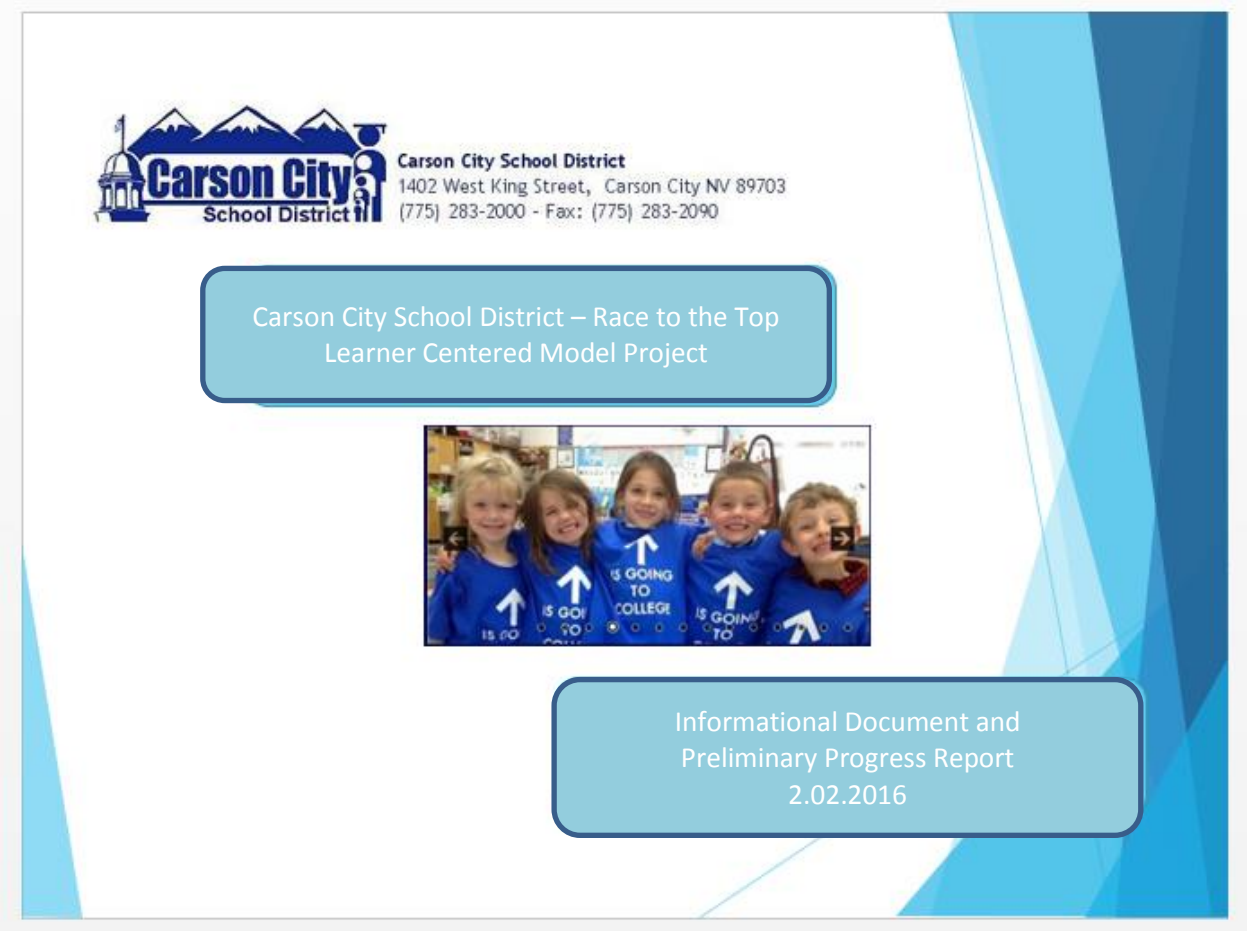

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EXHIBIT M-1 - EDUCATION
Document consists of 18 pages.
Entire exhibit provided.
Meeting Date: 02-10-16

Table of Contents:

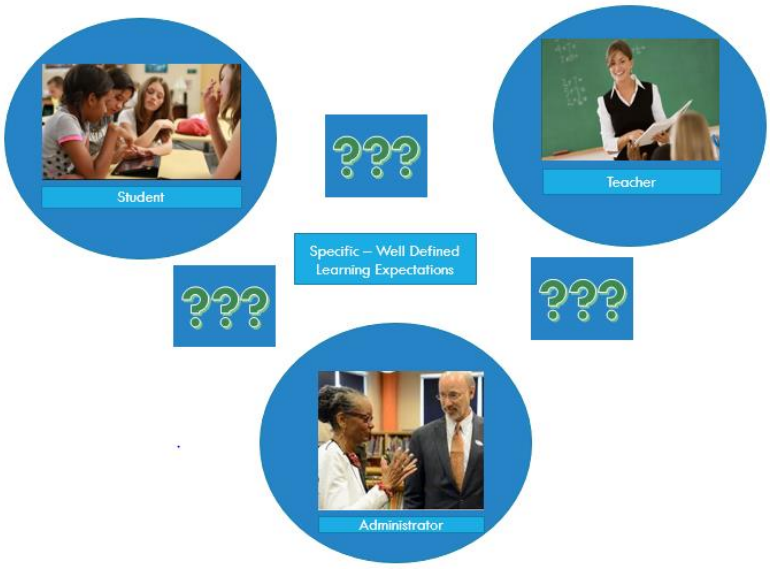
Carson City School District Race to the Top Project Description and Preliminary Results

In January 2012, the US Department of Education announced that the Carson City School District was selected as the nation's top applicant for the Race to the Top project. This project was selected above applications from New York, Boston, and Los Angeles public schools among others. Along with this application came a responsibility to develop a program that would first significantly improve educational opportunities for the students of Carson City, but more importantly, develop a system that has potential to change educational practices nationwide. The District is well on its way to meeting both of the expectations that have been set in this project. This document has been developed to share the key components of the project as well as the promising results that the District is collecting.

In an exceptional educational system, every student has the opportunity to identify and map out their academic pathway, determine if they are making appropriate progress, and are able to partner with their teachers to achieve the academic and career ready expectations set before them. Carson City's reform model provides a system that when implemented can transform traditional school districts into learner centered organizations that support every student in the process of becoming college and career ready.

Developing an aligned system:

When we began this project we recognized as an organization that our learning expectations for each classroom were not well defined. Despite having scope and sequence documents, curriculum maps, and common semester assessments, we found that when we moved from classroom to classroom that the expectations for mastery varied greatly. A simple example could be connected to our series of Algebra I



classrooms. As we moved from class to class, observing, gathering data, and talking with teachers and students, we found that the learning experience varied greatly, there were virtually no common

assessment points with the exception of the semester exams, and other than grades, there were no common data points present that could be used to verify student mastery of required learning. We knew that we had to develop a system that would create a guaranteed knowledge and curriculum pathway for all students and provide consistency across every classroom.

The best way to describe this work is the development of a competency model in which specific student outcomes are tied to each unit of study. Our goal as an organization was to shore up our system so all stakeholders held a clear understanding of learning expectations and we could develop a method of tracking student performance for each unit in real time.

Resolving this Dilemma: Elements of an Aligned System

We understood that our challenge included the process of developing **common curricular units** for each course, **common assessments** for each course, and a **student mastery tracking system** that could be used to track student progress in real time. In the following sections we have taken the time to further clarify this work.

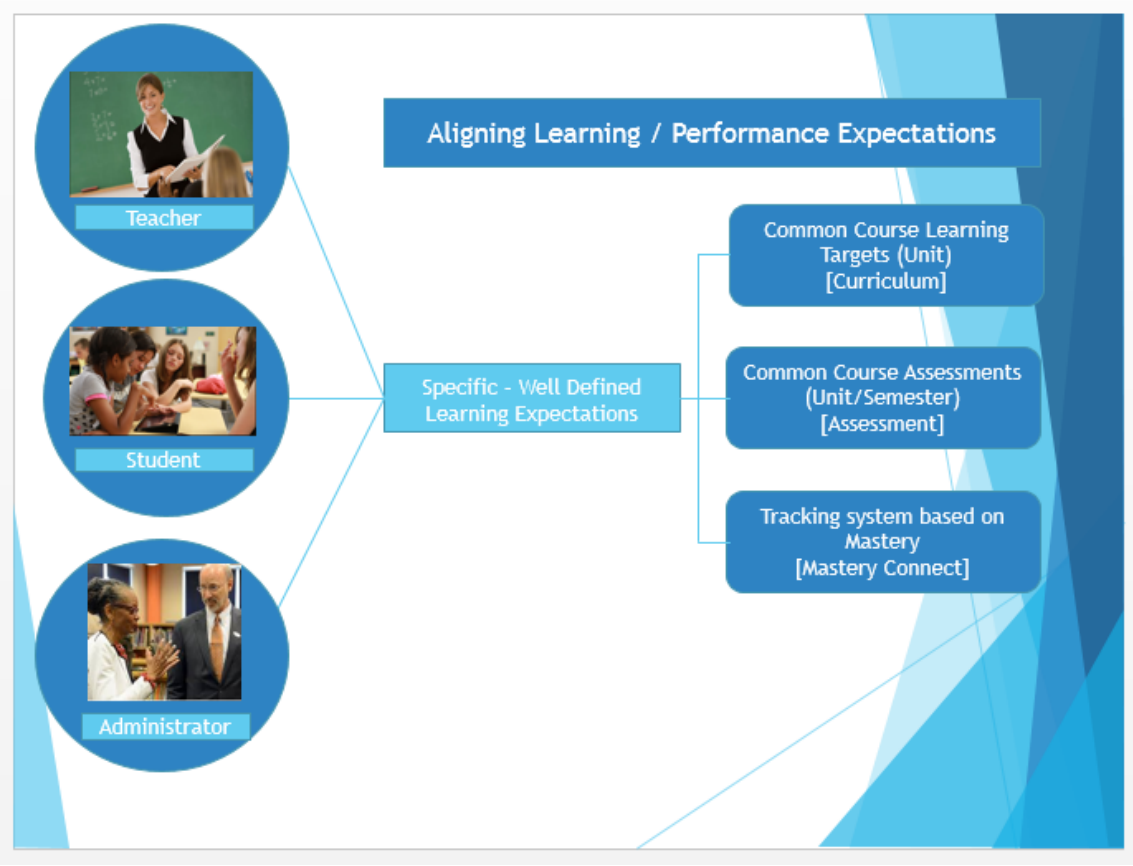
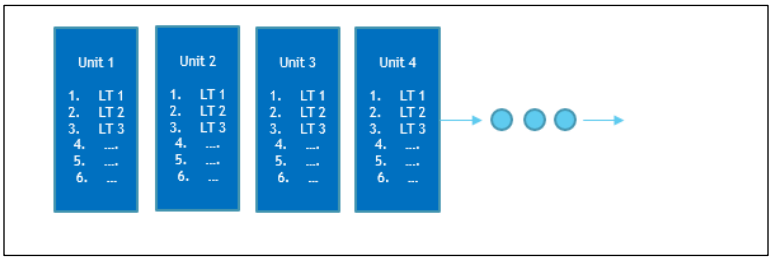


Figure 1A: Represents the process of developing three essential components of the system. Common Units of study which define what students are learning by unit. Common Unit Assessments which define how students are going to demonstrate mastery by unit, and the Student Tracking System which is used to define how well students have mastered the learning expectations both summatively and formatively. (Please see the description below)

Specific – Well Defined Learning Expectations

Common Course Unit/ Learning Targets (LT)

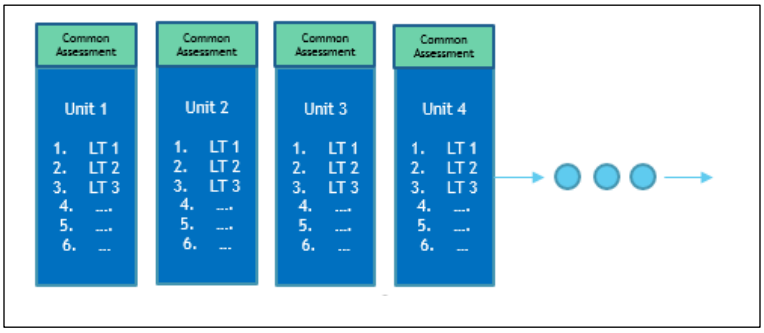


1. Our first step was to clearly define the curriculum based on units and placing the information in a format that teachers and students could access equally. Our belief centered on the fact that if both the teacher and the student could clearly identify and understand the learning expectation then they could form an effective partnership in the process of working toward mastery together. When we built our curriculum we followed the Wiggins and McTigh (1998) model of backwards learning design. As we implemented this process we unwrapped the state standards and created specific learning pathways for students by units. In this process we made it possible to clearly define what a student is to know and be able to do when they complete the learning experience contained within the unit. Essentially, we built a learning road map by unit. This is a student friendly way to help students clearly understand their learning expectations for each unit of study.

2. Two critical documents came out of that process, the first is the **learning guide(s).** This tool is used by teachers, students, and parents to identify and define the learning expectations for the unit. Think of it as a syllabus for the unit. This document defines essential learning for student to master, as well as performance requirements for the unit. The second document is the **course summary document(s)**, this is simply a document that lays all the units/learning targets within a single document. A course on one page if you will.

   See Appendix A for samples several samples of learning guides and course summary documents.

Common Course Assessments (Unit/Semester)

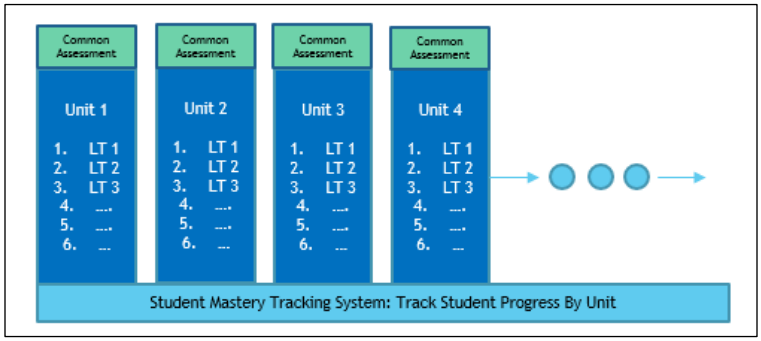


1. As we had seen from our previous work, setting the curriculum guidelines is not sufficient to solidify the boundaries of learning for both teachers and student, we needed to set the assessment guidelines as well. In order to verify a guaranteed implementation of the curriculum

we developed short cycle assessments by unit. Common courses utilize common unit and semester assessments. I.E. all Algebra I classes utilize the same post unit assessments. Please note that assessment does not necessarily mean a test. When we use the term assessment we are considering performance tasks as well as traditional pen and paper tests. The key here is that all common course teachers utilize the same assessment or activity to verify mastery.

2. Our system is a short cycle system in which common assessments are given roughly every three weeks, other districts across the country have chosen 9 week assessments or quarterly assessments instead of short term assessments. We chose a short cycle assessment system because it establishes a relatively short time to provide critical interventions. In the short cycle model, students and teachers have the opportunity to make midcourse corrections before they get too far behind.

Track Mastery by Learning Targets (Unit)



3. In a traditional system, staff and students use grades as benchmarks for performance, however, most people recognize that using a grading process alone does not necessarily define whether or not a student can demonstrate mastery of specific knowledge and or skill. In order to provide specific support to students a shift to a system that tracks specific performance related to each unit of study (learning target) is needed. The Carson City School District Partnered with Mastery Connect. The company (Mastery Connect) has developed a 1:1 item to learning target tracking system that allows the district to track student progress toward mastery of individual learning targets. This system works in both the formative and summative environments. (See Figure 2A on page 5)

   The tracking system collects data each time a student completes a task or assessment and categorizes the results as mastered, near mastered, or requires remediation of each learning target. This process works in real time, thus, once a student completes the task, the results are immediately entered and are available to view.

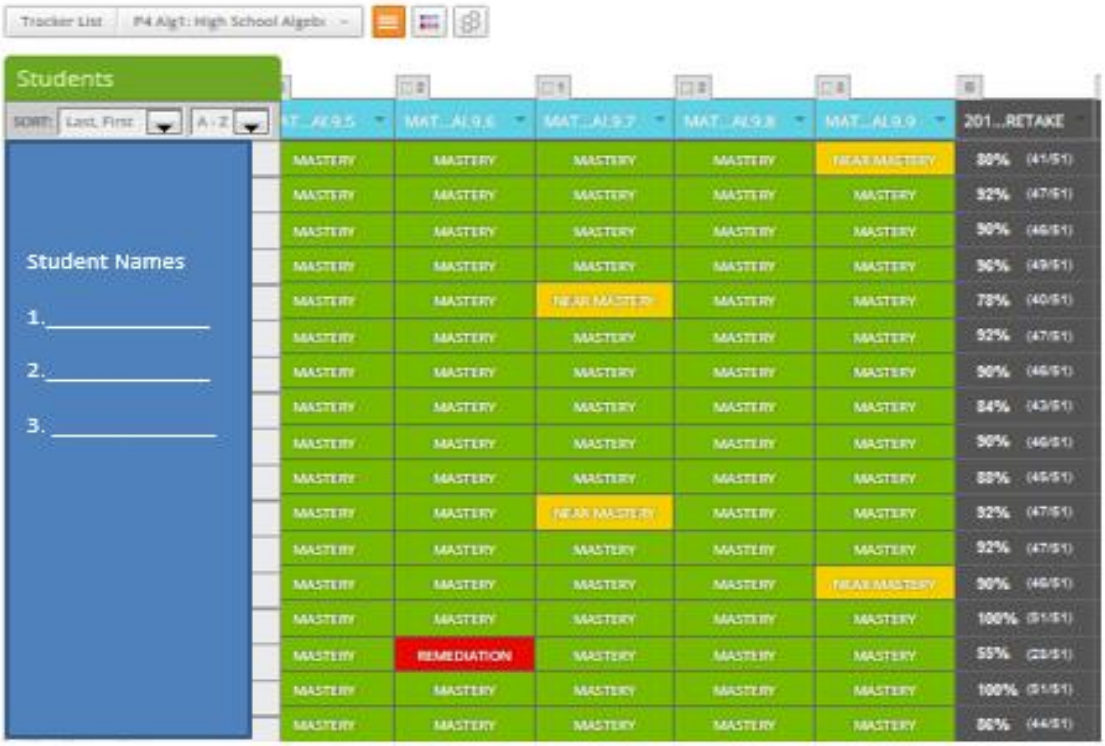


Figure (2A) The figure above represents an excerpt from a mastery tracker. In this system the green yellow and red area represents data collected from classroom activities that is used to provide formative feedback to teachers and students as to whether or not a student has mastered the material. The slate colored column represents a post unit or three week assessment and whether or not students mastered the material on the assessment.

System of Aligned Classrooms
Aligned Learning / Performance Expectations

Having the curriculum, assessment, and student mastery data system in place provides a foundation for a very special classroom experience. These elements also provides the foundation for system reform across, departments, schools, and districts.

Aligned System for Teachers

1. The curriculum is clearly spelled out by unit in terms that both teachers and students can understand. This information sets the foundation for instruction.
2. When moving from class to class the learning and performance expectations are the same. In other words, all Algebra I classes have the same units of study, learning guides, and common assessments. Student performance is tracked by unit and specific skill attainment can be shared from class to class
3. Learning guides define the curriculum and learning expectations for teachers and students. When used effectively, students can clearly define the day to day learning expectation by unit. (Administrators, also use the learning guides to monitor instruction as part of a coaching and evaluation model)
4. Professional Learning Communities can now work effectively because they have common units of study, common assessment, and common data.
5. Utilizing Mastery Connect Data, teachers have a color coded data set in which mastery for each student is easily identified.
6. Although the units of study and end of unit assessments are the same, teachers are not expected to teach lock step during the unit, essentially, each group of students carries unique needs, and teachers are expected to use information from the system and their individual teaching skills to move each student to mastery in a way that best meets the needs of the students being served.
7. Teachers can utilize the system to look back at the instructional targets and direct student mastery results to evaluate classroom effectiveness based on data. Thus significantly increasing the chances of improving the right elements of the learning cycle.

Aligned System for Students

1. In this system students are taught with the support of a learning guide which defines what they are learning, why they are learning it, and defining the expectations of mastery before ever entering the unit of study. In this model, students are expected to work with teachers and advocate for their own learning. This model is based on a true partnership between the teacher and the student.
2. Throughout the learning process students are expected to connect with information shared by teachers throughout the learning process and then are able to adjust their personal pathway to mastery. In essence creating personalized course corrections throughout the unit so that they can reach the mastery targets set for them.
3. As students interact with the Mastery Connect they receive information about specific progress to mastery within the unit. This moves beyond traditional grading and provides specific feedback as to what area needs to improve within the unit. The system is color coded and highly motivational.
4. Conversations change for students in this system from what assignment do I need to turn in to what steps do I need to take to learn and then show mastery of specific learning targets.
5. Student collaboration within this system is much more focused. Student enter and participate in the unit with shared understanding of the outcomes.
6. This system helps to activate intrinsic motivation in students because of the clear learning pathway and real time specific feedback. In addition each time they make a correct step within the unit they receive positive feedback, thus further propelling their desire to succeed.

Aligned System for Administrators

1. Utilizing **Course Summary Documents** and **Learning Guides** administrators can look closely at the targeted learning within each classroom. Classroom observations become more focused with a connection to both what is learned as well as how well students are learning the material identified within the lesson. The use of these tools makes this process much easier for a supervising administrator. In a traditional setting this information is often difficult to gather or access for each observation.
2. Supervision of teachers can be completed in terms of student mastery of learning targets.
3. Mastery Connect data provides insight into student mastery of key learning targets and data is available that provides direct evidence of students mastering or not mastering learning targets. Unlike a traditional system, an administrator in this system can look at data in real time that defines student mastery of key learning within every unit of study.
4. Conversations with students can help administrators to understand if students are truly connected to learning expectations and progress.
5. Supervision shifts to supporting learner centered practices.

Aligned System for Schools

1. Common curriculum implementation within and across campuses
2. Common assessment practices within and across campuses
3. Common data systems that can be used to track student progress both within and across campuses

4. The ability to develop a common learning mission for all common classes both within and across campuses
5. Transparent data motivates staff and students both within and across campuses

Early Results

1. **Shift in organizational beliefs:** A complete change in the belief system of the organization. This shift is elevating the belief that all students can leave the district college and career ready. Student performance data and evidence of mastery is supporting this shift.
2. **Intrinsic motivation is growing:** Students are beginning to be able to define their learning pathway and take control of their learning and performance. They are becoming advocates for self-development. This is true of teachers as well. As students master the material and evidence supports this, teachers are feeling empowered and recognized for their success.
3. **Alignment and shared work is growing collaboration:** Teachers having a truly common curriculum and assessment system is building skills of individuals and the organization. Teachers are becoming a team, both in school and across schools.
4. **Robust curriculum and assessment systems:** A minimum curriculum has been set. All students will take Algebra I, Biology, and English Language Arts on a curriculum level that will lead students to college readiness. An increased rigor and belief students can meet these elevated expectations.
5. **All students in Algebra I:** Prior to 2015 about 40% of Carson City's student population took a freshman math class that was at a lower level than Algebra I. In the previous model only 72% of the students passed this course. In this new system, all students must take Algebra I or higher their freshman year and the current pass rate is 88%. A significant increase in the quality of the course and the performance level of students.
6. **Summer School:** Prior to 2014 approximately 60-80 middle school students were required to attend summer school and make up at least one course in order to advance on to high school. During the summer of 2015, the number decreased to 25 students and 24 of those met their requirements and moved on to high school.
7. **Credit Accrual Rates:** The number and percent of students who passed their courses and earned credits went up significantly from 2013 to 2014. Please see table listed on the next page.

9.01.15 Carson City School District: Pass Percentages in Core Classes (6-12)

	2012-2013					2013-2014					2014-2015				
Grade	Total	Pass All	Fail 1 More	% fail one more	% Pass	Total	Pass All	Fail 1 More	% fail one more	% Pass	Total	Pass All	Fail 1 More	% fail one more	% Pass
6	592	450	142	24.0%	76.0%	535	475	60	11.2%	88.8%	559	516	43	7.7%	92.3%
7	554	399	155	28.0%	72.0%	592	471	121	20.4%	79.6%	542	463	78	14.4%	85.4%
8	609	470	139	22.8%	77.2%	553	427	126	22.8%	77.2%	578	505	72	12.5%	87.4%
9						608	443	138	22.7%	72.9%	557	452	105	18.9%	81.1%
10						561	431	130	23.2%	76.8%	588	484	104	17.7%	82.3%
11						524	397	127	24.2%	75.8%	538	447	91	16.9%	83.1%
12						514	459	55	10.7%	89.3%	478	435	43	9.0%	91.0%

Table AI: The data table above represents the number and percentage of students, grades 6-12 who passed all of their core classes in the Carson City School District; this includes the campuses of Carson High School, Pioneer High School, Carson Middle School, and Eagle Valley Middle Schools. This data connects directly to the number of credits earned and student graduation rates.

Support and Sample Documents

Appendix A Sample Learning Guide Mathematics

Appendix B Sample Course Summary Document Mathematics

Appendix C Sample Learning Guide ELA

Appendix D Sample Course Summary Document ELA

Appendix E Sample Pass Fail Document

Appendix F Sample Intervention Tracker

Appendix G Sample Mastery Connect

Appendix A: Sample Learning Guide: Mathematics Algebra I

Algebra I Learning Guide

Absolute Value Functions & their Graphs

– Unit 6

Learning Targets:

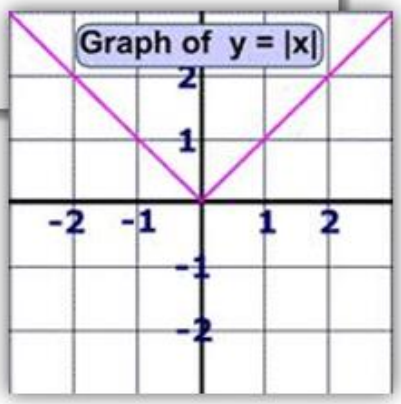
		MATH.AI.9.27 I can graph, write and interpret piecewise functions by identifying the domain and explaining how it relates to the function rule.
		MATH.AI.9.28 I can perform transformations by understanding how a, h and k affect the parent function of an absolute value function.
		MATH.AI.9.29 I can write the equation of an absolute value function by using the graph.
		MATH.AI.9.30 I can solve absolute value equations algebraically by isolating the absolute value expression.
		MATH.AI.9.31 I can solve absolute value equations graphically by identifying intersection points on a coordinate plane.

Essential Questions:

- How are piecewise functions different from other functions?
- What are the effects of the constants a, h and k on the graph of $y = a|x - h| + k$
- How can you use graphing to solve equations involving absolute value?

Key Vocabulary:

- Piecewise function
- Absolute value function
- Vertical Stretch/Narrow
- Vertical Shrink/Wide



Appendix B: Expert of Course Summary Document: Mathematics (Algebra I)

Carson City School District
1402 West King Street, Carson City NV 89703
(775) 283-2000 - Fax: (775) 283-2090

Content Area: MATH — Course Name: Algebra I/Honors Algebra I

Unit 4: Writing & Modeling Linear Functions Learning Targets:	Unit 5: Solving Systems of Equations & Inequalities Learning Targets:	Unit 6: Absolute Value Functions & their Graphs Learning Targets:
MATH.AI.9.16 I can write the equation of a line by using a point & slope or two points. (extension option: parallel and perpendicular) *A.CED.2;* A.REI.11; *F.IF.4; F.IF.6; F.BF.1; F.BF.2; F.LE.2* 5.3 ***MATH.AI.9.17** I can create a linear function in slope-intercept form, standard form, and point slope form by using a table, graph, or verbal description. *A.CED.2;* A.REI.11; *F.IF.4; F.IF.6; F.IF.9; F.BF.1; F.BF.2; F.LE.2* 5.3, 5.4 **MATH.AI.9.18** I can interpret paired data by determining whether correlation exists and implies causation/association. S.ID.6; S.ID.8; S.ID.9 OC4.8 **MATH.AI.9.19** *I can find the line of best fit by using two points. *F.LE.5; S.ID.6*; S.ID.7 5.6, OC4.9 **MATH.AI.9.20** I can find terms in a sequence by writing and applying explicit and recursive formulas for arithmetic sequences. *F.BF.1a; F.BF.2; F.IF.A.3* p. 309 Alg 1, 12.2 & 12.5 Alg 2 Assess	**MATH.AI.9.21** I can solve, approximate and explain the solution of a linear system of equations by using the graphing method. *A.REI.6*; A.REI.11 7.1 **MATH.AI.9.22** I can solve, explain and check the solution of a linear system of equations by using the substitution method. *A.REI.6*; A.REI.11 7.2 **MATH.AI.9.23** I can solve, explain and check the solution of a linear system of equations by adding equations or using the multiplication property of equality to eliminate a variable. A.REI.5; *A.REI.6* 7.3, 7.4 **MATH.AI.9.24** I can determine the type of solution for a system of equations to be no solution, infinite many solutions, or one solution by using the graphing, substitution, or elimination method. A.REI.5; *A.REI.6*; A.REI.11 7.5 **MATH.AI.9.25** I can solve a linear system of linear inequalities by graphing the system. (Use shading and specific lines to show solution.) A.REI.12 7.6 ***MATH.AI.9.26** I can model a linear system of equations or inequalities by writing and graphing using a real-world situation. N.Q.1; N.Q.2; *A.CED.2; A.CED.3; A.REI.6* OC3.6, OC2.8 Assess	**MATH.AI.9.27** I can graph, write and interpret piecewise functions by identifying the domain and explaining how it relates to the function rule. *A.CED.2; F.IF.2; F.IF.5; F.IF.C.7b.1* OC6.1 **MATH.AI.9.28** I can perform transformations by understanding how *a*, *h* and *k* affect the parent function of an absolute value function.(Describe using words such as vertical stretch/narrow and vertical shrink/wide and reflection) *A.CED.2; F.IF.2; F.IF.7*; F.BF.1; *F.BF.3* OC6.2, ext 6.5, OC6.3, OC6.4 **MATH.AI.9.29** I can write the equation of an absolute value function by using the graph. *A.CED.2; F.IF.2; F.IF.7; F.BF.3* OC6.2, ext 6.5, OC6.3, OC6.4 **MATH.AI.9.30** I can solve absolute value equations algebraically by isolating the absolute value expression. *A.CED.1; A.CED.2;* A.REI.11 OC6.5 **MATH.AI.9.31** I can solve absolute value equations graphically by identifying intersection points on a coordinate plane. *A.CED.1; A.CED.2*; A.REI.11 OC6.5 Assess

Developed by Sarah Lobsinger, Brian Branch, Hal Wilkins, and Chris Mannschreck June 2013
Revised by Chris Mannschreck and Sarah Lobsinger June 2015

*Power Standard 2

Appendix C: Sample Learning Guide: ELA 8th grade

8th Grade ELA
Learning Guide
MIU 6 – Argumentative Writing

Essential Questions

- What are a claim and a counter claim?
- How do I determine a strong argument?
- How do I create my own argumentative essay?

Learning Targets

- **I can draw conclusions and make inferences about authors' interpretations by identifying facts and citing textual evidence**
- **I can determine which text has a stronger argument and better claims by responding to the texts**
- **I can analyze word and sentence choices and how they affect the text by responding to a text**

Statement of Purpose:

- **I can state the purpose of my essay and remain focused by analyzing a task, clearly stating my claim in context, and staying on topic**

Organization:

- **I can effectively organize an argumentative or informative essay by aligning audience and purpose with appropriate introduction, body, and conclusion in my writing**

Evidence and Reasoning:

- **I can accurately support my claim by addressing counterclaims, citing sources, and using a variety of elaboration techniques**

Language and Vocabulary

- **I can maintain a formal style by using appropriate academic and domain specific vocabulary**

Conventions:

- **I can edit my writing by applying the conventions of standard English**

Key Vocabulary

- Claim
- Counter claim
- Interpretation
- Audience
- Author's Purpose
- Context
- Formal style
- Domain specific vocabulary

Evidence of Mastery

- Q3 Performance Task
- MIU3 District Benchmark Assessment
  - Comprehension Questions
  - Written Response
- Classroom Formative Assessment
- Classwork
- Written Responses

Appendix C: Sample Learning Guide: ELA – Student Self-Assessment

Self-Assessment
It is important for you to monitor your learning throughout this process. This is a tool to help you document your understanding.

	Learning Target	Self-Assessment			
2	I can draw conclusions and make inferences about authors' interpretations by identifying facts and citing textual evidence	Say what?	Not really	I kind of know how to do this	I've got this!
3	I can determine which text has a stronger argument and better claims by responding to the texts	Say what?	Not really	I kind of know how to do this	I've got this!
4	I can analyze word and sentence choices and how they affect the text by responding to a text	Say what?	Not really	I kind of know how to do this	I've got this!
5	I can state the purpose of my essay and remain focused by analyzing a task, clearly stating my claim in context, and staying on topic	Say what?	Not really	I kind of know how to do this	I've got this!
6	I can effectively organize an argumentative essay by aligning audience and purpose with appropriate introduction, body, and conclusion in my writing	Say what?	Not really	I kind of know how to do this	I've got this!
7	I can accurately support my claim by addressing counterclaims, citing sources, and using a variety of elaboration techniques	Say what?	Not really	I kind of know how to do this	I've got this!
8	I can maintain a formal style by using appropriate academic and domain specific vocabulary	Say what?	Not really	I kind of know how to do this	I've got this!
9	I can edit my writing applying the conventions of standard English				

Appendix D: Expert of Course Summary Document: ELA

Carson City School District
1402 West King Street, Carson City NV 89703
(775) 283-2000 - Fax: (775) 283-2090

Content Area: English Language Arts

Course Name: 8th Grade ELA

Q2 MIU FOUR Research Paper	Q2 MIU FIVE "A Vision of Success"	Q3 MIU SIX "Argumentative Writing"
Learning Targets: **ELA.8.8.1** • I can edit my writing by applying the conventions of standard English L8.1; L8.2; L8.2a; L8.2c; L8.3; L8.4; L8.4a; L8.5b; L8.6 **ELA.8.8.15** • I can choose a topic, find important information, and select appropriate evidence by writing a research paper RI8.1; RI8.8; W8.2b; W8.2f; W8.4; W8.5; W8.6; W8.9 **ELA.8.8.16** • I can incorporate multimedia elements with my research by creating a multimedia project W8.2a **ELA.8.8.17** • I can properly cite sources by creating a works cited page W8.7; W8.8; W8.9 **Evidence of Mastery:** Common Pre-/Post-Assessment Learning Guides Student Self-Assessments	**Learning Targets:** **ELA.8.8.1** • I can edit my writing applying the conventions of standard English L8.1; L8.2; L8.2a; L8.2c; L8.3; L8.4; L8.4a; L8.5b; L8.6 **ELA.8.8.18** • I can determine an author's position and point of view by writing a response and citing textual evidence RI8.1; RI8.6; W8.4; W8.9 **ELA.8.8.19** • I can determine central ideas and essential information by creating an objective summary RI8.2 **ELA.8.8.20** • I can evaluate the advantages and disadvantages of using different mediums to present a topic by explaining how they affect my understanding of the topic RI8.7 **ELA.8.8.21** • I can explain word and sentence choices and how they affect the text by responding to a text RI8.4; RI8.5 **ELA.8.8.22** • I can determine the meaning of words in context by identifying and defining Latin/Greek roots RI8.4; L8.4b **Evidence of Mastery:** Common Pre-/Post-Assessment Learning Guides Student Self-Assessments	**Learning Targets:** **ELA.8.8.1** • I can edit my writing applying the conventions of standard English L8.1; L8.2; L8.2a; L8.2c; L8.3; L8.4; L8.4a; L8.5b; L8.6 **ELA.8.8.23** • I can draw conclusions and make inferences about authors' interpretations by identifying facts and citing textual evidence RI8.3; RI8.9 **ELA.8.8.24** • I can determine which text has a stronger argument and better claims by responding to the texts RI8.8; RI8.9 **ELA.8.8.21** • I can analyze word and sentence choices and how they affect the text by responding to a text RI8.4; RI8.5 **ELA.8.8.25** • I can state the purpose of my essay and remain focused by analyzing a task, clearly stating my claim in context, and staying on topic W8.1; W8.1a; W8.1c; W8.4 **ELA.8.8.26** • I can effectively organize an argumentative or informative essay by aligning audience and purpose with appropriate introduction, body, and conclusion in my writing W8.1b; W8.1c; W8.1e; W8.9 **ELA.8.8.27** • I can accurately support my claim by addressing counterclaims, citing sources, and using a variety of elaboration techniques W8.1a **ELA.8.8.28** • I can maintain a formal style by using appropriate academic and domain specific vocabulary W8.1d **Evidence of Mastery:** Argumentative Essay Post Assessment

2