

Understanding Mobility Rates in Colorado's Multi-District Online Schools

Pursuant to CCR 301-67 – “Rules for the Administration of Colorado Data Reporting for School Accreditation,” the Colorado Department of Education (CDE) has calculated and reported student mobility rates since the 2006-07 school year. Multi-District online schools in Colorado, as a group, are reported as having some of the highest mobility rates in the state. This has become a major topic of discussion as stakeholders and the public are concerned about whether schools with such high mobility rates can effectively serve students, and brought into question whether the schools are being funded for a disproportionate amount of students that end up leaving later in the year. Although there have been many anecdotal reasons proposed for why these rates could be so high, there has been little quantifiable data to verify these speculations.

In response to the recent scrutiny of online schools in Colorado, the Unit of Online Learning at the CDE decided to conduct a preliminary data survey of the 2009-2010 End of Year (EOY) data collection in order to develop a better understanding of the data elements used to calculate mobility rates as well as which data elements contribute to the mobility rates of the Multi-District online schools. This is in no way meant to provide root analysis or longitudinal student data. Instead, this data survey is meant to provide a better understanding of what the state definition of mobility is and what this looks like when applied to the Multi-District online schools of Colorado.

According to CDE, “a student is considered mobile any time he or she enters or exits a school or district in a manner that is not part of the normal educational progression.”¹ Using this definition, CDE has selected a series of data elements that are captured in the EOY data collection and used to calculate two rates: 1) the student mobility rate and 2) the mobility incidence rate. The student mobility rate is an unduplicated count of a mobile student, meaning that once a student has incurred a mobility incident for a school or district, that student will not be counted again in the same year. The mobility incidence rate is a duplicated count and includes every mobility incident that is incurred by students for a given school or district throughout the year.

The calculations for each rate are found below:

The Student Mobility Rate Calculation:

$$\frac{\text{Unduplicated count of grade K-12 students who moved into or out of the school or district in Year X}}{\text{Total number of students that were part of the same membership base at any time during Year X}}$$

The Mobility Incidence Rate Calculation:

$$\frac{\text{Duplicated count of grade K-12 students who moved into or out of the school or district in Year X}}{\text{Total number of students that were part of the same membership base at any time during Year X}}$$

¹<http://www.cde.state.co.us/cdereval/rv2010MobilityLinks.htm>

Both of these calculations seem straight-forward enough, but are actually far more complex for the following reasons:

- It is unclear from reviewing the description of mobility exactly what type of incidents constitute “unanticipated” or “non-normal” movements that are then included in the numerator of these calculations
- The denominator is not based on a school’s funded enrollment count, but instead contains any student that has been enrolled at any time during a given school year at a given school. This includes students who are enrolled and disenrolled prior to October count and thus would not be a part of the funded pupil count. Essentially any student who is a potential dropout is included in the denominator of both calculations and many of the students may be duplicates if there have been certain changes to their enrollment status, such as a grade change.

The mobility rates of several Multi-District online schools and the state of Colorado are shown in Table 1 along with the funded enrollment count from the same year. Note the difference between the column labeled Actual Funded Enrollment and the column labeled Total Pupil Count, which is the denominator for both mobility calculations:

Table 1 – 2009-2010 Mobility Rates and Components along with Actual Funded Enrollment

School Name	Actual Funded Enrollment	Total Pupil Count (All students)	Total Mobile Student Count (All students)	Total Instances of Mobility (All students)	Total Student Mobility Rate (All students)	Total Mobility Incidence Rate (All students)
STATE TOTALS (INCLUDING ALTERNATIVE SCHOOLS)	832,368	926,347	221,787	241,861	23.9	26.1
ONLINE TOTALS	12,719	19,735	13,542	13,956	68.6	70.7
COLORADO DISTANCE & ELECTRONIC LEARNING ACADEMY	451	663	488	490	73.6	73.9
BRANSON SCHOOL ONLINE	447	706	434	440	61.5	62.3
COLORADO VIRTUAL ACADEMY (COVA)	5,006	7,282	4,876	4,883	67	67.1
CONNECTIONS ACADEMY	1,060	1,751	1,292	1,344	73.8	76.8

Without a full understanding of what constitutes a mobility incident, these numbers are incredibly alarming, especially when a comparison is made between the state mobility rate and the online mobility rates (See Appendix A for a complete list of Multi-District online schools and their mobility rates). A closer look at the specific student entry types and exit types reveals the complexity of CDE’s mobility calculations. According to CDE’s current mobility definition, the data elements listed below in Table 2 and Table 3 are recorded as mobility incidents and used to calculate both the Student Mobility Rate and the Mobility Incidence Rate for schools.

Table 2 – Entry Types that are Recorded as Mobility Incidents

Continuous in same school with entry date after 10/1
Continuous in a school that has either closed or whose grade range changed with entry date after 10/1
K-6 student entering from an unknown educational setting/status
Transfer from a public school in the same school district with entry date after 10/1
Transfer from a detention center within a district
Transfer from a public school in a different Colorado district or BOCES
Transfer from a school located in a different state/country
Transfer from a non-public school
Transfer from home-based education (home schooling)
Transfer from a Career and Technical (vocational) Education Program not administered by a Colorado School District or BOCES
Transfer from a Licensed Eligible Facility or State Operated Program and was attending an on-grounds school
Transfer from a facility administered by the district
Transfer from a facility operated by the Department of Corrections or Division of Youth Corrections
Re-entry to same school district after prolonged illness/injury
Re-entry after dropping out from same school district in a previous school year
Re-entry after expulsion without educational services from same school district in a prior year
Re-entry after transferring to an External GED program
Re-entry after being reported as a graduate in a prior year
Re-entry after being reported as a diploma recipient (IEP) in a prior year
Re-entry after receiving a certificate of completion
Re-entry after receiving a General Education Development Certificate (GED)

Table 3 – Exit Types that are Recorded as Mobility Incidents

Reached maximum age for services
Death
K-6 student exited to an unknown educational setting/status
Transfer to a public school in the same school district - not for students who are matriculating from one school (e.g. 8 th grade middle school) to another school (e.g. 9 th grade high school) in the same district
Transfer to a detention center within district
Transfer to a public school in a different Colorado school district
Transfer to a school located in a different state/country
Transfer to a non-public school
Transfer to home-based education (home schooling)
Transfer to a Career and Technical (vocational) Education program not administered by a Colorado school district or BOCES
Transfer to a Licensed Eligible Facility or State Operated Program and is attending an on-grounds school
Transfer to a facility operated by the Colorado Department of Corrections or Division of Youth Corrections
Student exited the district after previously being erroneously coded as a graduate in a prior year
Extended absence (Student is absent for 10 or more consecutive days of school)
Illness/Injury (Student was unable to complete this year's educational program due to serious/critical illness or injury and is not receiving educational services through a home-bound program)
Dropped Out
Expulsion (Student who leaves school involuntarily due to an expulsion, is not receiving any education benefits while expelled, and does not return before the end of the reported school year)
GED Transfer to a preparation program not administered by the district
Student transferred to a non-district run GED program AND received a GED certificate all in the currently reported school year

The 2009-2010 EOY collection sample that was requested consisted of 16,383 student records, 16,070 of which were unduplicated students. The records were the last district record of each student, which means that some of the students may have had an entry or exit type that is recorded as a mobility incident, but was masked by either a re-entry or a grade change (generally a promotion due to credit or mastery of material). Therefore, the exact number and type of mobility incidents are incomplete, but the numbers that are available still provide a compelling overview of how and when students enter Multi-District online schools. These students were all enrolled in one or more of the 18 certified Multi-District online schools at some time between July 1, 2009 and July 1, 2010. Each record contained the following information:

- School Year
- Organization (District) Code
- School Code
- SASID (Unique student identifier assigned by CDE)
- Entry Date
- Entry Type Code (The process by which a student enters a school during a given school year)
- Entry Grade
- Retention Code
- Exit Date
- Exit Type Code (The process by which a student exits a school during a given school year)
- Last Record Flag Internal

Tables containing the disaggregated data are found below. Data elements with an N count of less than 16 were not included in order to protect student privacy.

Table 4 – Student Entries that Incurred a Mobility Incident

Transfer from Another District	In-District Transfer After 10/1/2009	Transfer from Home-Based Education	Transfer from Another State/Country	Transfer from a Non-Public School	Re-entry After Dropout from Same District	Other	Total
6680	252	188	155	123	97	59	7554

Table 5 – Student Exits that Incurred a Mobility Incident

Transfer to Another District	Dropout	K-6 Transfer to Unknown Educational Setting	Transfer to Another State/Country	Transfer to an External GED Program	Transfer to Home-Based Education	Obtain an external GED certificate	Other	Total
3822	1443	558	380	354	291	205	178	7231

Due to concerns about funding it is also worth noting when the entries and exits occurred, specifically how many exits and entries occur before and after October 1, which is the official student count day. The following tables show mobility incidents that occur before and after October 1. Schools that enroll students after October 1 do not receive funding for those students.

Table 5 – Post-October 1 Student Entries (unfunded by the schools accepting these students)

Transfer from Another District	In-District Transfer	Transfer from Another State/Country	Other	Total
714	252	31	45	997

Table 6 – On or Post-October 1 Student Exits (most likely unfunded at the receiving public school)

Transfer to Another District	Dropout	Transfer to Another State/Country	K-6 Transfer to an Unknown Educational Setting	Transfer to an External GED Program	Obtain an External GED Certificate	Other	Total
1317	853	252	214	291	153	309	3389

Table 7-Pre-October 1 Student Entries

Transfer from Another District	Transfer From Home-Based Education	Transfer from Another State/Country	Transfer from a Non-public School	Return After Dropping Out in a Previous Year	Other	Total
5966	172	124	110	90	43	6505

Table 8- Pre-October 1 Student Exits

Transfer to Another District	Dropout	K-6 Transfer to an Unknown Educational Setting	Transfer to Another State/Country	Transfer to an External GED Program	Transfer to a Non-public School	Other	Total
2505	590	344	128	63	62	146	3838

Conclusion

It is clear from this preliminary survey that the majority of mobility incidents are occurring due to transfer to and from other districts. Even with incomplete data, the transfers to and from other districts that have been documented from this data set account for 53.2% of mobility incidents when used in the Mobility Incidence Rate with the Total Pupil Count for Online schools used as the denominator. It is highly likely that these transfers actually account for a much higher proportion of mobility incidents, although a data set containing all student records, not just the last record would be required to verify this. As transfers to and from another district incur mobility incidents regardless of when transfers occur and there are not the same geographic limitations that may prohibit district transfers in brick-and-mortar schools, the current mobility calculations may be inadvertently inflating the mobility rates in Multi-District Online schools.

This inflation is further compounded by the “newness” of many Multi-District online schools, in which case they acquire most of their enrollees from other districts. While it is possible that Multi-District online schools are being over-penalized for enrolling students from outside districts, the number of students who transfer to other districts mid-year or drop out deserves equal attention. Many explanations have been offered as to why so many students leave online schools, but as of yet these are anecdotal speculations.

Although this initial data survey provided some insight into the high mobility rates of Multi-District Online schools, more extensive research is necessary to garner a full understanding of these schools and their student characteristics. The following actions are recommended:

- A study that compares Multi-District and Single-District mobility rates should be conducted to determine whether high mobility rates are a phenomenon that is specific to Multi-District online schools or online schools in general.
- The current mobility rate calculations should be evaluated to determine whether or not they are appropriate for Multi-District online schools.
- A data analysis of longitudinal individual student mobility between brick and mortar and online students should be conducted to determine whether online students may be “more mobile” in general than their brick and mortar counterparts.
- A set of student characteristics/factors that are common to online students who stay with one online school, those who transfer between online schools, and those who temporarily enroll and then leave online schools should be identified, and data should be collected to quantify to what degree these student characteristics may be more prevalent in online schools versus brick and mortar schools.
- A qualitative study should be conducted to determine why students attend online schools and why students leave online schools.

Multi-District online schools represent innovation in Colorado’s education landscape, and provide a valuable educational option for many students. Unfortunately, there is very little data that effectively demonstrates the full spectrum of how and why students are choosing these online schools, and more importantly, how these variables may affect student outcomes. It is therefore crucial to gather, analyze, and fully understand this data in order to properly inform legislation, state policy, and best practices that will translate into students who are college and career ready.

Appendix A

Certified Multi-District Online School Mobility Rates for 2009-2010

School Name	Total Pupil Count (All students)	Total Mobile Student Count (All students)	Total Instances of Mobility (All students)	Total Student Mobility Rate (All students)	Total Mobility Incidence Rate (All students)
STATE TOTALS (INCLUDING ALTERNATIVE SCHOOLS)	926,347	221,787	241,861	23.9	26.1
ONLINE TOTALS	19,735	13,542	13,956	68.6	70.7
ACADEMY ONLINE HIGH SCHOOL	54	50	51	92.6	94.4
ACHIEVEK12	190	178	183	93.7	96.3
COLORADO DISTANCE & ELECTRONIC LEARNING ACADEMY	663	488	490	73.6	73.9
BRANSON SCHOOL ONLINE	706	434	440	61.5	62.3
COLORADO VIRTUAL ACADEMY (COVA)	7,282	4,876	4,883	67	67.1
CONNECTIONS ACADEMY	1,751	1,292	1,344	73.8	76.8
CROWLEY COUNTY ONLINE ACADEMY	35	24	32	68.6	91.4
EDISON ACADEMY	226	163	164	72.1	72.6
KAPLAN ACADEMY OF COLORADO	485	438	443	90.3	91.3
GOAL ACADEMY	755	610	610	80.8	80.8
HOPE ON-LINE	4,691	2,724	3,023	58.1	64.4
INSIGHT SCHOOL OF COLORADO AT JULESBURG	1,229	1,055	1,061	85.8	86.3
JEFFCO'S 21ST CENTURY VIRTUAL ACADEMY	152	131	132	86.2	86.8
KARVAL ONLINE EDUCATION	344	229	235	66.6	68.3
EDCSD ON-LINE EDUCATION	287	235	236	81.9	82.2
ONLINE HIGH SCHOOL	199	129	134	64.8	67.3
MONTE VISTA ON-LINE ACADEMY	145	102	105	70.3	72.4
V.I.L.A.S. ONLINE SCHOOL	541	384	390	71	72.1