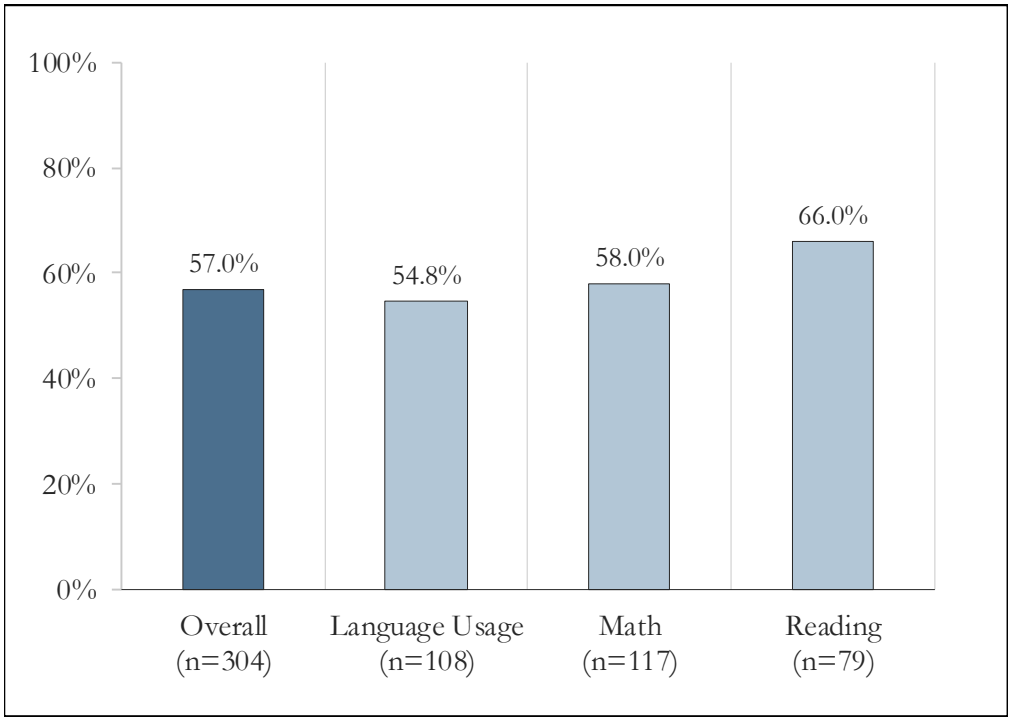
The following results represent the aggregated median growth percentile of students, consolidated across quintiles, and presented as simple aggregate statistics. The Division of Youth Services calculated percentile growth medians across all exams completed across valid terms of measurement by each student, within each subject. Once aggregated, all median percentiles were aggregated across subjects, comprising indicators of growth for 187 students across 304 data points. Across subjects, a total of 108 students completed matched Language Usage exams (57.8%), 117 students completed matched Math exams (62.6%), and matched Reading exams were available for 79 students (42.3%).

Figure 26: Academic Growth Quintiles by Subject | AEC Norms



Overall, the median growth across all exams completed by the cohort placed 45.1% of exams above average growth (23.4% and 21.7%), in the 60th to the 99th percentile (see Figure 26). Nearly one quarter of exams (23.4%) represented growth in the highest quintile (80th to 99th percentile). This growth was most pronounced in Reading, with more than half of demonstrated growth (55.6%) in the highest and second quintile. While growth in Mathematics followed growth in Reading closely, and 45.3% of youth demonstrated above average patterns of growth, the number of matched exams falling in the second quintile (21st to 40th percentile) exceeds the number demonstrating growth in the third quintile, indicating a larger number of exams showing poor growth than those showing average growth.

Figure 27: Academic Growth Percentile by Subject |AEC Norms



Incorporating all levels of growth into one statistic, overall, students demonstrated growth approaching 'above average' growth (fourth quintile; 61st to 80th percentile), presented in Figure 27 as the 57th percentile. Growth in Reading was particularly high for this cohort, well within the fourth quintile (66th percentile). Median student growth in Math exceeded the overall median (57th percentile) and trailed growth in Reading, in the 58th percentile.

Summary of Educational Outcomes

In summary, educational outcomes presented in this report were measured in two ways: academic achievement and academic growth. Importantly, results shared in this report represent the statewide aggregate of a discharge cohort of students.

Academic Achievement Results

- 67% of youth discharged from the Division with either a High School Diploma or GED in-hand. For the 33% that did not achieve a HSD/GED, a vast majority of students (121 of 130) had circumstances that provided valid reasoning for non-attainment (e.g., were too young, were actively enrolled in school, etc.).

- In total, one quarter (25%, or 98 of 394 youth) of students obtained a certification or participated in various Career and Technical Education (CTE) opportunities while committed. These vocational skills give students an opportunity to prepare for college and careers; provides students who have already attained a High School Diploma or GED with additional skills, knowledge and training to be successful in future careers; and also widens career choices for individuals that participate in programming.

- The number of DYS students in pursuit of a college education upon discharge appears to be growing. For instance, in last year's report four (4) students were confirmed to have participated in collegiate opportunities. This year's report cohort included 21 students. Of these 21 students:

    - Eleven (11) students were enrolled at Adams State University and working toward completing college credits;

    - Two (2) students enrolled and attending college at area community colleges;

    - Seven (7) students had applied, worked on applications and financial aid, or had the intention of applying for enrollment into various local colleges and universities, including: Adams State University, Arapahoe Community College, Pikes Peak Community College, Red Rocks Community College, and Western State University; and

    - One (1) student obtained a CNA license.

- Nearly one-third of youth (30.5%) were involved in Special Education programming and had an Individualized Education Program (IEP). This is nearly three times the percentage of students requiring special education programming in public schools across the nation (13%).

    - Previously identified, and unidentified disabilities are prioritized by the DYS Education team to the benefit of serving students along a diverse continuum of needs.

- The high needs exhibited by the DYS committed population in general, and the cohort studied for this report, include, but are not limited to: remediation (>32%), substance abuse (~87%), mental/behavioral health (~62%), and often co-occurring substance abuse and mental health needs (~54%). These complex treatments needs play a central role in the ability of youth to achieve academically. In fact, the obstacles associated with high need youth are consistent and well-documented in the research and literature, dating back more than two decades.

    - As described in an examination of differences in academic achievement and special needs of detained and committed students (Krezmien, et al., 2008), the needs identified among Colorado's committed youth are not exceptional:

      "Results from our investigation indicate serious academic and mental health problems among this population of [committed] participants, consistent with current research. For example, we found severe deficiencies in academic achievement, consistent with the findings of Brunner (1993) and Foley (2001). We found high rates of students identified with disabilities, particularly EBD [Emotional Behavioral Disorders], consistent with findings reported by Quinn and her colleagues (2005), and we found high percentages of students who reported a history of mental health problems, consistent with prevalence rates reported by Atkins and colleagues (1999), Cauffman (2004), Teplin and colleagues (2002), and Wasserman and colleagues (2004)."

    - The same 2008 study by Krezmien, et al. found that detained and committed students were, similarly, four years behind their same-aged peers in the general population in Reading and Math. These deficiencies point to increased motivation to accelerate through course completion and complete High School Diploma and GED requirements.

      "The extremely low standard scores on the reading and math tests reveal substantial academic limitations of court-involved youth. They also highlight a continuing problem confronting juvenile corrections educators charged with helping youth make academic gains in content areas despite glaring deficiencies in basic academic skills." (p. 453)

- Immediacy and accuracy are central to the conduct of the Division's Education team when working with incoming youth to identify the special needs of committed students. Through strengthened communication channels, DYS continues to circumvent similar challenges retrieving "school transcripts, special education records, and related documents" (Krezmien, et al., 2008) in a timely manner.

  "Accurate identification of special needs youth in corrections settings is difficult because many [committed] youth were not attending school at the time of arrest, and may have been out of school for long periods prior to incarceration."

Academic Growth Results

- In the initial exams completed by students, median achievement percentiles indicate proficiencies were well below average, falling in the 36th percentile across subjects.
  - Echoing findings from prior reports, students demonstrated the strongest proficiency in Reading, and were least proficient in Math.
  - Not only is the finding consistent across reports previously published, but consistent within existing research on serving committed and detained students.
- DYS serves a committed population with a broad range of needs, as demonstrated in this report through the median achievement quintiles. More than 54.3% of student exams collected across subjects fell in the lowest two quintiles (40th percentile or lower).
- Students with matched exams presented similar deficiencies (as determined by median achievement percentiles) when compared to deficiencies found within the entire discharge cohort. Both analyses showed that students demonstrated the least proficiency in Math (25th percentile), and performed strongest in Reading (38th percentile).
- Although similarities were found in regard to least (Math) and highest (Reading) proficiency subjects, students with matched exams demonstrated comparatively lower levels of proficiency in each subject, when compared to the entire discharge cohort.
  - These differences are expected, as those students demonstrating higher proficiency are likely to attain High School and General Education Diplomas quicker than their lower-performing peers, and require fewer exams to assess academic progress (i.e., many of these higher performing students may have only had one exam, making them ineligible for the matched exam analysis).

- Measures of growth associated with discharge cohort exams show strong growth in Reading (66th percentiles), the subject in which students consistently demonstrate the highest proficiency when completing their initial exam (38th median achievement percentile).

- Growth in Math was in the 58th percentile, indicating above average growth in a subject where aggregate scores show initial achievement falling toward the 25th percentile.

    - These outcomes align with Alternative Education Campus growth cut-points, indicating the discharge cohort growth meets or exceeds typical growth.

Educational Improvements at DYS

The DYS Education team and staff are responsible for ongoing improvements that result in improved outcomes for youth. To achieve this, various program improvements have begun implementation in alignment to the Division's strategic plan and education objectives.

STATE AUDITOR RECOMMENDATIONS

The Colorado Office of the State Auditor (OSA) made multiple recommendations in the January 2019 Performance Audit of the Division of Youth Services Reporting of Education Outcomes, and the inaugural report published in July 2018. Recommendation 1A stated that DYS enforce "policy and contract requirements that youth centers operated by contractors measure and report in the educational outcomes of youth in their custody." To accomplish this, DYS Education reviewed contract policy specific to education which residential placements, including some CDE facility schools, were required to adhere to. This resulted in an updated 17.8 policy for contract providers (or policy C17.8, Education Programs; see report Appendix D for policy language), which replaced antiquated language and expectations with those mirroring outcomes reporting for DYS commitment schools. The policy effective date is June 1, 2019, and accordingly, contract providers will begin adhering to the new policy expectations to report on the DYS youth placed in their care for future reporting.

Additional OSA recommendations included offering MAP testing to youth whose initial assessment scores correlate to the 12th grade level (indicating some level of mastery of the tested content) while also determining another method for measuring continuing growth. The steps to implement this recommendation include assuring youth with these 12th grade test scores are included on all testing rosters for fiscal year 2020 and beyond, while also determining additional evidence that best indicates achievement and growth while in a DYS education program.

Information Systems

Additional education program improvements, which will result in better and more comprehensive data reporting and monitoring, include the implementation of a student information system (SIS) for all commitment schools; complete implementation across the committed schools will be complete by July 2020. This will allow a more robust tracking system of all youth. Infinite Campus (IC) is a popular SIS within Colorado school districts and is a tool in the early implementation phase for DYS, that will allow for easier record transfers and verification of credits within the DYS schools and overall. DYS Education will also use this system to monitor credits earned, grades, and grade point averages to have more timely interventions and celebrations.

Legislative Supports

During the 2018 71st General Assembly for the State of Colorado, Representative Leslie Herod authored House Bill 18-0524, concerning the transfer of academic credits from DYS placements. This bill became a law and requires all local Colorado school districts to recognize and appropriately transfer credits from DYS to the traditional or alternative school settings and to subsequently apply those credits towards graduation requirements. This allows students to retain the credits earned in their out-of-home placement in the content in which it was earned while transferring to a different school or district and helps maintain motivation and the pathway to successful high school completion.

Staffing Improvements

Staffing considerations were addressed in a 2018 CDHS Decision Item for Special Education. This decision item allowed DYS Education to (a) allocate a full-time school social worker at each site, (b) assure there was a designated Special Education Coordinator at each site, (c) reduce the caseload of special education teachers by adding staff, and (d) hire a full-time school psychologist. These additional supports for youth will ensure on-going compliance with both federal and state special education law, as well as promote equitable access to school content for students. While these positions were created and human resource processes were started in FY 2018-19, the process did not result in any hires during FY 2018-19.

Additionally, as positions were vacated in 2017 and 2018, the new DYS Education Director, hired June of 2016, reallocated and revamped positions to better support teaching and learning. The added responsibilities to enhance such support included instructional coaching, implementation and monitoring of data-driven, multi-tiered systems of support (MTSS), and creating whole system and site-based professional development. These system improvements were included in developing an education-specific strategic plan which began implementation in FY 2018-19.

Staff Professional Development and Awards

Additionally, in 2017, DYS Education began annual state-wide, collaborative teacher professional development to establish a community of practitioners across contents and youth centers. The purpose of this on-going professional development was tri-fold: (a) necessary for improved student outcomes, (b) provides beneficial teacher development and advancement, and (c) to meet a recommendation pursuant to a 2017 external review of DYS education programming.

These education-focused professional development days have presented juvenile justice related content including trauma-responsive classroom practices, high-leverage skills for short-term youth, assessment and planning for high needs youth using data, and collaboration on the DYS instructional model. On-going support has been embedded in these sessions and throughout the year for the award-winning implementation of Chromebooks for youth and technology-enhanced instruction in all five commitment sites. As mentioned, the Education OIT team was honored at the 2016 Colorado Public Sector IT conference as the 2016 CIMA IT Team of the Year; this award "recognizes an innovative, efficient, effective, high caliber team of IT technicians/professionals that have achieved outstanding implementation success or process improvement which has resulted in a substantial improvement in operational performance and service delivery capacity."

Partnership Between CDHS and CDE

Inter-Departmental support and cooperation continues to improve efforts to monitor student outcomes and develop opportunities. The Colorado Department of Education (CDE) and CDHS are in the last stages of finalizing a data-sharing agreement to monitor the educational outcomes of youth in out-of-home placements throughout the state, including those served by DYS and those served by the county departments of human services (i.e., foster-care youth). This agreement has been in process for over two years, and once finalized, will bring all participating entities a step closer to accessing and maintaining more comprehensive educational information.

Assistant Secretary of Education visits Lookout Mountain Youth Services Center

Posted by CDHS Communications

Scott Stump, assistant secretary for career, technical, and adult education at the U.S. Department of Education, visited Lookout Mountain Youth Services Center (LMYSC) January 17, 2020, to see the vocational and technical opportunities available to the center's youth. Stump, CDHS Executive Director Michelle Barnes, Director of Division of Youth Services Anders Jacobson and Director of the Office of Children, Youth and Families Minna Castillo Cohen visited LMYSC's screen printing shop, and barbering, culinary arts and construction trades programs.

"The visit inspired conversation, vision, and direction to further support youth vocational programming in DYS," Jacobson said.

After the visit, Stump tweeted "I saw students preparing to be career-ready upon reentry." He commented that it's more important now than ever to provide multiple educational pathways to young people who are committed.

Recommendations

The Educational Outcomes conveyed in this annual report represents a point of success for incarcerated youth. The Division is encouraged to <u>continue</u> building upon successes and identifying additional areas to support youth committed to DYS.

- The Division of Youth Services addresses areas, cited in current literature, that are often deemed critical for ensuring the academic success of students who have been incarcerated.

- Educators and clinical staff utilize a battery of assessments to gauge the academic, behavioral health, medical, and criminogenic needs of youth committed to the Division.

- The needs of students who perform poorly on initial academic assessments, as well as subsequent assessments, are reviewed for further identification and intervention.

- Academic outcomes presented in this report, and in the 2nd Annual Educational Outcomes report, indicate consistent outcomes of exceeding typical growth across subjects.

- During the 2019-20 Fiscal Year, the Division incorporated methods for measuring student college-readiness by subject. Future reporting of post-secondary education opportunities may be bolstered in this regard.

Continue leveraging systems and resources that are designed to regularly monitor academic progress across a diverse population, with dynamic needs. This will lead to a better understanding of the youth and the outcomes, and create a solid foundation for future success.

- Following the inaugural DYS Educational Outcomes Report in 2018, sustainable systems for evaluating MAP student growth, which incorporate recommended processes for isolating valid, measurable data points were instituted - streamlining the analysis and reporting process.

- Currently, the integrated disaggregation reporting tools provide insight into outcomes for students by both static and dynamic educational factors. Integrating these tools into existing review and oversight practices will further inform touchpoints for increased success.

While the academic outcomes of <u>all</u> discharged students are important, the outcomes of those <u>students returning</u> to a traditional academic setting are of critical importance. The Division is well-positioned to identify and link youth with opportunities for continued success, both on parole and beyond DYS.

- Nearly seventy percent (67%) of the discharge cohort examined in this report completed school, evidenced by the achievement of a high school diploma or GED during their time with DYS. Of the remaining 33%, a large majority of students returned to school or actively enrolled in school following commitment. Prior research conducted by Bullis et al. (2002), and cited in Cavendish (2014) found:

  > *"Intensive services [need to be] afforded youth at the point of release from the juvenile correctional system and continued intensively for at least 1-year post-exit [as these] services could reduce return rates and improves subsequent work and educational success." (p. 50)*

- Current research on the educational outcomes among committed students reintegrating into traditional schooling environments points to common gaps in communication, and a lack of facilitation in the transition process.

- Outcomes attributable to supportive educational transitions show mixed outcomes, pointing to a need for individualized services, described by Cavendish (2014) as interagency coordination, with a school and community continuum of services and care (as cited in Carter et al., 2008, Gagnon et al., 2008).

  - Whether or not a youth is academically prepared to return to schools in the community is of critical importance.

  - Equally important is the transition of academic credits from the Division of Youth Services to the student's school; college-readiness and subject-level proficiencies, as well as student attitudes and orientations towards academics is key information to share forward.

    > *"Achievement does not progress in a linear fashion without appropriate learning experiences, and the gap between expected achievement and actual grade level is quite important in understanding school disengagement." (Simpson et al., 1992 as cited in J.B. Sander et al., 2012, p. 1706)*

Review this statutory report and revise the evaluation plan as necessary to accommodate the latest research available. Understanding the educational outcomes of a complex committed population is critical to understanding the extent to which students are equipped for transition/community re-entry upon leaving DYS.

- The current model of evaluating academic outcomes for youth committed to the Division focuses on the outcomes of all discharged youth, in aggregate, without specificity evaluating those youth discharging and reintegrating into their local schools. Introducing student-specific case studies, that specifically capture youth who transitioned back into their local schools, is suggested.

    - Exiting a juvenile justice setting and trailing one's peers academically represents an added challenge, as described in interviews with students participating in an action kit developed by the Juvenile Law Center, Juveniles for Justice, and Youth Fostering Change in 2019:

        > *"Before I left the juvenile placement, my judge said I was not ready for a regular high school. Instead, I was put in an alternative school. Since leaving placement, I have been in three different schools. I am also in foster care and have been in eight different homes including foster homes, group placements, and mother-baby homes (programs to help moms). I am 19 and still in 10th grade because two years of my schoolwork is gone. Now, I am slowly enrolling myself in a charter program. The biggest challenge I have had trying to graduate on time is being moved from home to home and school to school. The work was not consistent from school to school." (p. 14)*

        From another student:

        > *"After placement, I went to a residential facility where I attended a community school for a month. After I left this facility, I tried to go to the school I went to before placement, but the principal said I was away too long and could not come back. It took me two months to re-enroll in school, and I went to school online because no other school would accept me. I was having trouble doing my work at my current school because I didn't get an appropriate education in placement and fell behind. I needed more help when I came out of placement and tried to go back to school. The longer it took me to re-enroll, the longer I was out of class, and the harder it was for me to succeed when I finally started school." (p. 11)*

- The addition of more qualitative and student-specific case studies could lend valuable insight into youth educational success upon re-entry. Further exploration into the characteristics and academic outcomes of the population continuing education following "system placements" may provide more context regarding achievement and outcomes as they apply in a transitional process.

Appendix A: Works Cited

Abrams, L. S., Shannon, S. K., & Sangalang, C. (2008). Transition services for incarcerated youth: A mixed methods evaluation study. *Children and Youth Services Review*, *30*(5), 522-535.

Bullis, M., Yovanoff, P., & Havel, E. (2004). The importance of getting started right: Further examination of the facility-to-community transition of formerly incarcerated youth. *The Journal of Special Education*, *38*(2), 80-94.

Bullis, M., & Yovanoff, P. (2006). Idle hands: Community employment experiences of formerly incarcerated youth. *Journal of Emotional and Behavioral Disorders*, *14*(2), 71-85.

Cavendish, W. (2014). Academic attainment during commitment and postrelease education–related outcomes of juvenile justice-involved youth with and without disabilities. *Journal of Emotional and Behavioral Disorders*, *22*(1), 41-52.

Colorado Department of Education. (2012, July 10). *NWEA MAP Measures, Metrics and Cut-Points for Alternative Education Campuses*. Retrieved from: https://www.cde.state.co.us/sites/default/files/documents/accountability/downloads/nweamapforaecs.ppt.

Colorado Department of Education. (2016, December 14). *Colorado Growth Model FAQs (General)*. Retrieved from: https://www.cde.state.co.us/schoolview/generalgrowthmodelfaq.

Colorado Department of Education. (2017, May). *NWEA RIT Growth_Rank Percentile Tables_formatted_forposting* [Data set]. Colorado Department of Education. Retrieved from: https://www.cde.state.co.us/accountability/nwea_rit_growth_rank_percentile_tables.

Colorado Department of Education. (2017, May). *Revised NWEA MAP Growth Methodology: For AEC Optional Measures*. Retrieved from: https://www.cde.state.co.us/accountability/revised_nwea_map_fact_sheet.

Colorado Department of Education. 2017. *Teacher shortage fact sheet*. Retrieved from: https://www.cde.state.co.us/educatortalent/teachershortage2017.

Colorado Department of Education. 2017. *Highly mobile student guide: Understanding ESSA and statute.* Retrieved from: https://www.cde.state.co.us/dropoutprevention/fchighlymobilestudentsguide

Colorado Department of Education. (2018, March). *Alternative Education Campuses: Overview on AECs in Colorado Fact Sheet*. Colorado Department of Education. Retrieved from: https://www.cde.state.co.us/accountability/aecoverviewfactsheet.

Colorado Department of Education. (2018, May). *Accountability for Alternative Education Campuses: Policy Guidance*. Colorado Department of Education. Retrieved from: https://www.cde.state.co.us/accountability/policy-guidance-for-aecs_final_may-2018.

Colorado Office of The State Auditor. 2019. Division of youth services reporting: Performance audit. Report no. 1813P. Retrieved from: http://www.leg.colorado.gov/sites/default/files/documents/audits/1813p_division_of_youth_services_reporting.pdf.

Douglas, Emily. (2013). *Achievement vs. Growth: What K-12 Managers Need to Know*. Battelle for Kids. Retrieved from: https://blogs.edweek.org/topschooljobs/k-12_talent_manager/2013/02/achievement_vs_growth_k-12_talent_managers.html.

Ernst, J. (2012, July). *Use of NWEA for AEC Accountability Measures. Colorado Department of Education.* Retrieved from: https://www.cde.state.co.us/sites/default/files/documents/accountability/downloads/nweauseguidance.pdf.

Ernst, J.L. (n.d.). *NWEA AEC Research Findings to Inform How to Best Articulate the Assessments Use: For Purposes of AEC Accountability*. Colorado Department of Education. Retrieved from: https://www.cde.state.co.us/sites/default/files/documents/accountability/downloads/nweaaecwriteup.pdf.

Juvenile Law Center, Youth Fostering Change, and Juveniles for Justice. (2019, June). Operation: Education – An Action Kit to Achieve Positive Educational for Youth in the child Welfare and Juvenile Justice Systems. Juvenile Law Center. Retrieved from: https://jlc.org/resources/operation-education.

Kolivoski, K. M., Shook, J. J., Goodkind, S., & Kim, K. H. (2014). Developmental trajectories and predictors of juvenile detention, placement, and jail among youth with out-of-home child welfare placement. *Journal of the Society for Social Work and Research*, *5*(2), 137-160.

Krezmien, M.P., C.A. Mulcahy, and P.E. Leone. (2008). Detained and committed youth: Examining differences in achievement, mental health needs, and special education status. *Education and Treatment of Children, 31*(4):445-464.

Krezmien, M. P., & Mulcahy, C. A. (2008). Literacy and delinquency: Current status of reading interventions with detained and incarcerated youth. *Reading & Writing Quarterly*, *24*(2), 219-238.

Osher, D., Amos, L. B., & Gonsoulin, S. (2012). Successfully transitioning youth who are delinquent between institutions and alternative and community schools. *Washington, DC: American Institutes for Research*.

National Center for Education Statistics. (2018). Table 5.3. Types of state and district requirements for kindergarten entrance and attendance, waivers and exemptions for kindergarten entrance, by state: 2018 [data file]. Retrieved from: https://nces.ed.gov/programs/statereform/tab5_3.asp.

Northwest Evaluation Association. (2011). *2011 Normative Data*. Portland, Oregon: Northwest Evaluation Association. Retrieved from: https://www.nwea.org/content/uploads/2014/07/MAP-Normative-Data-One-Sheet-Dec11.pdf.

Northwest Evaluation Association. (2012, January). *RIT Scale Norms Study*. Portland, Oregon: Northwest Evaluation Association. Retrieved from: https://www.seattle.gov/Documents/Departments/OFE/FundingOpportunities/Workshops/NWEA2011RITScaleNorms-InFull.pdf.

Northwest Evaluation Association. (2013). *Education Performance Indicator Selection: Background and Basis (Prepared for the Colorado Department of Youth Correction)*. Portland, Oregon: Northwest Evaluation Association.

Northwest Evaluation Association. (2015, August). *2015 NWEA Measures of Academic Progress Normative Data*. Portland, Oregon: Northwest Evaluation Association. Retrieved from: https://www.nwea.org/content/uploads/2015/06/2015-MAP-Normative-Data-AUG15.pdf.

Northwest Evaluation Association. (2015, November). *NWEA FAQ: RIT Scale Norms*. Portland, Oregon: Northwest Evaluation Association. Retrieved from: https://files.eric.ed.gov/fulltext/ED568277.pdf.

Northwest Evaluation Association. (2016, September). *Comparative Data to Inform Instructional Decisions*. Portland, Oregon: Northwest Evaluation Association. Retrieved from: https://www.nwea.org/content/uploads/2016/09/Comparative-Data-Sheet.pdf.

Northwest Evaluation Association. (2017). *2015 NWEA MAP Growth Normative Data*. Portland, Oregon: Northwest Evaluation Association. Retrieved from: https://www.nwea.org/resource-library/research/2015-normative-data-3.

Northwest Evaluation Association. (2018, August). *Average MAP Growth Test Durations*. Portland, Oregon: Northwest Evaluation Association. Retrieved from: https://www.nwea.org/content/uploads/2018/08/Average-MAP-Growth-Test-Durations.pdf.

Northwest Evaluation Association. (2018, December). *MAP Reports Reference*. Portland, Oregon: Northwest Evaluation Association. Retrieved from: https://teach.mapnwea.org/impl/PGM2_MAP_Reports_Reference.pdf

Northwest Evaluation Association. (2019, December). *Guidance for Administering MAP Growth Assessments to Improve Measurement Accuracy and Maintain Test Integrity*. Retrieved from: https://files.eric.ed.gov/fulltext/ED587435.pdf.

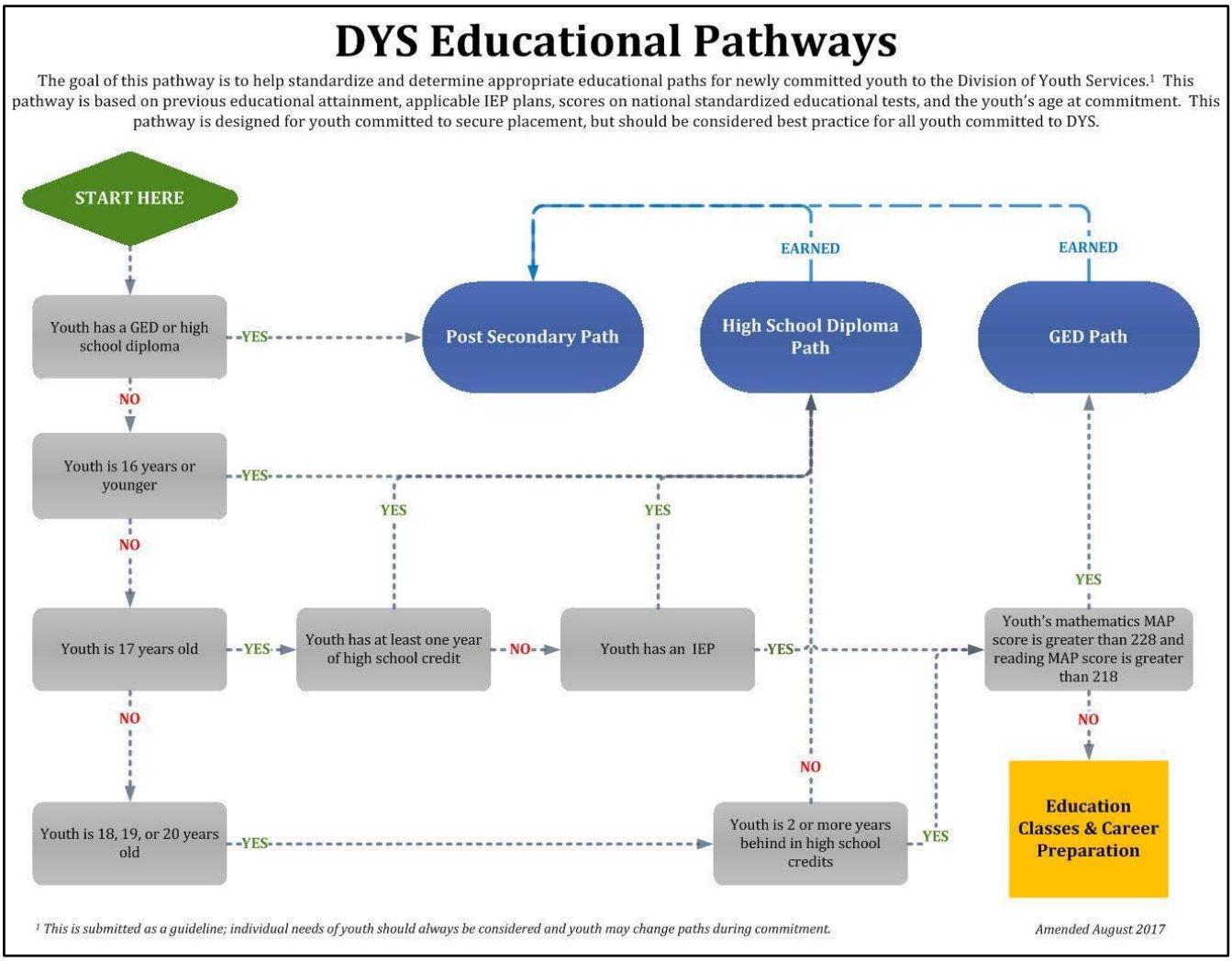
Sander, J. B., Patall, E.A., Amoscato, L.A., Fisher, A.L., Funk, C. (2012). A meta-analysis of the effect of juvenile delinquency interventions on academic outcomes. *Children and Youth Services Review*, *34*(9), 1695-1708.

Shader, M. (2001). *Risk factors for delinquency: An overview*. Washington, DC: US Department of Justice, Office of Justice Programs, Office of Juvenile Justice and Delinquency Prevention.

U.S. Departments of Education and Justice. 2015. Guiding principles for providing high-quality education in juvenile justice secure care settings. Washington, D.C.

Appendix B: DYS Educational Pathways Flowchart

Figure A: DYS Educational Pathways Flowchart



Appendix C: Technical Methods

As recommended by the Office of the State Auditor (OSA), this appendix provides technical guidance detailing the data considerations, data parameters, and to inform external parties on the steps necessary to replicate calculations performed and resulting outcomes presented in this report.

Exam Types and Rasch Unit (RIT)

The MAP assessment consists of testing in three primary academic subjects: Reading, Math, and Language Usage. Student growth norm scores, which provide projections to assess student growth in comparison to a nationally-normed sample, are available for grades K-10 in Reading, Math, and Language Usage. Historically, NWEA has released new RIT norms on a fluctuating triennial and quadrennial schedule, beginning with the first release in 1996 (NWEA, 2011). As of the date of publication, the most recent release of RIT norms publicly-available is 2015.

2015 RIT Norms

Past reports on educational outcomes supplied by the Division of Youth Services have relied on RIT status scores to assess the grade level proficiency of students received by the Division. RIT status scores released by NWEA in 2008, and 2011 were central to assessing current grade for exams completed previous to August 2015. Per recommendation received from NWEA in 2019, and as described in the 2015 NWEA Measures of Academic Progress Normative Data release, "Slight differences between 2008, 2011, and 2015 RIT norms; each potentially attributable to student demographics, methodological improvements, and the adoption of the Common Core State Standards, solicit the use of one set of norms for all exams" (NWEA, 2015, p. 1). In addition, due to limitations associated with previous 2015 RIT scale norms extrapolated by the Division of Youth Services, RIT scale norm calculations utilizing the 2015 RIT scale norms reference table are not included in this report. DYS staff members use grade level proficiency in practice to determine the appropriate curriculum for youth by translating RIT scale norm scores to an estimated grade proficiency.

Initial MAP Exam

Students are tested in one of two designated assessment YSCs: Mount View, and Grand Mesa. Following screening, and completion of the first MAP assessment, students tested in Mount View YSC may transfer to another YSC, and students tested in Grand Mesa may transfer as well. Therefore, almost all subsequent exams, following the initial admission exam, are completed at a Youth Services Center other than the original assessment facility. Due to two-fold concerns regarding the current testing process: concerns about the quality of academic data collected during a challenging and stressful time of transition, and the impact of assessment fatigue, DYS is in the process of shifting to a decentralized testing process.

Low Performance

MAP exams are adaptive; meaning each correct item response is followed by a more difficult item, while each incorrect response is followed by an easier item (Northwest Evaluation Association, 2013, p. 6). Recommendations shared by NWEA specify it is appropriate to assume that students will answer at least 50% of the questions correctly. All exams, including initial and follow-up exams with fewer than 40% correct responses are used as a measure of low engagement. Students may test and retest more than once. Each flagged exam is retained in the NWEA MARC system, as well as the DYS Data Management Database.

Brief Duration

While it is possible to obtain a valid score in less than 20 minutes on Language Usage exams, and less than 25 minutes on Reading and Math exams, data reviewed by NWEA show validity is unlikely (see NWEA, August 2018).

Additional Data Considerations

11th and 12th Grade Norms

As described in the Youth Demographics section of this report, the average grade of youth in the cohort aligned with the 11th grade (μ=16.9 years-old; range: 13.2 – 19.9 years-old). NWEA provides student growth norms for students up to, and including, the 10th grade. As described by NWEA (2013),

> Since MAP measures student's achievement levels in General Reading, Mathematics, Language Usage, and Science, the content assessed does not align well to typical high school junior and senior-level content-based courses (e.g., English literature, Pre-calculus)...Since this population is not representative of the overall population across the country, 11th and 12th grades are not included in the NWEA norming studies. (p. 4)

Time Periods

Student growth norms employed by AECs are dependent on the time period during which the student completes the initial and follow-up exams. In a traditional school setting, growth is calculated from the initial exam of the school year to the end of the first academic period (Fall-to-Winter). If a student score is expected to increase by five RIT points in the first academic period, and five in the second academic period (Winter-to-Spring), total expected academic growth for the year would be ten RIT points (Fall to Spring). This model evaluates academic growth according to

the highest level of academic achievement, rather than current grade targets specific to initial achievement within an academic period. This differs from traditional methods and requires a more intensive demonstration of academic growth to meet AEC student status growth targets.

To ensure uniformity across all data points, the Division calculated academic quarter and academic year terms using exam dates retained in the MARC data system.

NWEA normative data are designed to support traditional school settings. The Division of Youth Services schools operate year-round, including during the Summer.

NWEA Median Percentile

Developed from extensive analyses of nationally-normed samples in traditional schools, exams completed by students within the defined testing windows generate a percentile score designed to support peer comparison. The median of all achievement scores generated by the MARC system, across all academic subjects, and school years provides valuable insight into the academic achievement level of students in the cohort. Students in traditional schools are expected to fall in the 50th percentile, or more accurately, normed data extend across a normal distribution and 68% will fall between the 40th and 60th percentile, which represents one standard deviation from mean scores collected across students completing the MAP.

Importantly, percentiles are not available for all valid MAP exams. MAP percentiles also represent the widely-preferred measure of student growth. As required by NWEA, testing windows must parallel standard testing schedules utilized by traditional schools. In other words, students must complete MAP tests on a regular schedule defined by school instruction periods (e.g., trimester, quarter, or a comparable schedule defined by each school). As discussed previously, DYS conducts testing on a quarterly schedule following defined periods of instruction. Currently, while a majority of exams are completed on this schedule, it is not feasible for all students to test on this schedule, including students received into assessment centers, and students in private secure facilities.

DYS administrative staff members collaborate with each Youth Services Center to define a testing week, and assign the weeks of instruction in the MARC system. Exams completed two weeks before the selected testing window, and two weeks after the window are considered valid and include percentile.

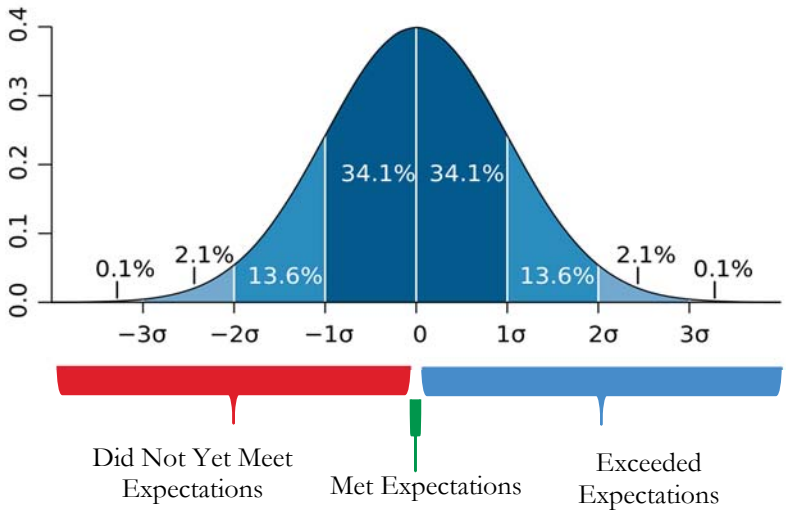
Student grade-level, expected grade-level proficiency, and other indicators of student status are included in this report as well, as each provides valuable insight and context regarding student achievement when each youth is received into commitment by the Division of Youth Services.

AEC Growth Calculations (National Alternative School Norms for Comparison Purposes)

Paired exams completed in Spring followed by Fall, Winter followed by Fall, and other combinations spanning more than one year between initial and follow-up exam were not included in analyses. All available norms were combined and indexed in SPSS 26.0, according to RIT scale norm scores, academic term, and current grade. Importantly, as shown in the following table, expected growth differs by academic subject, academic period, and the RIT score of the student's initial exam. For example, typical growth for a student presenting a 175 on the initial MAP exam is seven RIT points over the course of the Fall-to-Winter academic quarter. If the youth meets this growth target (182 points), expected growth of the student is particular to grade-level and the youth has not changed grades in the second academic term (Winter-to-Spring), so the growth target in the fall will be 4 RIT points in the second academic quarter.

NWEA Growth Targets for AEC Students in Reading				
Fall RIT Range	Fall RIT Grade Equivalent	Fall to Winter Growth Target	Winter to Spring Growth Target	Fall to Spring Growth Target
up to 146	K	5 RIT	4 RIT	9 RIT
147-160	1st	7 RIT	6 RIT	13 RIT
161-179	2nd	7 RIT	4 RIT	11 RIT
180-192	3rd	5 RIT	3 RIT	8 RIT
193-201	4th	4 RIT	2 RIT	6 RIT
202-208	5th	3 RIT	1 RIT	4 RIT
209-213	6th	2 RIT	1 RIT	3 RIT
214-217	7th	2 RIT	1 RIT	3 RIT
218-220	8th	2 RIT	1 RIT	3 RIT
221-222	9th	1 RIT	1 RIT	2 RIT
223-226	10th	1 RIT	1 RIT	2 RIT
227	11th	1 RIT	1 RIT	2 RIT
228 and above	Above 11th	0.5 RIT	0.5 RIT	1 RIT

These academic *targets*, developed by AECs under the guidance of the Colorado Department of Education, provide a set of norms to guide the interpretation of growth patterns of students with needs best served outside of a traditional school setting. As described by Dr. Ernst (2012), "These targets were determined using the differences between medians in the 2008 NWEA Norm Placement document, which also maps onto the average growth…but do not allow for negative growth in target setting" (p. 8). This is an important difference, and as detailed in the following graphic, there is less variance in what is considered 'typical growth', and students must surpass a single data point to demonstrate growth in line with typical student growth.



The AEC growth *calculations* were developed through determining the percentile ranks of observed MAP growth in AECs across the country.

DYS utilized percentile growth developed by AECs to explore academic growth. The tool for assigning and evaluating growth percentiles included a series of percentiles designed to categorize the magnitude of change in RIT scale score from an initial exam to a subsequent exam. DYS aligned the categorization of all calculations prepared by AECs, indexed standard growth calculations, and assigned growth percentiles according to the shift in RIT scores across all matched exams, according to school subject, academic term, and current grade in SPSS 26.0.

Grade Application

For the purpose of this report, student status growth norms and growth targets were calculated on the current grade of the student, rather than the grade proficiency demonstrated by the student. Stated differently, an 11th grade student performing at a seventh-grade level was expected to demonstrate growth commensurate with other 11th graders, rather than the growth of 7th graders. Importantly, RIT scores maintained by AECs decrease uniformly as students age. This means students initially exhibiting deficits at later stages in life (e.g., a 19-year-old student presenting 6th grade proficiency) have significantly lower growth thresholds to demonstrate successful academic growth.

Appendix D: DYS Policy C 17.8

COLORADO DEPARTMENT OF HUMAN SERVICES DIVISION OF YOUTH SERVICES	POLICY C 17.8	PAGE NUMBER 1 OF 9
	CHAPTER: Programs and Services	
	SUBJECT: Educational Programs	
	EFFECTIVE DATE: October 1, 2019 REVIEW DATE: N/A	
THIS POLICY RELATES TO: Residential Contract Programs	 Anders Jacobson, Director	

I. POLICY:

Each Division of Youth Services' residential contract program shall have a comprehensive educational program which includes opportunities for each youth to earn a high school diploma or General Equivalency Diploma (GED), AND OPPORTUNITIES TO enroll in a post-secondary education program, REMEDIAL SKILLS COURSEWORK, AND CAREER AND POSTSECONDARY WORKFORCE READINESS PROGRAMMING. Special education and all federally funded programs shall be in compliance with Federal Laws and State Statutes. Special education students shall have a current Individual Education Program (IEP) WHICH FOLLOWS ALL FEDERAL AND STATE LAWS IN ADDITION TO THE DISTRICT OR OVERSIGHT AND GOVERNING BODY COMPREHENSIVE PLAN.

II. KEY TERMS:

A. Career and Technical Education (CTE): A program which prepares youth for careers by using manual, automated, or practical activities related to a specific trade, vocation or occupation.

B. Education Program: A broad CREDIT EARNING educational program which meets all requirements set forth by the Colorado Department of Education that is suited to the participating youths' needs and abilities.

C. Teacher: A person responsible for the instructional content, ENGAGEMENT, BEHAVIORAL management AND TEACHING of the ASSIGNED YOUTH IN THE classroom. All teachers assigned to a classroom instructing Division of Youth Services' youth shall be licensed by the Colorado Department of Education and assigned classroom duties commensurate with their license, OR HAVE EVIDENCE OF WAIVERS SOUGHT AND APPROVED FOR TEACHER LICENSING THROUGH CDE.

D. Transitional Services: Educational transitional services provide assistance to youth in locating community services including education, employment preparation, and employment.

III. ASSOCIATED FORMS:

1. None

IV. PROCEDURES:

A. Educational Program Requirements:

1. THE RESIDENTIAL CONTRACT PROGRAM WILL HAVE AN OVERSIGHT AND/OR GOVERNING STRUCTURE WHICH MONITORS AND AUDITS THE PROGRAM AND WILL REPORT AUDIT, COMPLIANCE, AND LICENSING PERFORMANCE INFORMATION AND FINDINGS ANNUALLY TO THE DIVISION OF YOUTH SERVICES PROGRAM MANAGEMENT. RESIDENTIAL CONTRACT PROGRAMS MUST STAY IN COMPLIANCE WITH ALL OVERSIGHT AND GOVERNING STRUCTURE EXPECTATIONS AND LICENSING RULES.

2. All education classes shall have no less than one (1) teacher for every fifteen (15) youths assigned to a classroom.

3. Based on the information obtained through assessments, evaluations and documented observations youth are placed in Educational or Career and Technical Education Programs as appropriate. The special education process shall be initiated when necessary.

4. Provisions shall be made IN ACCORDANCE TO STATE AND FEDERAL LAW for youth who require special services because of physical, cognitive, emotional or learning disabilities.

5. WHEN THERE IS A CHANGE OF PLACEMENT FOR A YOUTH, ALL STATE AND FEDERAL REQUIREMENTS AND DOCUMENTATION MUST BE FOLLOWED TO INCLUDE A BEST INTEREST DETERMINATION MEETING.

6. Programs up to the completion of high school and/or GED preparation shall be available at no cost to the youth.

7. There shall be incentives for educational participation and provisions for the formal recognition of specific educational accomplishments through credits, certificates and diplomas. Graduation ceremonies should also be conducted or made available, as appropriate.

B. Comprehensive Education Program:

A Comprehensive Education Program shall be available to all youths. Counseling and other non-educational activities shall not conflict with a youth's participation in the education program. The Comprehensive Education Program shall include the following at minimum, WHICH WILL BE DOCUMENTED AND AVAILABLE FOR REVIEW:

1. Program description, and

2. Education services as population dictates shall be provided that MAY include:

   a. Middle School Education.

   b. Secondary Education.

   c. Post-Secondary Education.

   d. Special Education.

   e. Career and Technical Education.

   f. English as a Second Language (ESL) and English Language Learner (ELL).

   g. Transition services AND/OR PREPARATION FOR TRANSITION TO NEW EDUCATION SETTING OR EMPLOYMENT.

   h. Title I FUNDED INTERVENTIONS.

3. Open entry/open exit courses, and

4. Written description of the Special Education Process and Service Delivery Model, and

5. Brief descriptions for courses offered in academic, Career and Technical Education and technology areas, and

6. The process for establishing youth and program schedules WHICH ARE documented in Colorado Trails Database where available AND A DIGITAL STUDENT INFORMATION SYSTEM WHERE AVAILABLE.

C. Program Assessment/Evaluation:

1. The education program shall establish annual and long-range performance objectives THAT SHALL BE MEASURED AND MONITORED ANNUALLY. OBJECTIVES SHALL BE SHARED WITH THE EDUCATIONAL PROGRAM'S OVERSIGHT AND GOVERNING BODY AND THE DIVISION OF YOUTH SERVICES DIRECTOR OF EDUCATION.

2. ON A QUARTERLY AND ANNUAL BASIS, THE RESIDENTIAL CONTRACT EDUCATION PROGRAM SHALL SUBMIT TO THE DIVISION'S DIRECTOR OF EDUCATION, A REPORT ON THE EDUCATION OUTCOMES RELATED TO THOSE DIVISION OF YOUTH SERVICES' YOUTH SERVED BY THE RESIDENTIAL CONTRACT EDUCATION PROGRAM.

3. THE RESIDENTIAL CONTRACT EDUCATION PROGRAM SHALL ELECTRONICALLY SUBMIT THE REPORT USING THE "QUARTERLY AND ANNUAL RESIDENTIAL CONTRACT EDUCATION PROGRAM OUTCOME REPORT" TEMPLATE PROVIDED BY THE DIVISION OF YOUTH SERVICES.

   a. THE ANNUAL RESIDENTIAL CONTRACT EDUCATION PROGRAM OUTCOME REPORT SHALL BE DUE TO THE DIVISION OF YOUTH SERVICES' DIRECTOR OF EDUCATION ON OR BEFORE JULY 16TH OF EACH FISCAL YEAR.

   b. THE QUARTERLY RESIDENTIAL CONTRACT EDUCATION PROGRAM OUTCOME REPORT SHALL BE SUBMITTED TO THE DIVISION OF YOUTH SERVICES' DIRECTOR OF EDUCATION NO LATER THAN TWO WEEKS FOLLOWING THE END OF EACH QUARTER OF THE STATE FISCAL YEAR.

4. THE ANNUAL RESIDENTIAL CONTRACT EDUCATION PROGRAM OUTCOME REPORT SHALL INCLUDE THE FOLLOWING INFORMATION ON DIVISION OF YOUTH SERVICES' YOUTH WHO RECEIVED EDUCATIONAL SERVICES DURING THE FISCAL YEAR:

   a. ANNUAL CENSUS OF YOUTH SERVED, AND

   b. THE AVERAGE LENGTH OF STAY, AND

   c. YOUTH INDIVIDUAL SASID AND TRAILS ID IF AVAILABLE, AND

d. TOTAL GED ATTEMPTS BY CONTENT AND GEDS EARNED BY CONTENT WITH DATE RECEIVED, AND

e. TOTAL NUMBER OF DIPLOMAS EARNED CATEGORIZED BY THE ACCREDITED SCHOOL DISTRICT OR ORGANIZATION, AND

f. PERCENTAGE OF ALL DIVISION OF YOUTH SERVICES' YOUTH SERVED WHO EARNED A DIPLOMA AND PERCENTAGE OF THE SAME POPULATION WHO EARNED A GED, AND

g. LIST OF EACH YOUTH WHO EARNED A GED OR DIPLOMA BY SASID AND TRAILS ID IF AVAILABLE, AND

h. TOTAL NUMBER OF YOUTH WHO HAD AN IEP AND PERCENTAGE OF TOTAL DIVISION OF YOUTH SERVICES' POPULATION, AND

i. TOTAL NUMBER OF YOUTH WITHIN EACH PRIMARY DISABILITY CATEGORY, AND

j. THE PERCENTAGE OF YOUTH WITH AN IEP WHO GRADUATED WITH A DIPLOMA, AND

k. THE PERCENTAGE OF YOUTH WITH AN IEP WHO ATTEMPTED OR EARNED THEIR GED, AND

l. TOTAL NUMBER OF YOUTH ENROLLED IN CTE COURSES, AND

m. TOTAL NUMBER OF YOUTH WHO EARNED A CERTIFICATION BY CONTENT OR COURSE, AND

n. NUMBER OF YOUTH WHO ATTENDED OR EARNED COLLEGE CREDITS, AND

o. PERCENTAGE OF YOUTH WHO WERE POST-SECONDARY, AND

p. ANNUAL GROWTH AND ACHIEVEMENT REPORTS IN THE AREAS OF READING AND MATH, AND

q. INDIVIDUAL YOUTH ACHIEVEMENT REPORTS OR ACHIEVEMENT INFORMATION FROM INITIAL TEST TO LAST TEST WITHIN THE FISCAL YEAR AS MEASURED ON STANDARDIZED AND VALIDATED ASSESSMENT TOOLS. ACHIEVEMENT SHOULD BE REPORTED ON ALL ASSESSMENT

TOOLS USED WHICH MAY INCLUDE BUT ARE NOT LIMITED TO STAR 360, NWEA MAP, AND COLORADO MEASURES OF ACADEMIC PROGRESS (CMAS), AND

r. INDIVIDUAL YOUTH GROWTH REPORTS FOR THOSE WHO HAVE A LENGTH OF STAY OF NINETY (90) DAYS OR MORE AND FOR EVERY NINETY (90) DAYS THEREAFTER ON STANDARDIZED AND VALIDATED ASSESSMENTS OR PROGRESS MONITORING TOOLS, AND

s. TITLE 1 ANNUAL REPORT, IF APPLICABLE, AND

t. GROWTH AND ACHIEVEMENT REPORTS MAY, BUT ARE NOT REQUIRED TO, INCLUDE INFORMAL ASSESSMENT DATA, ANNUAL RATE OF GRADES EARNED, AND ANNUAL END-OF-GRADING TERM GRADE POINT AVERAGES.

5. THE QUARTERLY RESIDENTIAL CONTRACT EDUCATION PROGRAM OUTCOME REPORT SHALL INCLUDE THE FOLLOWING INFORMATION ON DIVISION OF YOUTH SERVICES' YOUTH WHO RECEIVED EDUCATIONAL SERVICES DURING THE QUARTER:

a. CENSUS OF YOUTH SERVED, AND

b. LENGTH OF STAY OF YOUTH SERVED, AND

c. YOUTH INDIVIDUAL SASID AND TRAILS ID IF AVAILABLE, AND

d. GED ATTEMPTS BY CONTENT AND GED EARNED BY CONTENT WITH DATE RECEIVED, AND

e. NUMBER OF DIPLOMAS EARNED CATEGORIZED BY THE ACCREDITED SCHOOL DISTRICT OR ORGANIZATION, AND

f. THE PERCENTAGE OF THE DIVISION OF YOUTH SERVICES POPULATION WHO EARNED A DIPLOMA AND THE PERCENTAGE OF THE SAME POPULATION WHO EARNED A GED, AND

g. IDENTIFICATION OF YOUTH BY NAME, SASID AND TRAILS ID WHO EARNED A GED OR DIPLOMA, AND

h. NUMBER OF YOUTH, WHO HAD AN IEP AND PERCENTAGE OF TOTAL DIVISION OF YOUTH SERVICES' POPULATION TO INCLUDE,

   i. NUMBER OF YOUTH WITHIN EACH PRIMARY DISABILITY CATEGORY.

   ii. THE PERCENTAGE OF YOUTH WITH IEPS WHO GRADUATED WITH A DIPLOMA.

   iii. THE PERCENTAGE OF YOUTH WITH IEPS WHO ATTEMPTED/EARNED GED.

i. NUMBER OF YOUTH ENROLLED IN CTE COURSES, AND

j. NUMBER OF YOUTH WHO EARNED A CERTIFICATION BY CONTENT OR COURSE, AND

k. QUARTERLY NUMBER OF YOUTH TAKING WORK KEYS TESTS AND SCORES FOR EACH TEST, IF APPLICABLE, AND

l. NUMBER OF YOUTH WHO ATTENDED OR EARNED COLLEGE CREDITS, AND

m. GROWTH AND ACHIEVEMENT REPORTS IN THE AREAS OF READING AND MATH, AND

n. ACHIEVEMENT REPORTS OR INFORMATION FOR YOUTH TO INCLUDE INITIAL TESTS ON STANDARDIZED AND VALIDATED ASSESSMENT TOOLS FOR YOUTH WHO HAVE BEEN ENROLLED DURING THE SCHOOL TESTING WINDOW, OR FOR 90 DAYS, WHICHEVER COMES FIRST, AND

o. GROWTH REPORTS FOR YOUTH WHO HAVE A LENGTH OF STAY OF NINETY (90) DAYS OR MORE AND FOR EVERY NINETY (90) DAYS THEREAFTER ON STANDARDIZED AND VALIDATED ASSESSMENT TOOLS WHICH MEASURE GROWTH, AND

p. QUARTERLY GROWTH AND ACHIEVEMENT REPORTS MAY, BUT ARE NOT REQUIRED TO, INCLUDE INFORMAL ASSESSMENT DATA, GRADE DISTRIBUTION OF GRADES EARNED, AND END-OF-GRADING TERM GRADE POINT AVERAGES.

6. EACH CONTRACT SITE THAT PROVIDES ON-SITE SCHOOL PROGRAMMING SHALL ALSO PROVIDE AN ANNUAL HUMAN RESOURCES REPORT THAT SHALL INCLUDE THE FOLLOWING INFORMATION:

   a. TOTAL NUMBER OF LICENSED SCHOOL PERSONNEL, AND

   b. TOTAL NUMBER OF PARAPROFESSIONALS, AND

   c. TOTAL NUMBER OF OFFICE AND ADMINISTRATION STAFF, AND

   d. TOTAL NUMBER OF NEW HIRES WITHIN THE YEAR AND PERCENTAGE, AND

   e. TOTAL NUMBER OF TEACHERS WHO ARE CONSIDERED IN-FIELD BY CDE AND THE PERCENTAGE, AND

   f. TOTAL NUMBER OF TEACHERS WHO ARE CONSIDERED OUT-OF-FIELD BY CDE AND THE PERCENTAGE, AND

   g. TOTAL NUMBER OF CDE WAIVERS SOUGHT FOR TEACHING STAFF AND PERCENTAGE OF TEACHING STAFF, AND

   h. EACH TEACHING STAFF CONTENT AREA AND YEARS OF EXPERIENCE, AND

   i. NUMBER OF TEACHING VACANCIES FOR OVER NINETY (90) DAYS THROUGHOUT THE FISCAL YEAR.

7. DIVISION OF YOUTH SERVICES WILL BE ALLOWED TO PERFORM A SCHEDULED ANNUAL PROGRAM EVALUATION ON SITE USING THE GOVERNING BODY CRITERIA IF REQUESTED. THE RESIDENTIAL CONTRACT PROGRAM SHALL HAVE A DESIGNATED PERSON TO MAINTAIN A GENERAL EDUCATION AND A SEPARATE SPECIAL EDUCATION FILE, AS NECESSARY, FOR EACH INDIVIDUAL ENROLLED IN THE RESIDENTIAL EDUCATION CONTRACT PROGRAM. THE GENERAL EDUCATION FILE SHOULD CONTAIN CURRENT AND PAST TRANSCRIPTS IF IN CREDIT EARNING COURSES, CERTIFICATES, COURSE SCHEDULE, GED OR DIPLOMA EVIDENCE, AND ASSESSMENT INFORMATION. SPECIAL EDUCATION FILES SHALL CONTAIN SIGNATURE PAGES AND REQUIRED DOCUMENTATION. EACH FILE SHALL UTILIZE AN ACCESS SIGNATURE PAGE.

8. In accordance with applicable State and Federal laws, students' rights to privacy and confidentiality shall be maintained.

9. THE CONTRACT PROVIDER SHALL PROVIDE YOUTH TRANSCRIPTS AND GRADE REPORTS TO THE YOUTH'S CLIENT MANAGER ON A QUARTERLY BASIS. COPIES OF COMPLETED TRANSCRIPTS SHALL BE INCLUDED WITH DISCHARGE REPORTS FOR YOUTH THAT ARE RELEASED AND SUBMITTED TO THE CLIENT MANAGER WITHIN 10 DAYS.

10. FINAL EDUCATION TRANSCRIPTS, GED DOCUMENTATION, AND DIPLOMA DOCUMENTATION MUST BE SENT TO THE DIVISION OF YOUTH SERVICES PROGRAM MANAGER AND DIVISION OF YOUTH SERVICES EDUCATION OFFICE WITHIN TEN (10) BUSINESS DAYS OF WHEN STUDENT DISCHARGES FROM THE RESIDENTIAL CONTRACT EDUCATION PROGRAM.

"The function of education is to teach one to think intensively and to think critically. Intelligence plus character – that is the goal of true education."

~Martin Luther King, Jr.

Any questions concerning this report may be directed to:

Rashaun.Esposito@state.co.us
Youth Services Analyst
or
Kelli.Burmeister@state.co.us
Director of Data Management & Analysis

Division of Youth Services
4255 S. Knox Court
Denver, CO 80236

COLORADO
Division of Youth Services
Office of Children, Youth & Families