Summit Middle School

Boulder Valley School District Colorado

2000-2001

Annual Report to the Board of Education



Summit Middle School 4655 Hanover Avenue Boulder, Colorado 80305

February 28, 2001

Summit has been the most significant educational experience my son may ever have. I believe what he has learned here will make a real difference for his future success. Summit was not easy for him. He struggled. But both he and I would not trade it for the world. My highest compliments to the faculty and staff of Summit.

I realize what an exceptional place this really is. Thank you for instilling a love of learning in my children. Summit has provided an environment that says "it's okay to use your head and not get into trouble." Thanks to all of you!

Summit Middle School is a wonderful, safe, and respectful environment for learning.

The academic curriculum and teacher involvement with each student far exceed my highest expectations. Summit has been a great learning environment for our children.

The difference in [my son] right from that first day [at Summit] has been amazing. He's challenged, he's happy, he's interested in schoolwork again. He made friends right from the start, and is becoming a disciplined, organized student rather than a haphazard one. ... He admires his teachers, he loves the learning process, he enjoys his classmates. The Summit teachers are outstanding, period. I can't say enough about them.

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Letter from the Board of Directors

We are pleased to present Summit Middle School's fifth annual report to the Boulder Valley Board of Education. This year completes Summit's first five-year charter and is marked by the impending renewal of Summit's charter. This juncture provides an opportunity for reflection on the past and anticipation of the future.

When Summit began, its founders and supporting families had hopes and dreams for a school that would provide an outstanding, challenging academic program for Boulder Valley middle school students and be a crown jewel for the Boulder Valley School District. Over the five years of Summit's original contract, these hopes and dreams have become reality. Summit's accomplishments, success, and status today, it is fair to say, have far surpassed even the most ambitious aspirations of its founders.

In Summit's first five years, as in life, challenges have been presented, obstacles have been overcome, and lessons have been learned. Summit has taken the opportunity presented to it and done the utmost with it. An evolutionary and developmental process has occurred. As a result, sound principles and concepts upon which Summit is based have been fleshed out and implemented in Summit's classrooms. In some areas, events have unfolded exactly as planned. In others, the learning process for Summit has produced results that transcend our initial expectations.

The Summit Board of Directors, administrators, and teachers deeply appreciate the opportunity to serve the students of the Boulder Valley School District. Summit students and families continually express their gratitude for Summit's program.

As we enter the final stages of contract negotiations, which we hope will provide a strong foundation for many more years of service to the students of the Boulder Valley, we are excited about Summit's future. In addition to constantly improving Summit's performance, we look forward to building on the communications that have occurred during contract renewal discussions and working toward deeper understandings and trust that will enable Summit and the school district to better fulfill our joint mission of serving students through cooperation and mutual support.

Sincerely yours,

Summit Middle School Board of Directors James A. Cederberg, Chair 2

Mission, Goals, and Objectives

Mission Statement

- To provide a rigorous, academic curriculum that promotes high levels of student effort and academic achievement.
- To foster high self-esteem through stimulating intellectual challenge and meaningful academic accomplishment.
- To inspire in students a lifelong love of learning and a desire for self-development.
- To create a community of peers who value scholarship, academic achievement, and creativity.
- To serve as an excellent preparation for students intending to study in the International Baccalaureate program and other college-preparatory high school programs.

Goals and Objectives

Summit was founded upon, and its program based upon, the following goals and objectives established in 1995:

For the Program

- To expand educational choices within the Boulder Valley School District by offering middle school students the opportunity to enroll in a rigorous academic program modeled upon the International Baccalaureate Middle Years Program. (By the time Summit opened in Fall 1996, the phrase, "modeled upon the International Baccalaureate Middle Years Program," was deleted.)
- To provide the option of advanced classes for any student on a self-selecting basis.
- To group students according to subject mastery rather than grade classification or age.
- To challenge each student in every course.
- To elicit academic achievement commensurate with each student's ability.
- To maintain an unwavering commitment to the mastery of educational fundamentals (content) and the development of critical-thinking skills (process).
- To enhance each student's social and emotional development and to foster positive relationships among peers.
- To recognize that its customers are students, parents, and the community and to be responsive and accountable to their concerns.
- To strive to reflect the diverse population of the Boulder Valley School District.
- To meet or exceed District and State curriculum, content, and performance standards.
- To monitor the program and evaluate it regularly.
- To ensure safety, civility, and an optimum learning environment.

For the Student

- To realize one's intellectual and personal potential.
- To have high expectations for performance in all curriculum areas.
- To eagerly meet academic challenges and learn to take intellectual risks.
- To reason critically, solve problems creatively, develop intellectual integrity, tolerate ambiguity, and express ideas competently and fluently in oral and written presentations.
- To acquire a genuine love of learning that will be a lifelong source of strength and enjoyment.
- To internalize the values of personal responsibility, individual freedom, and respect for others.
- To appreciate the human capacity and drive to enjoy and improve the quality of life over time.
- To acquire a firm understanding and command of the English language as a means of communication and to develop admiration for the elegance and richness of human expression.
- To begin or continue the study of a foreign language in 6th grade and to continue for the duration of the middle school years.
- To acquire research skills as a means of developing individualized learning, independent thinking, and self-reliance.

For the Faculty

- To continue intellectual and professional development and to pursue further education in a primary academic discipline.
- To understand, model, and foster independent thinking skills, creative problem solving, and abstract reasoning.
- To develop with parents and students a cooperative partnership based on mutual respect and objectivity.
- To show empathy and understanding and to share ideas and observations with the students and the parents.
- To assess student performance frequently and objectively.

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Enrollment and Demographics

Enrollment for the 2000-2001 Academic Year

The 2000-2001 school year was the fifth year of operation for Summit Middle School. In 1997-98, our cap was 270 students, representing a one-year increase of 20 students authorized by the Board of Education to help us better balance the sizes of our three grades. In 1998-99, our cap returned to 250 students and remained at 250 through 2000-2001. Admission of new students was by lottery, with preference given to children of subscribers to the charter proposal, children of faculty and staff, and siblings of Summit students, as specified in our contract.

We received a total of 241 new applications during the 2000 open-enrollment period. With additional applications received through the spring and summer, we received a total of 257 applications for the 2000-2001 academic year. Ultimately we admitted 87 students: 83 new 6th graders and four new 7th graders.

One student has left Summit since the start of the 2000-2001 school year. We fill any openings from our waiting list through the end of the Fall semester because of our commitment to serve the community as our funding and enrollment cap permit. (We typically do not admit new students after the start of the Spring semester because new students usually have difficulty adjusting to classes well in progress.)

Summit draws its student population from various school situations: home schooled, private schools, schools throughout the Boulder Valley School District, and, following Colorado's openenrollment law, a few students (e.g., siblings and children of subscribers) from outside the Boulder Valley School District (see Table 3.1). Summit's current enrollment is given in Table 3.2.

Table 3.1. Last School Attended Prior to Enrolling at Summit, 2000-2001 Academic Year

Public School	201
Private School	55
Out-of-District School	3
Home Schooled	3

Table 3.2. Enrollment by Grade Level, 2000-2001 Academic Year

6th	82
7th	87
8th	87

Summit's population includes a large number of bilingual students. Second languages spoken include Arabic, Chinese, Hindi, Indonesian, Italian, Korean, Mandarin, Russian, and Spanish. The percentages of students in the officially designated ethnic groups and special education in 2000-2001 are given in Table 3.3.

Table 3.3. Percentage of Students in Different Ethnic and Categorical Groups

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Group ¹	Summit	BVSD ²	Southern Hills ³	Base Line ³
American Indian	0.0%	0.8%	1.3%	1.0%
Asian	7.5%	5.1%	3.0%	7.4%
Black	0.8%	1.8%	0.9%	2.7%
Hispanic	1.6%	11.6%	3.4%	9.7%
White (not Hispanic)	90.1%	80.7%	91.4%	79.1%
Special Education	5.4%	11.4% 4	17.4% 4	17.1% 4
Free/Reduced Lunch	0.3%	12.3% 4	4.5% 4	15.4% 4

¹ Colorado Department of Education designations

Attendance

From August 2000 to February 2001, the daily average attendance was 95.35%. Table 3.4 gives data for the first part of the current academic year. This compares to the 96.2% daily average attendance over a similar time period a year ago.

Table 3.4. Percent Daily Average Attendance (August 24, 2000 to February 22, 2001)

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6th Grade	7th Grade	8th Grade	Overall
95.37%	95.35%	95.35%	95.36%

Enrollment Applications for the 2001-2002 Academic Year

Current sixth and seventh graders have priority for re-enrollment for the next school year. Of the 169 sixth and seventh grade students at Summit in 2000-2001, all have re-enrolled for the 2001-2002 academic year as seventh and eighth graders.

Among new applicants, priority groups include children of the subscribers to the charter proposal, children of faculty and staff, and siblings of Summit students. Remaining openings are filled, by grade level, based on a lottery conducted by the district. This year's district openenrollment period ended on January 31, 2001. We received 278 applications during the 2001 open-enrollment period (Table 3.5). Fifty-five applicants are in enrollment priority groups.

Table 3.5. New Applications Received for 2001-2002 (by Grade Level)

	` ' J	
6th Grade	7th Grade	8th Grade
228	36	14

² Source: Colorado Department of Education and Boulder Valley School District

³ Representative middle schools in Summit's geographic area. Source: BVSD

⁴ Data from 1999

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Applicants were distributed fairly evenly over the entire district. Of the total of 278 applicants, 38 were from the Southern Hills neighborhood attendance area, 43 from Centennial, 34 from Platt, 25 from Angevine, 23 from Base Line, 20 from Burbank, 12 from Louisville, 14 from Monarch, and 27 from Casey. A total of 51 were from independent (private) schools and two were home schooled. We expect to admit a number of students from our waiting list, as we do each year.

We did not encourage applicants for 7th and 8th grades since we anticipated very few openings for those grade levels. As was the case last year, a frequently asked question at our open houses was, "What are our chances of getting in?" Often, parents stated that they did not intend to apply for admission because they felt their chances of being admitted were too small. In actuality, of the applicants for 6th grade who were subject to the lottery (i.e., did not have enrollment priority) and who indicated Summit as first choice on their open enrollment applications, 49% were in the initial offer group.

With the new centralized BVSD open enrollment procedures in place for the 2001 enrollment season, it has been difficult for Summit to accurately track student applications or to fully address questions and considerations of applicants as in the past. Summit, however, remains committed to providing complete consumer information about its program so that families are able to make informed choices regarding middle school. Summit has been allotted 50 additional enrollment slots for 2001-2002 and has based enrollment projections for next academic year on a total enrollment of 300 students. This allows Summit to accommodate in part the consistently long waiting list and strong demonstrated demand, year after year, for Summit's successful middle school program.

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Curriculum Standards

Summit is in the process of adopting content standards and benchmarks that meet or exceed state and district standards. In the years ahead, we will continue to develop our curriculum and refine our assessments and teaching practices to ensure that students are achieving Summit's standards.

Summit believes in standards-based education. As expressed by the Northern Colorado BOCES, standards-based education has several benefits: (1) There are clear community expectations for schools; (2) The question, "What do we want students to know and be able to do?" is asked and answered; (3) Focus and clarity are brought to the curriculum; (4) Rigorous academic content is taught at all grade levels; (5) High expectations are established that demand hard work and effort from students, parents, and teachers; (6) All students are expected to reach high standards of achievement.

Summit is well along the path towards standards-based education. The following is the current draft of our content standards and exit benchmarks. Summit faculty members have written specific benchmarks for each core subject level taught at Summit and are now in the process of developing standards-based units of study, along with appropriate assessments.

English

Standard #1. Students read and understand a variety of materials.

- 1.1. By the end of English III or IV, students, given an unfamiliar selection to read, can explain its literal meaning, identify its genre, discuss its structure, technique, author's purpose and point of view, and relate its ideas to the world outside of the text.
- 1.2. By the end of English III or IV, given access to appropriate resources, students can make meaningful connections between a text and its cultural, historical, or artistic context.
- 1.3. By the end of English III or IV, students can read for a variety of purposes (e.g., to follow directions, summarize main ideas, find and record information, analyze an argument, evaluate effectiveness, sequence events and ideas, derive enjoyment) and employ strategies appropriate to each purpose (e.g., self-questioning, note-taking, outlining, skimming, and scanning).
- 1.4. By the end of English III or IV, students can make appropriate use of intra-textual aids (e.g., phonetic, syntactical, and context cues) and extra-textual resources (e.g., background knowledge, dictionaries, and reference materials) to assist in comprehension of various texts, including informational materials, poetry, novels, essays, stories, plays, and biographies/autobiographies.
- 1.5. By the end of English III or IV, students can articulate their own reading processes and preferences and self-assess their level of comprehension of written material.

1.6. By the end of English III or IV, when asked to read and respond to the writing of others, students can provide suggestions and constructive critiques at appropriate points in the writing process.

Standard #2. Students write and speak for a variety of purposes and audiences.

- 2.1. By the end of English III or IV, students can select and incorporate source materials to support and enhance their speaking and writing.
- 2.2. By the end of English III or IV, students can use the writing process (pre-writing, planning, drafting, revising, and editing in response to feedback) to produce a variety of written products.
- 2.3. By the end of English III or IV, students can write compositions and make speeches that fulfill different purposes and that are clearly focused for different audiences, both public and private.
- 2.4. By the end of English III or IV, students can select from a variety of organizational patterns, including the narrative, summary, five-paragraph essay, and comparison/contrast, to serve the writing or speaking purpose.
- 2.5. By the end of English III or IV, students can write compositions and speeches that are focused and cohesive.
- 2.6. By the end of English III or IV, students can produce effective compositions for a variety of rhetorical purposes, including description, persuasion, exposition of research, and literary analysis.
- 2.7. By the end of English III or IV, students can identify and make use of stylistic elements, such as figurative language, diction, sound, and structure, as they develop an individual style and voice.
- 2.8. By the end of English III or IV, students can speak and write using a precise and varied vocabulary that reflects wide reading and knowledge of words' connotations (as well as denotations), common roots and their derivatives, and informed use of the dictionary and thesaurus.
- 2.9. By the end of English III or IV, students can independently prepare and present speeches that establish rapport, demonstrate credibility, and maintain clarity for the audience through accurate content, clear and relevant visual elements, correct pronunciation with minimal vocalized pauses, eye contact, and appropriate body language, pace, volume, and emphasis.

Standard #3. Students write and speak using conventional grammar, usage, sentence structure, punctuation, capitalization, and spelling.

- 3.1. By the end of English III or IV, students can self-edit and/or use available resources to produce finished compositions that demonstrate correct spelling of frequently used words and homonyms and show attention to the correct spelling of commonly misused and less familiar words.
- 3.2. By the end of English III or IV, students can use resources such as knowledge of spelling rules, spell-check functions, and dictionaries to improve spelling accuracy.
- 3.3. By the end of English III or IV, students can identify the parts of speech--noun, pronoun, verb, adverb, adjective, conjunction, preposition, and interjection--and use that knowledge to draft, write, revise, evaluate, and improve his or her written products.
- 3.4. By the end of English III or IV, students can speak and write using correct pronoun case and agreement, regular and irregular noun and verb forms, and subject-verb agreement.
- 3.5. By the end of English I or II, students can write using the conventions of capitalization, such as to begin sentences, proper names, titles, and nationalities.

- 3.6. By the end of English III or IV, students can produce written work that uses correct ending punctuation and shows few significant errors in the use of commas, quotation marks, semi-colons, and apostrophes.
- 3.7. By the end of English III or IV, students can use complete simple, compound, and complex sentences in their writing.

Standard #4. Students apply thinking skills to their reading, writing, speaking, listening, and viewing.

- 4.1. By the end of English III or IV, students can infer an author's or speaker's point of view, purpose, and the influence of historical/cultural context.
- 4.2. By the end of English III or IV, students can solve problems and answer literal- and interpretive-level questions using reading, writing, speaking, listening, and viewing skills.
- 4.3. By the end of English III or IV, students can compare and contrast a variety of texts based on literary elements such as theme, style, point of view, historical, cultural, and artistic context, and character and plot development.
- 4.4. By the end of English III or IV, students can independently interpret spoken and written texts and justify that interpretation using textual and other support.
- 4.5. By the end of English III or IV, students can critique the content and style of their own and others' written work and oral presentations.
- 4.6. By the end of English III or IV, students can articulate and evaluate the processes they used to develop an idea or create a product.

Standard #5. Students read to locate, select, and make use of relevant information from a variety of media, reference, and technological sources.

- 5.1. By the end of English III or IV, students can locate, evaluate (e.g., for accuracy, persuasiveness, emphasis), and organize relevant information for reading, writing, and speaking purposes.
- 5.2. By the end of English III or IV, students can access and use information from a variety of resource materials, including printed texts, library databases, the Internet, and CD-ROM.
- 5.3. By the end of English III or IV, students can incorporate source materials into an informative and properly documented end product.

Standard #6. Students read and recognize literature as a record of human experience.

- 6.1. By the end of English III or IV, students can draw on a broad base of knowledge about universal themes (e.g., initiation, appearance and reality, death and rebirth, responsibility, individuality and conformity) and apply these to specific literary works and to their own lives.
- 6.2. By the end of English III or IV, students can identify and discuss how specific aspects of culture (e.g., perspectives, beliefs, customs, mores, and artistic traditions) are reflected in specific American and world literature texts.
- 6.3. By the end of English III or IV, students can discuss literary technique and genre, using correct terminology, including diction, character, conflict, setting, plot, theme, symbol, allusion, figurative language, foreshadowing, imagery, and point of view and apply these to particular literary works from the United States and other cultures.

- 6.4. By the end of English III or IV, students can identify, explain, and compare key features of particular authors' works (e.g., themes, techniques, historical/cultural backgrounds, perspectives).
- 6.5. By the end of English III or IV, students can develop a definition of a literary classic and/or a set of aesthetic principles and apply these to particular works from a variety of historical periods and cultures.
- 6.6. By the end of English III or IV, students can synthesize and evaluate numerous perspectives (e.g., prior knowledge, cultural information, other readers' responses, literary conventions, and personal experience) in order to form and justify interpretations of the works studied.

Science

Standard #1. Students understand the processes of scientific investigation and design, conduct, communicate about, and evaluate such investigations.

- 1.1. Students can make scientific observations about their world, contrast quantitative and qualitative observations, and distinguish between observations and inferences.
- 1.2. Students can develop questions that can be explored experimentally, find relevant information in the literature, and formulate hypotheses consistent with known phenomena and principles.
- 1.3. Students can design, perform, and defend an investigation using the scientific process, which includes a written step-by-step comprehensive procedure, testing a hypothesis, controlling variables, and collecting relevant data.
- 1.4. Students can use appropriate measuring tools and measurement units to collect and record data, evaluate their precision and accuracy, and identify sources of error.
- 1.5. Students can measure, calculate, and report data using the SI units and decimal prefixes (e.g., kilo-, centi-, milli-) and are able to convert between English system and metric system (e.g., Fahrenheit vs. Celsius, mile vs. meter).
- 1.6. Students can explain the need for many observations, determine the number of observations needed to reach an appropriate level of accuracy and reliability in an experiment, and explain the concept of significant figures.
- 1.7. Students can maintain a laboratory notebook to record all data, observations, and procedures, realizing that this notebook serves as a legal document.
- 1.8. Students can function safely, effectively, efficiently, and responsibly in a laboratory or field study setting.
- 1.9. Students can organize, manipulate, and present data to show functional relationships between observations in order to formulate conclusions.
- 1.10. Students can relate the results of an experiment to experimental questions that were asked, to other experiments, and to known models and theories in order to ask new questions and plan subsequent experiments.
- 1.11. Students can communicate the results of an experiment with fidelity and clarity, using words, graphs, pictures, charts, diagrams, and computer resources (Internet, CD-ROM, application programs), in language and forms appropriate for an intended audience.

Standard #2. Physical Science. Students know and understand common properties, forms, and changes in matter and energy (focus: physics and chemistry).

- 2.1. Students know that matter has characteristic properties, which are related to its composition and structure.
- 2.1.1. Students can examine, describe, compare, measure, and classify objects based on common physical and chemical properties.
- 2.1.2. Students can classify matter as solid, liquid, or gas, based on its properties using models.
- 2.1.3. Students can distinguish between physical and chemical properties and changes, and separate substances based on these properties.
- 2.1.4. Students can predict the effects of physical changes on properties and composition of matter.
- 2.1.5. Students can classify and describe matter in terms of atoms, compounds (both ionic and molecular), and mixtures.
- 2.1.6. Students can name the compound that chemical formulas represent and explain the stoichiometry of the formula.
- 2.1.7. Students can describe the particles of the atom, relative sizes of the atom, and discuss the structure of the atom according to the quantum mechanical model.
- 2.1.8. Students can identify, classify, list, and predict chemical and physical properties of certain elements from their location in the periodic table (metals, nonmetals, noble gases).
- 2.1.9. Students can describe and apply special precautions in handling common household materials such as solvents and cleaners based on their properties.
- 2.2. Students know that energy appears in different forms and can move (be transferred) and change (be transformed).
- 2.2.1. Students can identify and describe different forms of energy: chemical energy, mechanical energy, thermal energy, electromagnetic energy, and nuclear energy.
- 2.2.2. Students can describe and explain applications associated with conversions between forms of energy (e.g., a refrigerator, a battery, and a solar cell).
- 2.2.3. Students can describe qualitative and quantitative relationships, using data, observations, and graphs associated with energy transfer or energy transformation.
- 2.2.4. Students can describe and apply concepts related to chemical energy, e.g., chemical reactions, acids and bases, and chemical solutions.
- 2.2.5. Students can describe, apply, measure, and calculate quantities related to mechanical energy (e.g., force, pressure, momentum, and work).
- 2.2.6. Students can describe, apply, measure, and calculate quantities related to thermal energy and change-of-state, e.g., temperature, boiling and melting points, and specific heat.
- 2.2.7. Students can describe, apply, measure and calculate quantities related to electricity and magnetism, e.g., resistance, current, voltage, and electric power.
- 2.2.8. Students can describe and apply concepts related to nuclear energy, such as radioisotopes, radioactive decay, half-life, and nuclear power and its by-products.
- 2.2.9. Students can measure, interpret, and calculate the relationship between quantities.
- 2.2.10. Students can describe and apply the concepts of electromagnetic waves (e.g., light) and mechanical waves (e.g., sound) and their interactions with matter.
- 2.3. Students understand that interactions can produce changes in a system, although the total quantities of matter and energy remain unchanged.
- 2.3.1. Students can identify, describe, and predict the effects of external forces acting on matter.
- 2.3.2. Students can describe and explain physical interactions of matter using conceptual models, including the conservation laws of mass and energy.
- 2.3.3. Students can observe, measure, and calculate quantities to demonstrate the laws of conservation of mass and energy within a closed system.

- 2.3.4. Students can describe, measure, and calculate quantities before and after a chemical or physical change within a system.
- 2.3.5. Students can identify, describe, and apply types of heat transfer: conduction, convection, and radiation.

Standard #3. Life Science. Students know and understand the characteristics and structure of living things, the processes of life, and how living things interact with each other and their environment (focus: biology, anatomy, physiology, botany, zoology, and ecology).

- 3.1. Students know and understand the characteristics of living things, the diversity of life, and how living things interact with each other and with their environment.
- 3.1.1. Students can identify and describe the characteristics that all life forms share and can discuss the importance of these characteristics in defining new life forms (e.g., viruses, halobacteria)
- 3.1.2. Students can understand, construct, and synthesize classification systems based on the structure of organisms.
- 3.1.3. Students can understand and apply the concepts and mechanisms of evolution, including bio-diversity, adaptation, specialization, extirpation, and extinction.
- 3.1.4. Students can analyze the interactions and interdependence of living and nonliving components within an ecosystem, create and interpret food chains and food webs, and explain how adaptations of an organism determine its niche in the environment.
- 3.1.5. Students can analyze the dynamic equilibrium of ecosystems describing how an environment's ability to provide food, water, and space determines the carrying capacity and how perturbations in the environment will affect the ecosystem.
- 3.2. Students know and understand interrelationships of matter and energy in living systems.
- 3.2.1. Students identify everything in the universe as either matter or energy, and that the simplest unit of matter is the atom.
- 3.2.2. Students know that atoms form molecules, molecules form macromolecules, macromolecules can be found in cells, cells form tissues, tissues form organs, and organs form body systems.
- 3.2.3. Students can explain the role of energy in the maintenance, repair, growth, and development of organisms.
- 3.2.4. Students recognize that food is the source of energy and building blocks for essential structures of an organism.
- 3.2.5. Students can describe, compare, and contrast the processes of photosynthesis and respiration.
- 3.2.6. Students can explain the recycling of materials such as water or nitrogen within an ecosystem.
- 3.2.7. Students can describe the role of decomposition and recycling of dead organisms in an ecosystem in terms of matter and energy.
- 3.3. Students know and understand how the human body functions, factors that influence its structures and functions, and how these structures and functions compare with those of other organisms.
- 3.3.1. Students understand that the cell is the fundamental unit of all life and describe cellular organelles and their function.
- 3.3.2. Students can compare and contrast the basic structures and functions of different types of cells within an organism and between varying species.
- 3.3.3. Students can differentiate among the levels of organization within the whole organism.
- 3.3.4. Students can investigate the relationship of structure and function in organisms at both the micro and macro levels of investigation.

- 3.3.5. Students can describe the growth and development of several organisms.
- 3.3.6. Students know the structures and functions of the human body systems, identifying how the components of the systems interact to perform a function.
- 3.3.7. Students acknowledge the interactions and interdependence of the body systems, allowing for a healthy organism.
- 3.3.8. Students can describe and give examples of non-communicable diseases and communicable diseases.
- 3.4. Students know and understand how organisms change over time in terms of biological evolution and genetics.
- 3.4.1. Students can compare and contrast the purpose and process of cell division (mitosis) with the production of sex cells (meiosis).
- 3.4.2. Students can draw the structure of DNA, identify the components of the structure, and understand how the genetic information is stored and duplicated.
- 3.4.3. Students understand the general structure and function of the gene and its role in heredity and protein synthesis.
- 3.4.4. Students understand that most organs in the body are made of proteins.
- 3.4.5. Students understand the nature of a genetic mutation as illustrated by diseases such as Huntington's or albinism, as well as mutations as a result of environmental factors, such as ultraviolet radiation.
- 3.4.6. Students understand the terms dominant and recessive in terms of genetic traits.
- 3.4.7. Students can describe evidence that reveals changes or constancy in groups of organisms over geologic time.

Standard #4. Earth and Space Science. Students know and understand the processes and interactions of Earth's systems and the structure and dynamics of Earth and other objects in space (focus: geology, meteorology, astronomy, and oceanography).

- 4.1. Students know and understand the composition of Earth, its history, and the natural processes that shape it.
- 4.1.1. Students can describe the Earth's shape and size, and draw a simple model of the Earth's interior, revealing the different layers between the core and the surface.
- 4.1.2. Students can describe ways minerals form (e.g., evaporation, heat, and pressure) and give examples of some rock-forming minerals (e.g., quartz, feldspar, and mica).
- 4.1.3. Students can identify a substance as a mineral or non-mineral based on its structure and origin, describe some special properties of minerals, and give examples of common minerals on Earth.
- 4.1.4. Students can identify and describe different types of rocks (igneous rocks, sedimentary rocks, and metamorphic rocks) and describe the general steps in the rock cycle, including shortcuts (e.g., volcanism and uplift).
- 4.1.5. Students can describe ways in which fossils are formed, preserved, and used as evidence that life forms have changed over time, and identify some commonly found fossils (e.g., trilobites, crinoids, ammonoids, and dinosaur tracks).
- 4.1.6. Students can explain the concepts of absolute time (the actual date of an event) and relative time (the occurrence of an event relative to a sequence of events) and apply these to the geologic timetable.
- 4.1.7. Students can identify and apply concepts of natural processes that shape the Earth's surface: weathering, erosion, wind, hydrologic processes (water cycle, ground water), glaciation, plate tectonics, volcanism, earthquakes, and mountain building.
- 4.1.8. Students can explain how geologists and seismologists obtain information and list some topics and materials they study.

- 4.2. Students know and understand the general characteristics of the atmosphere and the fundamental processes of weather.
- 4.2.1. Students can describe the basic composition and temperature structure of the atmosphere and its significance to life (e.g., the importance of the ozone layer and ionosphere).
- 4.2.2. Students can observe, measure, and record changes in local weather conditions: air temperatures, relative humidity, precipitation, wind direction and speed, and air pressure.
- 4.2.3. Students can distinguish between the main types of clouds and describe conditions under which these form.
- 4.2.4. Students can describe the energy balance of Earth and its atmosphere, explain how atmospheric circulation is driven by solar heating, and discuss related environmental problems, such as greenhouse effect and ozone depletion.
- 4.2.5. Students can explain the concepts of climate and weather systems, such as fronts, storms, monsoons, and jet streams, and identify the symbols on weather maps.
- 4.2.6. Students can investigate factors that control climate and climate change, such as topography, solar radiation, and burning of fossil fuels.
- 4.2.7. Students can explain how meteorologists obtain information and list some topics and materials they study.
- 4.3. Students know major sources of water, its uses, importance, and cyclic patterns of movement through the environment.
- 4.3.1. Students can describe the hydrosphere and the movement of water in the water cycle, including oceans, glaciers, groundwater, and the atmosphere.
- 4.3.2. Students can describe regional community water budgets and water systems in terms of sources, storage, treatment, and distribution.
- 4.3.3. Students can describe the occurrence, distribution, and conditions necessary to support aquatic life.
- 4.4. Students know the structure of the solar system, composition and interactions of objects in the universe, and how space is explored.
- 4.4.1. Students can describe the basic components (composition and size relative to the Sun) of the solar system, including planets, comets, asteroids, and meteoroids.
- 4.4.2. Students can identify the composition of the universe (including stars, galaxies, quasars, and black holes) and define and use several units that express distances in space (e.g., light years and astronomical units).
- 4.4.3. Students can explain the aspects of the relative motion and positions of the Sun, Earth, and moon; the Earth's seasons; time measurement and the Earth's rotation; the moon's phases; lunar and solar eclipses; and tides.
- 4.4.4. Students can compare the physical and chemical properties of Earth with those of other planets (e.g., size, temperature, and chemical composition).
- 4.4.5. Students can summarize the accomplishments of lunar and Mars exploration, and identify technology needed for space exploration (e.g., Hubble space telescope, radio telescopes).
- 4.4.6. Students can describe the main aspects of the life cycle of a star and compare the Sun with other stars.
- 4.4.7. Students can describe the functions of an optical telescope and locate and name some famous constellations.
- 4.4.8. Students can describe the function and progress of the international space station.

Standard #5. Students know and understand interrelationships among science, technology, and human activity and how they can affect the world.

- 5.1. Students can give examples to show that scientific knowledge is public, reproducible, and undergoing revision and refinement based on new experiments and data.
- 5.2. Students can describe advantages and disadvantages that might accompany the introduction of a new technology.
- 5.3. Students can give examples of scientific investigations conducted for the purpose of finding a technological solution to a social or individual problem.
- 5.4. Students can consider how renewable and nonrenewable energy sources are affected by new technologies and human activity.
- 5.5. Students can give examples of inventions and the way these innovations have benefited humankind, including name of the inventor and place and year of the invention (e.g., light bulb, Velcro, post-it notes, scientific instruments).
- 5.6. Students can describe how scientists and technicians use science and technology in their profession.

Standard #6. Students understand that science involves a particular way of knowing and understanding common connections among different disciplines.

- 6.1. Students can understand how scientific knowledge is dynamic as demonstrated by stating examples of how the acquisition of new knowledge has modified ideas.
- 6.2. Students can describe contributions to the advancement of science made by people in different cultures and at different times in history.
- 6.3. Students can identify, predict, and control variables and conditions that will affect change within a system in any scientific discipline.
- 6.4. Students can identify and predict cause-effect relationships within a closed system.
- 6.5. Students can identify and illustrate natural cycles, realizing they are critical components of a natural system.
- 6.6. Students can use a model to predict change, and evaluate the effectiveness and scale of the model.

Standard #7. Students know how to appropriately select and safely and effectively use tools (including laboratory materials, equipment, and electronic resources) to conduct scientific investigations.

- 7.1. Students can function safely in a laboratory or field study setting, are aware of the safety of other people, and practice proper personal safety techniques, including wearing appropriate clothing and wearing safety goggles when handling chemicals, hot liquids, or glassware, or when performing any activity that could harm the eyes.
- 7.2. Students can function responsibly in a laboratory or field study setting, respect equipment, supplies, and fellow students, and understand appropriate behavior (e.g., no horseplay or running, and no eating, drinking, or chewing gum) and the repercussions of inappropriate behavior.
- 7.3. Students can identify the location of safety equipment (fire extinguishing supplies, broken glass container, eyewash station) and first aid kit.
- 7.4. Students are respectful of chemicals, careful in the handling of all chemicals including acids and bases, know the location of the material safety data sheets (MSDS), and what type of information is present in these sheets.
- 7.5. Students demonstrate proper care for electrical appliances, do not touch electrical equipment with wet hands or use it near water, check for frayed cord or broken wires,

- make sure cords do not dangle from the table, and disconnect the appliances by pulling the plug, not the cord.
- 7.6. Students are careful with hot liquids, hot objects, and hot plates and use clamps, tongs, or heat-resistant gloves when handling hot objects.
- 7.7. Students are cautious while using sharp objects (e.g., dissection tools) and notify the instructor for proper disposal of broken glass.
- 7.8. Students can properly select and use appropriate equipment to measure characteristics of objects (e.g., length: meter stick, mass: balance, volume: graduated cylinder, temperature: thermometer, time: stopwatch) to be used accurately for varying scientific investigations.
- 7.9. Students can identify and know how to read correctly volumetric devices (e.g., graduated cylinders, burettes) by noting the bottom of the meniscus, how to zero a balance to obtain accurate measurements, how to read both analog and digital meters (e.g., pH meters, stopwatches, thermometer) and how to use microscopes including preparing wet mounts and staining of live microscopic specimens.
- 7.10. Students can properly clean, at the end of each session, the laboratory and the equipment used.
- 7.11. Students can use computers and other electronic resources for activities such as gathering information and constructing graphs.

Social Studies

History (proposed for approval in 2001)

Standard #1. Students are able to understand the chronological organization of history, are able to organize both people and events into major eras, and can explain historical relationships.

- 1.1. Students can link ancient civilizations, their leaders, cultures, technologies, beliefs, and practices to each other as the civilizations rose and fell in competition with each other through the Renaissance.
- 1.2. Students can link the continuum of ideas, leaders, events, technologies, beliefs, and practices to forces that formed and maintained the United States and the world through the Cold War era.
- 1.3. Students can link the development of the complex United States infrastructure and economy to a global society in the present day.

Standard #2. Students are able to use critical processes of historical inquiry.

- 2.1. Students can formulate hypotheses about the ways human societies developed around the world
- 2.2. Students can formulate processes to interpret and evaluate primary and secondary sources of historical information.
- 2.3. Students can formulate predictions about future events based on the analysis of present day issues and events from multiple historical perspectives and current events.

Standard #3. Students are able to understand social diversity and that societies are diverse and have changed over time.

3.1. Students can evaluate the history of social organization through contacts and exchanges, cooperation and conflict, and wars and alliances among various societies.

- 3.2. Students can evaluate tensions and resolutions inherent in the clashes over old and new world views, philosophical paradigms, natural law, and other legal systems.
- 3.3. Students can evaluate the existence of conflict and cooperation, competition for natural and human resources, and struggles for dominance of power and ideas, especially between the primitive and the modern.

Standard #4. Students are able to identify religious and philosophical ideas as powerful forces throughout history.

- 4.1. Students can compare and contrast world views, cosmologies, and philosophies that have competed with each other in human history, especially through artistic expression.
- 4.2. Students can compare and contrast great ideas that influenced the birth of the United States and the ongoing culture wars which result from the pressures of pluralism and modernity.
- 4.3. Students can compare and contrast the developed world with the developing world, indigenous peoples with technologically sophisticated populations, and paradigm shifts which result from the remaking of cultures in competition, war, and peace.

Geography (proposed for approval in 2001)

Standard #1. Students know how to use globes and other tools, construct and use maps to locate and derive information about people, places, and environments.

- 1.1. Students can use maps, globes, and other geographic tools to develop a spatial perspective and report information.
- 1.2. Students can use maps, globes, and other geographic tools to locate people, places, events, and environments in the modern world.
- 1.3. Students can use maps, globes, and other geographic tools to analyze the dynamic spatial organization of the global community.

Standard #2. Students use knowledge of physical and human characteristics of places, along with natural resources, to define and study regions of the world, interpret their patterns of change, and understand changes in meaning, use, and distribution of important resources.

- 2.1. Students can trace the development of how humans migrated, used and changed the characteristics of places, and how human systems were affected by the physical environment.
- 2.2. Students can trace the European and African migrations to the Americas and the spread of European populations, the defeat of indigenous cultures in the Americas, and link history, geography, and the study of public issues.
- 2.3. Students can trace the changes that occur in the meaning, use, location, distribution, and importance of land, water, ownership, colonization, and resource use in the globalization process, as well as the accompanying political and social reactions.

Standard #3. Students are able to employ various systems of geographic categorization.

- 3.1. Students can locate and define by geography ancient civilizations and their modern counterpoints on a map, as well as continents, oceans, and major physical land forms of the ancient world.
- 3.2. Students can locate and define, by geography, regions of the United States and its westward expansion.
- 3.3 Students can locate and define geographical zones on maps by climate, culture, and the politics of modern world powers, as well as their holdings on continents and in oceans, and the topography of major physical landforms of the modern world.

Civics (proposed for approval in 2001)

Standard #1. Students are able to define, compare, and contrast various forms of government and evaluate their efficiency and equity.

- 1.1. Students can define systems: cultural and political understandings of power, authority, influence, and governance.
- 1.2. Students can define turning points of cooperation and conflict, evolution, revolution, universality and diversity, power and plurality.
- 1.3. Students can define limited and unlimited governments and describe what historical influences made a particular balance of rights and responsibilities efficient.

Standard #2. Students are able to extend their knowledge from the United States constitutional government backwards and forwards in history.

- 2.1. Students can incorporate ideas from ancient cultures and forms of governments into modern democracies.
- 2.2. Students can incorporate cause and effect relationships between events in European and American history into the present day United States constitution and government.
- 2.3. Students can incorporate current events and leadership changes at home and abroad into United States foreign policy design, aid, and influence.

Standard #3. Students are able to distinguish characteristics of political cultures of civilizations and nations.

- 3.1. Students can describe and analyze the processes and consequences of various forms of organized social life and political power from agrarian societies forward.
- 3.2. Students can describe and analyze the constitution of the United States, amendments, laws, and benchmark decisions which have helped fulfill the promise of the constitution.
- 3.3. Students can describe and analyze ways in which governments in our global society manage conflicts over diverse viewpoints including taxation, civil rights, duty, and balance of power.

Standard #4. Students are able to recognize fundamental democratic principles and their underlying ideologies inherent in the United States concept of a constitutional democratic republic.

- 4.1. Students can classify and defend the meaning and emergence of individual rights, the common good, self-government, justice, and equality.
- 4.2. Students can classify and defend positions about historical and contemporary efforts to act according to constitutional principles, including resolving conflicts between liberty and equality, individual rights, and the common good, as in civil rights movements.
- 4.3. Students can classify and defend positions on contemporary issues related to the balance between individual rights and the common good, wealth, power, and social stratification.

Standard #5. Students are able to identify the structure and function of local, state, and national governments.

- 5.1. Students can trace the shift from individualism to cooperative organization on local, tribal, state, and national levels.
- 5.2. Students can trace the form and responsibilities of local, tribal, state, and national governments.
- 5.3. Students can trace the government's influences on the formulation and implementation of policy and legislative forum.

Economics (proposed for approval in 2001)

Standard #1. Students are able to link the condition of scarcity to supply and demand in a capitalist economy and decisions about the use of scarce resources to other forms of government.

- 1.1. Students can analyze how and why some human, capital, and natural resources become scarce, valuable, and desired, and how power attaches and shifts according to the condition of scarcity.
- 1.2. Students can analyze functional prerequisites of a society and the resulting economic choices made by individuals and governments.
- 1.3. Students can analyze the relationship between economic goals, the allocation of scarce resources, and the global economy in first, second, and third wave countries.

Standard #2. Students are able to define, compare, and contrast different economic systems, policies, and outcomes.

- 2.1. Students can illustrate the birth and necessity of various economic and monetary systems in human history.
- 2.2. Students can illustrate how different economic systems use different means to produce, distribute, and exchange goods and services, including vertical and horizontal consolidation.
- 2.3. Students can illustrate benefits and costs of the United States economic system and its use as an agent of foreign policy.

Standard #3. Students are able to calculate the results of trade, exchanges, and interdependence at home and abroad in businesses, governments, and societies.

- 3.1. Students can give examples of international, political, cultural, and social differences in concepts of ownership, resources, productivity, and trade.
- 3.2. Students can give examples of factors that lead a nation to a comparative advantage in trade and status.
- 3.3. Students can give examples of conditions, factors, and consequences, of both free trade and restricted trade.

Mathematics

Included are exit-level benchmarks, which each student will have completed by the end of Algebra plus either *Advanced Algebra/Introduction to Geometry* or *Proof Geometry*.

Standard #1. Students will accurately perform arithmetic computations and use basic number theory concepts to solve problems.

- 1.1. Students accurately add, subtract, multiply, and divide whole numbers and compute whole number powers and roots.
- 1.2. Students accurately add, subtract, multiply, and divide integers, and compute integer powers and roots.
- 1.3. In the context of various applications, students demonstrate their understanding of the meaning of fractions; add, subtract, multiply, and divide fractions; and name the numerator, denominator, and reciprocal of a fraction.
- 1.4. Students convert between mixed numbers and improper fractions and add, subtract, multiply, and divide mixed numbers.
- 1.5. Students round decimal numbers to given places; add, subtract, multiply, and divide decimal numbers; and convert among fractions, decimals, and percentages.
- 1.6. Students evaluate numerical expressions involving the four basic computations, powers, roots, and grouping symbols.
- 1.7. Students construct ratios and proportions to model a variety of application problems, including percentages, and solve proportions using several methods.
- 1.8. Students classify numbers into various number sets, and use number lines to represent positive and negative numbers, one-variable inequalities, and absolute values.
- 1.9. Students factor whole numbers including prime factorizations, identify prime and composite numbers, find common multiples and common factors, use scientific notation to represent quantities, and compute using scientific notation.
- 1.10. Students state and apply in problem solving the field and closure axioms (associative, commutative, distributive, closure, inverse, and equality).
- 1.11. Students recognize, extend, and apply arithmetic and geometric sequences.

Standard # 2. Students will use concepts, notations, and operations of set theory to classify numbers and solve problems.

- 2.1. Students describe number sets using standard set notation by enumeration and rule.
- 2.2. Students list the elements and subsets of number sets using standard set notation.
- 2.3. Students identify unions and intersections of sets using standard notation.
- 2.4. Students construct and use Venn diagrams of number sets to solve problems.

Standard #3. Students will graphically represent ordered pairs, lines, inequalities, and functions using the Cartesian coordinate system.

- 3.1. Students graph points using ordered pairs and determine the slope between points as rise over run.
- 3.2. Students construct graphs of lines by determining points, slopes, and x- and y-intercepts of linear equations in various forms.
- 3.3. Students determine equations of linear functions given graphs and equations of parallel or perpendicular lines.

Standard #4. Students will construct, simplify, and perform operations with variable monomial and polynomial expressions.

- 4.1. Students translate between verbal and arithmetic/algebraic expressions and equations.
- 4.2. Students demonstrate understanding of, and use in problem solving, integer and fractional exponents; determine powers and roots of variable expressions; perform operations with radicals; and write expressions in simplest radical form.
- 4.3. Students identify and classify polynomial expressions by degree and number of terms.
- 4.4. Students add, subtract, multiply, divide, and compute powers of polynomial expressions.
- 4.5. Students factor polynomial expressions using a variety of methods, find common factors, and identify prime quadratic expressions.
- 4.6. Students simplify and evaluate rational numerical and algebraic expressions, and add, subtract, multiply, and divide rational numerical and algebraic expressions.

Standard #5. Students will write and solve equations and inequalities.

- 5.1. In the context of application problems, students will write and solve one-variable equations involving variables on both sides, distribution, and combining like terms.
- 5.2. In the context of application problems, students will write and solve linear equations in a variety of forms.
- 5.3. Students will write systems of linear equations to model various applications and solve systems of linear equations using a variety of methods.
- 5.4. Students will solve multi-step absolute value equations.
- 5.5. In the context of application problems including distances, students will write and solve radical equations and identify extraneous solutions.
- 5.6. Students will write quadratic equations to model various applications and solve quadratic equations using a variety of methods.
- 5.7. Students will define and graph solution sets of linear inequalities and systems of linear and absolute value inequalities.
- 5.8. Students will define solutions of quadratic inequalities using a variety of methods.
- 5.9. Students will define actual and extraneous solutions of rational algebraic equations using a variety of methods.

Standard #6. Students will model and solve application problems involving functions.

6.1. Students will model and solve problems involving linear, direct, inverse, and quadratic functions using standard function notation.

Standard #7. Students will understand and use geometric concepts and principles.

- 7.1. Students will define and classify plane geometric figures and their properties.
- 7.2. Students will define and classify solid geometric figures and their properties.
- 7.3. Students will determine linear and angular measurements of geometric figures.
- 7.4. Students will determine missing side and angle measurements of triangles.
- 7.5. Students will perform reflections, translations, rotations, and dilations of geometric figures in the Cartesian coordinate system; identify symmetries; and recognize and generate tesselations of plane figures.
- 7.6. Using a variety of methods, including the Pythagorean relationship and trigonometric ratios, students will compute missing elements of right triangles.
- 7.7. Students will demonstrate their understanding of, and construct proofs of, geometric relationships in two- and three-dimensional coordinate systems.
- 7.8. Students will perform geometric constructions, including congruent angles and segments, angle bisectors, and perpendicular and parallel lines.

Standard #8. Students will use the principles of probability to solve problems.

- 8.1. Students will use the multiplication counting principles and factorials in problem solving.
- 8.2. Students will define, and apply in problem solving, theoretical and experimental probability, including sample spaces.

Standard #9. Students will define, and use in problem solving, the trigonometric relationships.

- 9.1. Students will use radian angle measure to define arcs and rotations.
- 9.2. Students will use trigonometric and circular functions to define angles.
- 9.3. Students will use inverse trigonometric functions to solve geometrical problems.
- 9.4. Students will model and solve various application problems with trigonometric functions.

Foreign Language

Standard #1. Students comprehend the target language from a variety of listening sources.

- 1.1. By the end of French, German, or Spanish II, students will verbally summarize and rephrase in their own words information obtained from authentic sources, such as watching and listening to a current event report and explaining it or comparing and contrasting it with another.
- 1.2. By the end of French, German, or Spanish II, students will identify, respond to, and use the who, what, when, where, and why of a listening selection by interpreting and discussing it in detail, both orally and in writing.

Standard #2. Students communicate by speaking the target language for a variety of purposes and diverse audiences.

- 2.1. By the end of French, German, or Spanish II, students will speak the target language clearly and accurately enough to be understood by a native speaker by speaking with ever decreasing English interference. They will also demonstrate mastery of rules of pronunciation when speaking and reading aloud.
- 2.2. By the end of French, German, or Spanish II, students will participate in more complex verbal exchanges on an advanced level to express and defend opinions, and demonstrate the ability to obtain and convey information, concepts, and procedures.
- 2.3. By the end of French, German, or Spanish II, students will initiate, sustain, and close a variety of everyday conversations in a culturally appropriate manner, such as greeting someone, asking his/her opinion, agreeing or disagreeing, explaining why, and ending the conversation. Students will use appropriate gestures and levels of formality.
- 2.4. By the end of French, German, or Spanish II, students will communicate logically, sequentially, and comprehensively to make predictions, analyze, draw conclusions, express facts and opinions, summarize, and paraphrase (e.g., discuss the importance of education, predict a possible outcome of an election, theorize about the impact of current events on contemporary life, or relate the plot of a movie, novel, fairy tale, or the gist of a news article).

Standard #3. Students comprehend the target language from a variety of reading materials.

- 3.1. By the end of French, German, or Spanish II, students will infer meaning of unfamiliar words and ideas from context, analyze the main point of an authentic reading selection, express and defend opinions of the reading selection, and identify the sequence of events, the speaker, point of view, and time frame.
- 3.2. By the end of French, German, or Spanish II, students will extract and apply information from authentic written sources to accomplish a task, such as following a recipe or gathering data to make a presentation.

Standard #4. Students communicate by writing the target language for a variety of purposes and diverse audiences.

- 4.1. By the end of French, German, or Spanish II, students will write creatively (e.g., publishing a children's book, fairy tale, or play), informatively (e.g., producing a travel brochure), and persuasively (e.g., reacting to a news article).
- 4.2. By the end of French, German, or Spanish II, students will write accurately enough to be understood by native readers about events in the time frames of past, present, and future.
- 4.3. By the end of French, German, or Spanish II, students will plan, draft, revise, proofread, and edit written communications.

Standard #5. Students acquire and use knowledge of cultures in which the target language is spoken.

5.1. By the end of French, German, or Spanish II, students will discuss and analyze in the target language cultural elements of a selected reading or listening sample and will discuss important authors, artists, and musicians found in the reading or listening material.

- 5.2. By the end of French, German, or Spanish II, students will perform in a culturally appropriate manner in complex social situations, such as acting out appropriate behaviors at an informal family outing.
- 5.3. By the end of French, German, or Spanish II, students will discuss and analyze selected reading or listening samples for cultural elements and historical or current events.
- 5.4. Students will observe and participate in the target culture through a variety of activities.

Throughout their studies of the target language, students will share in cultural characteristics and practices of different countries where the target language is spoken. This includes a variety of holidays, foods, customs, religious practices, historical events, music, currencies, and hands-on crafts. These will vary from year-to-year. Overall, students will have participated in a rich variety of cultural activities.

Standards for Learning Across the Curriculum

These standards are the behaviors and expectations shared by all content areas that Summit Middle School intends to develop in students so that they may become life-long learners.

Students Will Learn to Communicate

Scholars respect not only their own knowledge but also the knowledge and perspectives of others. Scholars speak confidently, fluently, and courteously in various situations, and they listen attentively to understand information shared by fellow students, teachers, parents, and community members. Students will learn to express themselves in standard English in their oral and written work across all disciplines.

Students Will Learn to Acquire and Apply Knowledge

Scholars have at their disposal strategies for gathering information from a wide range of sources, from textbooks to electronic media. They then employ various techniques to retain, organize, and evaluate the information, such as memorizing, note taking, summarizing, synthesizing, and outlining. These skills enable them to perceive relationships and apply knowledge among the various subjects.

Students Will Develop Powers of Reasoning

Scholars analyze and solve complex problems using a variety of skills, including visualizing, identifying a sequence of steps, inductive and deductive reasoning. They evaluate the effectiveness of their own learning and problem-solving techniques and apply appropriate strategies in each learning situation. Scholars are independent thinkers who identify and evaluate alternative solutions and points of view and apply their knowledge and skills in novel situations in and out of school.

Students Will Take Responsibility for Learning

Scholars realize that, ultimately, they are responsible for their own learning. This responsibility includes keeping records of obligations, scheduling time, setting priorities, and meeting deadlines. They evaluate their strengths and weaknesses and seek help when needed. Scholars persevere, go beyond the first effort, appreciate knowledge for its own sake, and find their own route to excellence.

5

Course Descriptions, Activities, Scheduling, and Articulation

English Department

Summit offers a literature-based curriculum that introduces students to a variety of high-quality works. Each course focuses on responding to and analyzing written works both orally and in writing, with strong emphasis on the writing of essays and other full-length products. In addition, the English department has developed a scope and sequence for grammar study at each level, with additional topics introduced or re-taught as necessary. It is the intention of the English department to provide students with the powers of analysis to make reading and writing about literature a meaningful experience, as well as to create engaging experiences with literature that will foster life-long reading pleasure. Students are asked to pay \$10 for *Writer's Inc.* if they do not already own a copy.

English Level I

Students will develop skill in decoding literal meaning in a variety of literature texts while beginning to identify stylistic and structural literary elements including plot, theme, and characterization. In writing, students will use the writing process to develop basic skills: creating and organizing solid expository paragraphs and five-paragraph essays based upon a thesis statement. They will concentrate on good paragraph development and the simple essay. Formal grammar instruction includes identifying the eight parts of speech, distinguishing between and using types of nouns, and correctly using end punctuation.

English Level II

At Level II, students will expand their knowledge of literary elements to include point of view and figurative language. Moreover, they will gain greater skill and independence in identifying stylistic and structural elements introduced in Level I. Responses to literature will include analysis as well as literal comprehension. Instruction will also focus on refining the five-paragraph essay and using writing and speaking to persuade and inform an audience. Grammar topics will include types of personal pronouns, recognizing sentence structures, and using quotation marks.

English Level III

Students in Level III will begin to consider universal themes and cultural context in interpreting literature. Close analysis of an author's intent and style will include references to character, conflict, setting, theme, language, and imagery. Students will broaden their writing and speaking repertoires to include a wider range of tasks, purposes, and audiences, such as persuading,

sharing research findings, and entertaining an audience. Writing tasks will involve analysis of poetry and other literature, exposition of author's style, and creative writing. Students will also focus on improving their own writing style and command of formal English language. Grammar instruction will include a review of the eight parts of speech, subject-verb agreement, the correct use of commas, and varying sentence structures.

English Level IV

In Level IV, students will respond to literature on numerous levels, considering both universal themes and the particular cultural and artistic traditions that shape a literary work. In addition to the literary elements introduced in earlier levels, students will respond to and analyze stories, poems, plays, and novels with respect to genre, archetype, diction, and symbolism. In writing, students will continue to expand their experiences with various rhetorical purposes, including exposition of research, comparison/contrast, analysis of literary style, and narration/storytelling. Grammar units will focus on improvement of writing accuracy and style: spelling rules, internal punctuation, and embedding information using phrases and clauses.

Science Department

The following is a description of the course offerings in the science curriculum. Students take science all three years, beginning with *Biological Sciences and the Environment*, then *Physical Sciences and the Earth*, followed by either *Advanced Topics in Science* or *Chemistry/Physics. Biological Sciences and the Environment* and *Physical Sciences and the Earth* meet the middle school science standards. There is a \$20 materials fee.

Biological Sciences and the Environment

This class addresses the structure and function of the cell, heredity and evolution, classification of living things, plants, animals, the human body, the environment, and the water cycle. This class involves exploration of the structure of organisms through dissections. Laboratory experiences emphasize the scientific method. Textbooks: *Life Science* (D.C. Heath), *Earth Science* (D.C. Heath).

Physical Sciences and the Earth

This class consists of an introduction to physics (mechanics, heat, light, and electricity), chemistry (atomic structures, properties of elements and compounds, chemical reactions, molar chemistry), and elements of earth science (earth structure, rock formation, crust transformation, and introduction to the solar system). The scientific method and the analysis of measurements using graphs is used in the laboratory experiments. Textbooks: *Physical Science* (D.C. Heath), *Earth Science* (D.C. Heath).

Advanced Topics in Science

This course provides depth in the areas of life science, physical science, and earth science. Major concepts and themes introduced in the core courses will be reinforced. Topics include history of the earth, weather and climate, mechanics of flight, acid and base reactions, and biotechnology. The expertise of the faculty will be utilized. Research will be emphasized. Textbook: *Science Interactions* (Glencoe/McGraw-Hill).

Chemistry/Physics

This exploratory science course emphasizes observing relationships, identifying variables, and developing explanation through experimentation and analysis. Students relate concepts of chemistry and physics to real world phenomena, as well as understanding their theoretical principles. Algebra is a prerequisite that must be completed before entering this course. Textbooks: *Physics* (D.C. Heath), *Chemistry* (Prentice Hall).

Social Studies Department

The Social Studies curriculum at Summit is comprised of three core courses: *World History*, generally taken in 6th grade; *American History*, generally taken in 7th grade; and *World Geography/International Relations*, generally taken in 8th grade.

Courses are designed to integrate and build on content and skills from one year to the next. The first course in the sequence, *World History*, allows students to explore how the world's major civilizations developed on all continents from pre-history through the Renaissance. By studying a variety of historical societies and governments, students are well prepared in their second year to study the development of their own nation, the United States, and appreciate the unique nature of both our society and government. This second course in the sequence, *American History* picks up where *World History* leaves off, with the European exploration of the Americas. Students follow the development of our nation from the initial contact between Europeans and Native Americans to the present. This course sets the stage for the final course in the sequence, *World Geography/International Relations*. Armed with an understanding of both world and American history, students can now begin to analyze the complex relationships that exist between their own nation and the many other peoples of the world.

World History

The World History course is designed to give students some continuity in both time and space as they begin to explore the many civilizations in history that provided a basis for their own. After a brief overview of pre-historic societies, students concentrate on the Mediterranean and Middle East and follow the development of the region for the first 3,000 years of civilization. They begin with their exploration of the region with Sumer, and the early civilizations of the Fertile Crescent, then follow the rise and fall of Egypt, Greece, Phoenicia, Rome, the Byzantine Empire, and Medieval Europe. In the second semester, students follow the Silk Road to India, China, and the Orient, and study the development of their civilizations over the same time period. Students then return to the Mediterranean and study the empires of West Africa and the development of the European Renaissance. The course ends with the European explorations of the "New World" and the first contacts with people in the Americas. Textbook: Kreiger, Neill, and Reynolds, World History: Perspectives on the Past (McDougal Littell),

American History

American History picks up where World History leaves off, with the arrival of the Spanish in North America. Students follow the early history of our nation as a clash and a melting of ideas and the cultures of people on three continents — America, Europe, and Africa. The remainder of the first semester follows a chronological sequence through the Civil War, emphasizing the Constitution and the Bill of Rights, and how they helped define this young nation. After the Civil War, in the second semester, students shift to a topical study of different issues in American History,

including Civil Rights, war and conflict, economics, and political policies. This allows students to develop an understanding of the historical basis for many of the problems facing the United States today. Textbook: Cayton, Israels Perry, and Winkler, *America: Pathways to the Present* (Prentice Hall).

World Geography/International Relations

This course was taught for the first time during the 1999-2000 school year. We have worked with local high schools to provide a solid foundation in geography and international relations that will not conflict with the required *Geography* course in Boulder Valley high schools. The overriding goal of the course will be to help students understand the complex political, economic, social and environmental problems that face the world's nations today, and to assess the role the United States should play in shaping solutions. Textbook: Sager and Helgren, *World Geography Today* (Holt, Rinehart and Winston).

Mathematics Department

Student ability, background, and motivation are used to place students properly in math courses. However, by the Summit charter, it is a matter of choice for the parent and student to make the final determination of which course is the appropriate starting point. Students are encouraged to take the most difficult course in which they can succeed, but care should be taken to avoid putting students in a situation where they are out of their depths. All students will have a solid understanding of algebra by the end of 8th grade.

Pre-Algebra

Pre-Algebra helps students to build computational skills as they transition into algebra. Topics include number theory; integers; numerical and algebraic expressions; equations in one variable; fraction and decimal computation; perimeter, area and volume; data analysis; and ratio, proportion and percent. Textbook:, Price, Rath, and Leschensky, *Merrill Pre-Algebra* (Charles E. Merrill).

Algebra

This course gives students a thorough foundation in the basic concepts of algebra. The following topics are covered in depth: linear equations and systems, the field axioms, polynomial and radical expressions, factoring, quadratic equations, and exponentiation. It is recommended that this course be followed by *Advanced Algebra and Introduction to Geometry*. Textbook: Foerster, *Algebra I* (Addison-Wesley).

Advanced Algebra and Introduction to Geometry

This is a follow-up course to *Algebra*. It is intended to strengthen and round out students' knowledge of algebra while introducing the basic principles of geometry. Topics include probability, rational and radical equations, inequalities, functions, basic trigonometry, introduction to proofs, coordinate geometry, and geometric transformations. Textbooks: Foerster, *Algebra I* (Addison-Wesley); Jurgensen, Brown, and Jurgensen, *Geometry* (Houghton Mifflin).

Pre-Algebra Honors

Pre-Algebra Honors is designed for the student who likes and excels in math. In order to succeed in this course, students need to have competence in basic computational skills, including fractions and decimals. This fast-paced course covers the regular *Pre-Algebra* topics in more depth, and includes additional topics such as solving inequalities and graphing linear equations and inequalities. Textbook:, Price, Rath, and Leschensky, *Merrill Pre-Algebra* (Charles E. Merrill).

Accelerated Algebra

A fast-paced course that covers all standard "Algebra 1" topics in depth and explores other advanced mathematical concepts. It takes an axiomatic approach to "allowable" operations, and problem solving is presented in both creative and algorithmic ways. Emphasis is on polynomials, quadratic equations, systems of linear equations, and functions. Textbook: Foerster, *Algebra I* (Addison-Wesley).

Proof Geometry

A high level of dedication is required to succeed in this course, as it requires students to learn a new way of thinking based on formal logical deductive reasoning. The goal is to improve students' ability to think and express themselves more clearly and accurately in speech and writing, and to learn the difference between "common sense" and a valid argument. Content of this course includes angles and triangles, perpendicular and parallel lines and planes, polygons and their areas, similarity and congruence, coordinate geometry, constructions, symmetry and transformations, volumes of solids, and an introduction to trigonometry. Textbook: Moise and Downs, *Geometry* (Addison-Wesley).

Algebra II/Trigonometry

This course is offered if there is sufficient demand. *Algebra II/Trigonometry* typically follows *Proof Geometry*. It is a highly-challenging, fast-paced presentation of topics including equations and inequalities; matrices and determinants; rational expressions; irrational and complex numbers; quadratic functions; conic sections; exponential and logarithmic functions; sequences and series; probability and statistics; and trigonometric functions, graphs and identities. Textbook: Foerster, *Algebra and Trigonometry* (Addison-Wesley).

Foreign Language Department

At Summit Middle School we teach three foreign languages: Spanish, French and German. We emphasize all five aspects of foreign language acquisition: listening, speaking, reading, writing, and culture. We use the Communicative Approach to teaching languages, which involves creating as many opportunities for students to speak as possible. We strive to create a comfortable learning environment in which students feel at ease making mistakes and experimenting with the language. Students are expected to buy a workbook.

We have divided two years of high school level language into three years. The course titles are Beginning Language, Language I and Language II. After completing the sequence of foreign language at Summit, students will enter high school in level III of their respective languages, well ahead of their counterparts. Textbooks: Spanish — *Paso a Paso I* and *Paso a Paso II* (Scott

Foresman); French — *Discovering French Bleu* and *Discovering French Blanc* (D. C. Heath); German — *Sowieso I* and *Sowieso II* (Langenscheidt).

Technology Electives

Applied Technology

Students explore the technology that surrounds our daily lives with units on structures, machines, energy, materials, flight, rocketry, communications, electronics, and computer technology. Each unit features an introduction to the history of the technology, a hands-on project, and, a look at career possibilities in that area of technology.

Introduction to Programming

No experience is necessary in this beginner's programming class. Students will learn how computers operate and will explore the components and functions of a modern personal computer. They will then learn the elements of program design and will complete several programs including a simple computer game.

Advanced Programming

This class is for students with some programming experience in any language. Emphasis will be on proper program design, including subroutines, data structures, and program control. Advanced students will be allowed to work on independent projects suitable to their abilities.

Keyboarding

Students will be taught basic keyboarding skills, enabling the student to type by touch, with accuracy and speed.

Social Studies Electives

Introduction to Japan: A Portal to Nihon

Students will learn about Japanese history, pop culture, language, food and customs, current events, film, and literature.

Liberal Arts Electives

Drama

Students will study acting, movement and character development. They will practice these skills in short, dramatic works.

Advanced Reading Techniques

Experienced readers know that reading a novel for pleasure, a textbook for information, and a phone directory for a friend's number involve very different kinds of reading. Sometimes,

however, students do not get the most out of their reading time because they rely on only one or two approaches for all reading situations. Even strong students can become more efficient readers by (1) acquiring new strategies and (2) learning how and when to apply them. *Advanced Reading Techniques* will combine instruction in a variety of reading techniques with study hall time to apply those techniques to reading tasks in all subject areas. Students will be able to use part of their class time as a study hall.

Film as Literature

This class will explore cinematic elements (angles, shots, lighting, sound, and editing techniques), their relationship to literary terms and concepts (character, symbol, metaphor, setting, conflict, and dramatic structure), and their impact on the story as a whole.

Creative Writing

Students will practice writing in a variety of genres and will create a literary magazine.

Art Electives

Most art classes have a \$10 materials fee; however, students are not asked to pay more than one art fee per semester even if they have more than one art class.

Art Forms

This class will include drawing, painting, sculpture, printmaking, and ceramics for the beginning art student or those who just like variety. Examples of assignments: contour drawing on a watercolor wash, linoleum printing, Anasasi pottery, and wire sculpture.

Pottery/Crafts

This is a beginning class in clay construction and various craft media. Coil, slabs, and modeling are the techniques used to create pots, and sculptures. Each student gets to make one pot on the wheel. Crafts may include basket weaving, kite making, hand painted calendars, and origami. All assignments are originals, designed and made by the student; no kits are used.

Sculpture

This course provides an introduction to three-dimensional design and sculpture. Visual examples in slide format of each assignment are provided as stimulation and historical context. We construct three-dimensional objects out of wire and cardboard and create site-specific sculptures out of natural materials.

Splash of Color

This multi-media course allows students to use various color media, particularly in drawing.

Music Electives

Orchestra

Prerequisite: Players must have at least one year of experience in school ensembles and/or private lessons. String players, keyboard players, and wind players come together to perform music in classical, folk, and pop styles. Players may also be prepared to accompany the school musicals.

Select Strings

Prerequisite: Three years of playing and Summit orchestra or audition. Advanced string players, pianists, and wind players will rehears classical repertoire, with some small ensemble work as well. Emphasis is on expressive playing and fine ensemble work. Students taking private lessons will excel in this group.

Jazz Band I

Prerequisite: Completion of *Standard of Excellence Book 1* or equivalent (intermediate musical experience); can be waived by successful audition. Play great music for band. Students complete the *Standard of Excellence Book 2* and continue to build ensemble skills and technique. Students learn basic swing, rock, and Latin styles and begin improvising. Some pop pieces as well as basic jazz literature are prepared. Performances are scheduled throughout the school year, as well as at graduation exercises.

Jazz Band II

Prerequisite: Minimum of two years playing and audition or *Jazz Band I* at Summit (completion of *Standard of Excellence Book 2*). Continued studies in jazz ensemble performance, sight reading, and solo improvisation.

Jazz Band III

Prerequisite: Minimum of three years playing and audition or *Jazz Band II* at Summit. Our "hot" Jazz Band just gets better! Advanced jazz ensemble work continues from the first semester of Jazz Band. Emphasis is on sectional independence, improving improvisational skills, and expanding repertoire. The best players will prepare to perform with the school musicals, as well as at graduation exercises.

Musical Theatre Workshop

Prerequisite: Prior experience in drama or choir or by audition. Learn choruses and solos from Broadway musicals and operas. Students are introduced to a variety of shows in excerpts and attend rehearsals and performances of local productions. Movement, dance, projection of speaking, and singing voice are developed. There are class performances throughout the school year.

Choir

Prerequisite: Love of music. Enjoy singing music from different cultures as well as popular music. Emphasis is in learning to sing in two and three parts and building skills for advanced choral performance. Students gain experience with singing in ensemble, movement, and choreography.

Starlight (Advanced Choir)

Prerequisite: *Choir* and/or audition involving solo performance. Summit's new choral ensemble features singing in three and four parts, advanced music reading, and choreography. Repertoire includes madrigals, a cappella music, and vocal jazz.

Silver Rain

Prerequisite: *Choir* and experience in reading and performing music. Membership is by audition only. Continue developing in the highest level choral ensemble. Activities include advanced reading and singing, show choir choreography, solo opportunities, performances in the community, and a broad variety of music. After-school performances will be held throughout the school year.

Other Electives

Physical Education

This course is designed to teach and encourage basic fitness and specific athletic skills. Student benefit physically and enjoy the experience. It may be taken every day or every other day.

Health

To assist students in making responsible health decisions, this course provides information and opportunities for mature discussion on a wide range of health topics, including nutrition and fitness, stress and emotional health, drugs and the life cycle.

Study Hall

This class offers an opportunity for students to work on their own. This course can be taken daily or every other day.

Activities

Summit students are unusually active in extracurricular activities. Opportunities offered through the school include music, drama, Student Council, Destination Imagination, Math Olympiad, Math Counts, Quiz Bowl, the *National Geographic* Geography Bee, National History Day, and Science Fair.

Summit offers a full complement of sports activities. Interscholastic and intramural sports include soccer, flag football, wrestling, track and field, basketball, volleyball, and weightlifting. Summit's sports teams are competitive with the best teams in the district.

Music students gave several vocal and instrumental performances at school and in the community during the year. *Silver Rain* caroled at the University of Colorado planetarium and the Pearl Street mall in Boulder, and participated in a choral music festival at Fairview High School. *Silver Rain* also performed for a number of elementary schools and for residents at Frasier Meadows retirement community. *Silver Rain* and *Select Strings* performed at the Omni Interlocken Hotel in Broomfield. The *Jazz Band* played in the Jazz Festival at Fairview. Two dress rehearsals and two public performances of *Fiddler on the Roof* were performed by students directed by Bill Burkhart and Lisa Hanckel.

Scheduling

Summit Middle School offers a seven-period day, with the five core courses (taught every day) and two periods of electives (some taught every day, others taught every other day). The two periods of electives often consist of four different selections, one of which is physical education. Schedules are adjusted at the semester break in order to accommodate the changing needs of Summit students and new electives selections.

Because our stated goal is to place each student at the appropriate level, in 2000-2001 we have four levels of English, four levels of science, three levels of each foreign language, and seven levels of mathematics. Placement is not necessarily by grade; most of our classes have students in different grades. In addition, we attempt to give our students their choices from varied electives.

Theoretically, a student's schedule could require five singletons. In order to achieve a schedule this flexible, Summit has used its own algorithm, developed by a mathematician who is the parent of a Summit graduate. As a result, every student is able to take his or her desired core classes. Most students are able to take their requested electives, including those in specialized music classes.

Summit's average core class size is 19.5 students, which takes into account Summit students taking additional core classes as electives. Electives average 24.8 students per class. Overall class size average is 20.7 students per class.

Articulation of Curriculum with High Schools

An important component of Summit's ongoing curriculum development and refinement is the conscientious effort to make Summit course offerings articulate as seamlessly as possible with those of BVSD high schools. Summit's teachers and counselor meet with the staff of individual academic departments at BVSD high schools and participate in BVSD curriculum committees. Summit works with the high schools on articulation and course placement issues so that students graduating from Summit will be well prepared and appropriately placed to succeed in the high school courses of study they choose.

For every core academic area, Summit has developed a curriculum that exceeds BVSD middle-level standards. Summit strives to determine the best combination and interface of its middle school and BVSD high school course offerings to satisfy district and state requirements and to ensure optimal student placement.

The Summit English department well prepares students for pre-IB Language Arts and advanced placement Language Arts courses at area high schools. The choice of literary works, approaches

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to literature study, writing assignments and purposes, and grammar instruction provide the skills and knowledge for high achievement in challenging high school English programs.

Students who enter Summit as 6th graders in Beginning Level and graduate from 8th grade having completed Level II in a foreign language will typically continue on to high school Level III foreign language classes as 9th graders. Summit students gain a strong background in French, German, or Spanish in preparation for continuing foreign language study in high school.

Mathematics teachers at Summit have carefully considered high school sequences of math courses in implementing a more closely aligned series of Summit math courses. All students leaving Summit are expected to have gained at least a solid foundation in algebra. Summit math teachers have developed a detailed flowchart to guide choices for high school math courses, based on courses completed at Summit.

Summit's accelerated science curriculum supports and enhances the knowledge and interests of students and provides excellent preparation for high school science courses. By agreement with district high school science departments, Summit graduates are, on a regular basis, granted exemptions from standard BVSD 9th grade science courses.

The Social Studies teachers at Summit have engaged in a series of discussions with their counterparts at BVSD high schools regarding articulation between programs. An appropriate balance of content and critical thinking skills is inherent in the standards and benchmarks for the Social Studies curriculum at Summit.

Accreditation

Summit is accredited by the North Central Association of Colleges and Schools.

6

Placement and Assessment of Student Progress

English

Assessment in English is ongoing and comprises a variety of student products: papers and essays (one per unit), presentations and speeches, responses to reading, and other written work. Diagnostic pre-tests are used to identify student needs in grammar instruction, and post-tests and other summative assessments are given to determine levels of proficiency at the ends of units of study.

Initial placement is determined by a writing assessment scored on a standard rubric. Once at Summit, students are recommended for advancement based on reading comprehension, success in the current level (70 percent or better), and the writing portfolio. Summit English teachers are in the early stages of tying assessments to specific benchmarks, and recommendations for advancement will be made based on student attainment of the benchmarks for the current level.

Portfolios of eighth grade students' work are also shared with interested high schools to assist in appropriate placement of students when they graduate from Summit.

Foreign Language

Summit offers Beginning Level, Level I, and Level II in all languages. Assessment in French, Spanish, and German is comprised of written work, oral responses and presentations, responses to reading, and responses to listening activities. Initial placement for 6th graders is Beginning Level in most cases. Some students with previous study or who have had exposure to languages may begin in Level I. Consideration for advanced placement is given by teachers on an individual basis.

Math

Student ability and track record should be used to place students properly for best results. Incoming 6th grade students are offered an initial placement test to provide data on their background knowledge and to assist in placement recommendations. It is appropriate for students to learn that they can tackle and overcome a challenge; therefore, students are encouraged to take the most difficult course in which they can succeed.

Assessment in math courses is based mainly on tests and quizzes. Testing is administered at the end of every chapter and cumulative tests are given at the end of each semester. Quizzes are given weekly to assess knowledge of the current material. Summit math teachers have developed and are now using systems for tracking student mastery of benchmarks for each math level.

Recommendations for advancement at Summit and placement in high school will be made using these data.

Science

The two core offerings are *Biological Science* and the Environment and Physical Science and the Earth. It is strongly suggested that incoming 6th graders enroll in *Biological Science* and the Environment. In all classes, students' mastery of material is assessed in a variety of ways. The primary method is evaluating written work; however, oral presentations are also used. Assessment in science classes is based on the following data: homework (one to two homework assignments per week); exams (two per quarter); quizzes (weekly); exploratory work (on average two laboratory experiments or activities per week, usually recorded in a laboratory notebook); assignments in class; research reports (one library research report and one experimental investigation per year). Course work may be individualized if students demonstrate prior mastery of a content area.

Social Studies

Incoming 6th graders are placed in the introductory *World History* course when they arrive at Summit. However, on an individual basis, students and their parents can request that they be placed in a more advanced class if they can demonstrate advanced knowledge of both the content areas and critical thinking skills that are covered in *World History*. New incoming 7th and 8th graders are placed following an interview with the student and parents to determine the most appropriate course for the student.

Once the year has begun, progress is measured through a variety of assessment techniques including papers, essays, objective exams, oral presentations, daily homework assignments, participation in class discussions, and cumulative final exams.

Gifted and Talented

At Summit, gifted and talented programming is built into the curriculum and course offerings at all levels. While gifted and talented students may be identified for district reporting purposes, programming for the needs of the gifted is available to all students who can benefit from it, with individual concerns addressed on an "as needed" basis. Summit offers ability grouping and opportunities for acceleration, a broad range of enrichment activities and programs, and compaction and differentiation of the curriculum for students who desire or need it. Counseling groups and mentoring for social/emotional needs are also available. The following is a description of essential elements of gifted and talented programming that is incorporated into Summit's program.

Acceleration and Ability Grouping

Acceleration and ability grouping have always been fundamental principles guiding Summit's programming and course offerings. For example, Summit offers seven levels of math courses, including honors classes, and four levels of English. Students are placed based on assessments, review of past performance, teacher recommendations, and parent requests. At any time during the year, if a student's placement is not meeting his or her needs, the student's schedule may be changed and the student moved to a more appropriate level. Science and social studies courses

are accelerated at all levels, as three years of traditional middle school curricula are covered in two years, with more advanced courses offered to 8th graders. Students who require additional acceleration may take courses at the high school or college level, either in person, by mail, or through distance learning.

Summit's commitment to accurate placement, flexible scheduling, and mixed age/grade level classes allows gifted students to be grouped according to their abilities and interests, without the stigma of being "pulled out" or labeled "different" by their peers. Also, we believe that incorporating gifted and talented programming throughout the curriculum has the added benefit of improving instruction and learning opportunities for all students in the school.

Enrichment Activities

Summit offers a wide range of curricular and extra-curricular enrichment activities for students. Many of these enrichment activities have an academic emphasis. Students with similar interests and a desire for additional challenges are encouraged to participate in activities such as History Day, Science Fair, Destination Imagination, Quiz Bowl, Math Counts, and Yearbook. Elective classes such as *Creative Writing* and *Advanced Computer Programming* are available to all students.

Compaction and Differentiation

At Summit, compaction and differentiation are featured in the curriculum as a whole, as well as in individual courses. Compaction is part of the overall curriculum in several core subjects and provides for more instruction in fewer years than is typical of middle school. For example, Summit's science classes teach in two years what other schools teach in three, allowing gifted students to choose a very challenging honors *Chemistry/Physics* class in eighth grade. Summit's foreign language curriculum, which is compacted relative to typical middle school programs, offers the equivalent of two years of high school language over the course of three years of middle school.

Within individual courses, compaction and differentiation occur as a natural effect of our standards-based program. Once students, gifted or otherwise, have demonstrated mastery of a benchmark, they are not required to continue practicing that identical skill or to show knowledge of that specific content. Instead, students who demonstrate proficiency are given alternate assignments or proceed to new material. Pre-testing is also used so that gifted students do not have to relearn what they already know.

Colorado Student Assessment Program (CSAP)

In Spring 2000, Summit 7th and 8th graders took the Colorado Student Assessment Program (CSAP) tests. The percentages of students scoring "proficient" or "advanced" were 91 in reading (fifth highest in the state), 84 in writing (sixth highest), 81 in math (third highest), and 97 in science (second highest). Our analysis of the 2000 CSAP scores indicated that our students needed to work on good short answers in writing, and written interpretations of graphs in math. We incorporated these into the curriculum beginning with the 2000-2001 school year. Because Summit's curriculum is tied to Summit, district, and state standards, and since the CSAP is keyed to state standards, Summit makes no special effort to "prepare" students for the CSAP tests. Tables 6.1, 6.2 and 6.3 compare Summit's scores with Boulder Valley's scores for these tests.

Based on its scores on the 1999 CSAP, Summit was invited to apply for a John J. Irwin Colorado Schools of Excellence Award by the Colorado Department of Education. In 2000, Summit was one of 19 schools in Colorado designated as a John J. Irwin School of Excellence.

Table 6.1. 7th Grade Scores on 1999 Colorado Student Assessment Program (CSAP) Tests

	Read	ing	Writing		
	Summit	BVSD	Summit	BVSD	
Number Tested	77	2161	77	2161	
Unsatisfactory	0%	7%	0%	1%	
Partially Proficient	3%	20%	3%	33%	
Proficient	75%	64%	90%	60%	
Advanced	21%	7%	4%	1%	
Proficient or Above	96%	71%	94%	61%	

Percentages based on the number of students enrolled, not the number of students tested

Table 6.2. 7th Grade Scores on 2000 Colorado Student Assessment Program (CSAP) Tests

	Read	ing	Writing		
	Summit	BVSD	Summit	BVSD	
Number Tested	88	2115	88	2115	
Unsatisfactory	0%	7%	0%	1%	
Partially Proficient	8%	18%	15%	36%	
Proficient	77%	65%	82%	57%	
Advanced	14%	7%	2%	1%	
Proficient or Above	91%	73%	84%	59%	

Percentages based on the number of students enrolled, not the number of students tested

Table 6.3. 8th Grade Scores on 2000 Colorado Student Assessment Program (CSAP) Tests

	Mat	h	Scien	ice
	Summit	BVSD	Summit	BVSD
Number Tested	75	2170	75	2169
Unsatisfactory	0%	16%	0%	11%
Partially Proficient	19%	28%	3%	23%
Proficient	43%	33%	55%	54%
Advanced	39%	21%	43%	10%
Proficient or Above	81%	54%	97%	64%

Percentages based on the number of students enrolled, not the number of students tested

Comprehensive Test of Basic Skills (*TerraNova*)

The CTBS (*TerraNova*) was given to all Summit students in April 2000. They performed well, reflective of their academic skills. Anticipated difference scores were positive, indicating value added by the school. In terms of "Total Score," a composite of reading, language, and mathematics, Summit median ("average") students scored 91.1 in 6th grade, 88.8 in 7th grade, and 93.4 in 8th grade, with positive anticipated difference scores of 7.1, 6.5, and 8.6, respectively. No student was excluded because of special education status. Science and Social Studies CTBS subtests were not given by Summit in 2000 in recognition of the time devoted to the Colorado Student Assessment Program (CSAP) tests. The district administered the CTBS only to 6th graders in 2000.

The CTBS provides important information to complement the CSAP: (1) CTBS gives a student's and a class's standing with respect to national norms. (2) Whereas the CSAP tests students in only one subject, different for each grade level, Summit gives the CTBS to all students in reading, language, and mathematics every year. Thus, the CTBS allows Summit to measure student progress from year to year.

Need for Above-Grade-Level Testing

Many Summit students top-out on the regular grade-level *TerraNova*. To assess the relative strengths and weaknesses of these students, and to measure their growth while at Summit, the Summit Board decided to administer one-grade-level higher tests to students beginning in 1999. The *TerraNova* tests are normed for a range of grades. For example, the 8th-grade-level test is normed for students from the sixth month of grade 7 through the second month of grade 9. Our 7th graders, taking the 8th-grade test in April (the eighth month of grade 7), fall within the norming range. Thus, the score reports for our students remain valid and comparable to previous years; the students are not penalized for taking the more advanced tests.

Summit requests pattern or "item response theory" (IRT) scoring rather than traditional (number correct) scoring. IRT scoring adjusts for guessing and also gives individual students a much better idea of their strengths and weaknesses. Class averages, however, are almost identical for IRT and traditional scoring. The district uses traditional scoring; as part of the district-wide 6th-grade testing, our 6th graders were scored using traditional scoring.

Summit's Median 2000 Scores

One indicator of a school's effectiveness is its "anticipated 50th percentile difference score," the difference between the actual and anticipated performance of an average student at the school. A positive difference indicates value added. Summit intends for most of its students to have actual scores higher than anticipated.

Table 6.4. Actual (Act.) and Difference from Anticipated (Dif.) Median National Percentile Scores, 2000 CTBS/*TerraNova*

	6t	h*	7th		8th	
	Act.	Dif.	Act.	Dif.	Act.	Dif.
Reading	89.7	8.7	87.3	7.9	88.8	5.8
Vocabulary	87.6	10.9	87.0	9.4	91.0	11.7
Reading Composite	90.7	9.0	91.6	10.6	92.0	8.4
Language	86.5	4.2	88.7	9.3	93.0	11.4
Language Mechanics	80.9	-0.4	80.8	1.0	87.3	6.4
Language Composite	87.5	3.2	87.8	6.1	96.0	11.3
Mathematics	89.0	6.1	85.3	4.0	92.7	6.2
Math Computation	91.1	18.1	88.5	12.6	88.5	6.3
Math Composite	92.7	12.7	87.3	7.1	92.6	6.3
Total Score	91.1	7.1	88.8	6.5	93.4	8.6
Spelling	77.9	-0.3	66.3	-10.2	88.7	14.2
Number Tested	87**		85**		74	

^{*}Traditional scoring was requested by the district for 6th grade.

^{**}One 6th grade student and three 7th grade students did not complete the Test of Cognitive Skills and are not included in these averages.

Table 6.4 gives the actual ("Act.") national percentile score for a median ("average") Summit student in all areas for all three grades, along with differences ("Dif.") from the anticipated score that is based on the Test of Cognitive Skills. Summit students performed very well, as they have every year since the school opened. Areas of relative deficiency are spelling and language mechanics for 6th and 7th graders.

Longitudinal Comparison

Table 6.5 gives the median *TerraNova* national percentile scores for 2000's 7th and 8th grade classes during their years at Summit. There was significant improvement in Math for 2000's 7th graders and in Language for 2000's 8th graders. Total scores increased from year to year for our current 7th and 8th graders, which satisfies one of Summit's accountability goals. This indicates that, although many students come to Summit with strong academic aptitude, their achievement level actually increases from year to year compared with national norms.

It is our goal that each student achieve at least one year of academic growth in every subject every year he or she is at Summit. We want each student to increase in national percentile score from year to year, especially in areas of deficiency. Summit staff analyzes the data and teachers modify parts of the curriculum as needed to address the deficiencies.

Table 6.5. Comparison of 1998, 1999, and 2000 Median *TerraNova* National Percentile Scores for 2000's 7th and 8th Grade Classes

	2000 7th	Grade	2000	2000 8th Grade		
	1999	2000	1998	1999	2000	
Reading	84.9	87.3	89.8	87.8	88.8	
Vocabulary	88.7	87.0	88.2	86.4	91.0	
Reading Composite	89.4	91.6	92.0	91.2	92.0	
Language	84.5	88.7	88.9	88.0	93.0	
Language Mechanics	86.0	80.8	81.5	80.8	87.3	
Language Composite	88.0	87.8	88.5	87.7	96.0	
Mathematics	79.5	85.3	92.2	90.3	92.7	
Math Computation	84.2	88.5	74.0	91.4	88.5	
Math Composite	81.6	87.3	86.6	92.2	92.6	
Total Score	84.7	88.8	91.6	92.6	93.4	
Science	86.5	*	88.7	89.5	*	
Social Studies	85.8	*	87.0	87.8	*	
Spelling	69.2	66.3	80.2	67.4	88.7	

^{*}Science and Social Studies subtests were not given in 2000.

Table 6.6 gives the national percentile and grade equivalent "Total" scores for Summit's own 10th, 25th, 50th (median), 75th, and 90th percentile students. (See Table 6.7 for 6th grade.) Summit students are narrowly clustered about the median, well above the national average. Even Summit's 10th percentile is above the national average. We note that the national average is generally regarded by testing professionals to be below proficient.

Table 6.6. Spread in National Percentile (NP) and Grade Equivalent (GE) Scores

		90	th	75	th	50	th	25	th	10	th
Grade	No.	NP	GE								
7th	88	99.0	12.9	97.3	12.9	88.6	12.4	77.3	10.9	55.3	8.2
8th	74	99.1	12.9	98.4	12.9	93.4	12.9	87.0	12.8	74.7	11.6

In terms of grade equivalent, a national percentile score of 99.0 in 7th grade, for example, extrapolates to a median score for students in the ninth month of 12th grade. The grade equivalent scale is much coarser than the national percentile scale.

Nationally normed tests, such as the CTBS, are but one measure of student performance and school effectiveness. Results can help in student placement and serve as an early warning of deficiencies.

Comparison with Other Middle Schools

Table 6.7 shows the 2000 6th grade *TerraNova* CTBS scores for all Boulder Valley middle schools. "Total" scores — which are a composite of reading, language, and mathematics — are shown for each school's own 25th, 50th, and 75th percentile students, along with the number of students tested. Actual ("Act."), anticipated ("Ant."), and difference ("Dif.") scores are given for each school's 50th percentile (median).

Table 6.7. Comparison of 6th Grade CTBS for District Middle Schools

School	No.	25th		50th		75th
		Act.	Act.	Ant.	Dif.	Act.
Angevine	252	30.0	49.7	54.2	-4.5	80.8
Base Line	144	59.0	76.8	73.9	2.9	88.4
Broomfield	327	39.4	63.3	66.0	-2.7	83.6
Burbank	111	58.3	81.4	73.3	8.1	93.1
Casey	86	32.0	55.0	58.5	-3.5	84.4
Centennial	222	56.0	81.6	65.0	16.6	93.9
Horizons	33	75.3	88.0	74.6	13.4	94.8
Louisville	173	64.6	83.3	75.7	7.6	90.7
Monarch	235	48.9	70.3	59.4	10.9	87.2
Nederland	52	47.7	59.0	61.4	-2.4	78.5
Platt	202	63.0	78.4	75.9	2.5	92.5
Southern Hills	122	63.0	81.7	78.8	2.9	94.0
Sojourner	15	19.0	41.0	48.0	-7.0	70.3
Summit	88	81.3	91.1	84.0	7.1	95.8
District	2064	49.3	74.5	69.1	5.4	89.5

In comparing anticipated differences, one should note that they are based on national percentile scores. The "Teacher's Guide to *TerraNova*" observes, "[National] percentile ranks are not equalinterval data. Differences between percentile ranks are larger near the ends of the range than they are in the middle. For example, the difference between percentile ranks of 5 and 10 or between 90 and 95 is much greater than the difference between percentile ranks of 50 and 55. Because the intervals between percentiles are unequal, percentiles are not suitable for statistical work such as computing averages."

To compare the value added by different schools, reference must be made to scores reported on an equal-interval scale. Normal Curve Equivalent (NCE) scores are often used for this purpose. NCE score reports are available from the publishers of *TerraNova* but are not requested by the school district. However, formulas or tables may be used to convert national percentiles to normal curve equivalents.

Table 6.8 gives actual and anticipated NCE scores for the middle schools. Note that NCE scores are not percentile scores and are not very useful for gauging the achievement of individual

students. Their utility, for present purposes, is in the difference computation, the last column in the table.

Table 6.8. Normal Curve Equivalents

School	Median NCE Scores				
	Act.	Ant.	Dif.		
Angevine	49.8	52.2	-2.4		
Base Line	65.4	63.5	1.9		
Broomfield	57.2	58.7	-1.5		
Burbank	68.8	63.1	5.7		
Casey	52.6	54.5	-1.9		
Centennial	69.0	58.1	10.8		
Horizons	74.7	63.9	10.8		
Louisville	70.3	64.7	5.7		
Monarch	61.2	55.0	6.2		
Nederland	70.3	60.4	9.9		
Platt	66.6	64.8	1.7		
Sojourner	45.2	48.9	-3.7		
Southern Hills	69.0	66.8	2.2		
Summit	78.4	70.9	7.4		
District	63.9	60.5	3.4		

Compared with Table 6.7, the difference scores in Table 6.8 become smaller for schools near the 50th percentile and larger for schools well above the 50th percentile. For example, Monarch's difference score converts downward from 10.9 to 6.2, whereas Summit's difference score converts upward from 7.1 to 7.4. Similar relationships would be obtained using any equal-interval scale such as "z-scores" or "T-scores." Unlike the national percentile scale differences reported by the district, a difference of 7.4 NCEs represents the same amount of value added at all levels of achievement.

7

Grants and Awards

Grants

Challenge Foundation

A generous 1997 grant from the Challenge Foundation has been used primarily to fund a multiyear, comprehensive curriculum development project. Faculty members have undertaken this exceedingly productive effort under the leadership of Summit's curriculum coordinator, Amanda Avallone. Nationally recognized curriculum development consultant Dr. Finlay McQuade also provided guidance. Faculty members worked during the summers of 1997, 1998, 1999, and 2000, as well as periodically throughout the 1997-98, 1998-99, 1999-2000, and 2000-01 school years, completing the content area standards and benchmarks, aligning the curriculum, identifying gaps and/or redundancies, developing valid and appropriate assessments, and creating and documenting curriculum units.

Toshiba Foundation

Summit received a grant in April 2000 from the Toshiba Foundation for Science and Math Improvement in the amount of \$9,330 for the **S**tudent **H**ands-on **In**terdisciplinary **E**xplorations (SHINE) project. The SHINE project was developed by Dr. Sharon Sikora and the Summit science faculty. It will allow 75 Summit 8th graders to participate in hands-on interdisciplinary explorations in environmental and physical sciences. The students will work with teachers and volunteer scientists to choose a project based on their interests, to design experiments, and to determine which parameters to investigate. Students will determine how to present their results and demonstrate their mastery of the technology.

Mini-Grants

In Fall 2000, French teacher, Lisa Hanckel, was awarded a \$600 Mini-Grant by the Foundation for Boulder Valley Schools to study "Griot Culture in French West Africa." The students learn about Griot culture and hear stories told by a Senegalese Griot who also plays the koro and teaches dances to the students. The students build musical instruments and make up their own stories.

Also in Fall 2000, science teacher Sharon Sikora received a \$600 Mini-Grant from the Foundation for Boulder Valley Schools for a project called "It's Elemental, My Dear Watson." Students explore the periodic table of elements through reactions and research. Elements are investigated by analyzing the atomic structure, physical and chemical properties. They then create a model of an element of their choice and build a classroom periodic table of their own.

Stephanie Donaton, Summit science teacher, was awarded a \$130 grant by the Mikkelson Education Fund of the Denver Foundation to participate in an alpine ecosystems workshop at the

Denver Botanical Gardens during the summer of 2000. She was also awarded a DataStreme Project grant from the American Meteorological Society to attend a DataStreme workshop and to incorporate the methods learned in teaching her classes.

Tools for Learning

Over \$50,000 was raised in Summit's 1999-2000 *Tools for Learning* fund drive for parents and families. Gifts ranged from \$20 to over \$1000. A total of 145 families out of 236, about 60%, contributed. Other families made material contributions of goods and services.

Student Awards

Science

Fifteen Summit students participated in the Boulder Valley Regional Science Fair March 10-11, 2000, with these projects: Kate Beall — *Curds and Whey*; Daniel Beylkin — *How Did the Romans Compute?*; Hildur Boylston – *Beetle Juice*; Corinne D'Ippolito — *The Modern Day Milky Way*; Laura D'Ippolito — *All Out of Breath*; Josh Karpel — *The Day Maker*; Anna Lindemann — *Bubble, Bubble, Toil and Trouble*; James Norton — *Brewster's Angle: Reflection, Refraction and Polarization*, Alana Riksheim — *Can You Stop Chilly Wind-Chill*?; Lauren Von Roenn — *You Won't Believe Your Eyes*; Steve Wilson — *Terminating Turbulence*; Jason Eckstein and Jamie Phillips-Crone — *Stuck on the Surface*; Erik Ogilvie-Wigley and Brendan Horton — *Tree Rings: A Window to the Past*.

Several students received special awards at the District level. Anna Lindemann received the Amgen Biotechnology Outstanding Junior Award; Hildur Boylston received the Geneva Pharmaceutical Life Science Junior Award, 1st place; Laura D'Ippolito received the Geneva Pharmaceutical Life Science Junior Award, 2nd place; Eirik Ogilvie-Wigley and Brendan Horton received Honorable Mentions for the INSTARR Mountain Research Award; Hildur Boylston and James Norton received U.S. Navy awards; and a Fractals, Inc. Mathematics Award was presented to Daniel Beylkin and Josh Karpel.

Of the Summit students who competed at the District level, eight were picked to represent BVSD at the Colorado State Science and Engineering Fair, April 13-15, 2000: Daniel Beylkin, Hildur Boylston, Corinne D'Ippolito, Katherine Hermann (a Southern Hills student who took science at Summit), Josh Karpel, James Norton, Alana Riksheim, and Steve Wilson.

These students did quite well. Hildur Boylston won the Top of Fair Award for the Junior Division, first place in the Zoology category, and received the Discovery Communications Young Scientist Challenge award. James Norton took third place in Physical Science, and Alana Riksheim received Honorable Mention in Physical Science. Corinne D'Ippolito received Honorable Mention in the Earth and Space category and the Amelia Earhart Award from the Zonta Club of Boulder. Steve Wilson won the U.S. Air Force ROTC award. Katherine Hermann won three special awards.

Mathematics

Summit students participated with Southern Hills students in a joint Math Olympiad Team. Daniel Beylkin earned a gold pin for finishing in the top 2% and Dillon Miner earned a silver medal for finishing in the top 10% of the 8,255 students participating in their 6th-grade division. Kent Gonzales earned a silver medal for placing in the top 10% of 6,532 7th-grade participants.

Fifty-four Summit students took the American Mathematics Competition Test in November 2000. Ryan Hamerly was the top scorer for Summit with a score of 20. Hannah Alpert, Elliot Paquette and Aban Siraj won 2nd place awards, each with a score of 19. Hannah also won a Certificate of Merit for being a 6th grader with a score over 15. Henry Liu and Eric Pahlke won 3rd place awards, each with a score of 18.

Social Studies

Summit's History Day was held December 7-8, 2000. These students will represent Summit at District History Day on April 4, 2001. Solo exhibit winners are Caitlin Smith — Charles Hamilton Houston: the Man Who Killed Jim Crow, Daniel Beylkin — Radar: An Invention That Changed the World; Alexander Woods — The Hubble Space Telescope; Colin Peterson — The Heliocentric Theory; and Andrew Jarmon — The Atomic Bomb. Group exhibit winners are Emma Benjamin and Laura Tippit — Clara Barton; Ali Fuhrman and Erica Smith — Defeat and Glory: The Story of Women's Struggle to find a Place in the Olympics; and Dana Oppenheimer and Sarah Baxt — Jewish-American Politics. The solo documentary winner is Josh Karpel — Toy Story: A Revolution of Computer Animation. The group documentary winners are Jasper Lipton and Drew Mohr — Comedy Through the Ages; Ali Reid and Lisa Brownstone — Jazz Changes Society Forever. Winners for papers are Terence Cudney — Seeing the World Through Identification's Eyes; Carrie Davis — I Am A Jelly Donut: The History of the Berlin Wall; Evan Eastburn — The Automobile; Anna Heiderer — Sputnik; and Justin Bridwell — The Graphic Calculator.

Summit students participated in the National Geographic Geography Bee on January 24, 2001. The school winner was Devin Bartley and he has also taken the written qualifying test for the state level Geography Bee. Summit's runner-up was Kathy Baker.

Spelling Bee

Aviva Johnson placed first in Summit's spelling bee and represented Summit at the regional spelling bee in April 2000. Chris Dole placed second, and Adam Petherbridge placed third.

Spanish

A number of Summit students placed in the National Spanish Examination. James Norton, Ben Gardner, Ashley Witt and Aviva Johnson placed in the top three places for the National Spanish Exam at the state level. Adam Petherbridge placed first in Colorado on the Level 4 test, taken at Fairview. ¡Muy bien!

French

Four Summit students were named national winners in the National French Contest. Summit students Linden Majack, Alana Riksheim, and Jessi Boulet were ranked in the top 10 in Level 1A. Summit student Galen Bascom was ranked 10th in Level 2 nationally. Regionally, Summit students took 9 of the top 10 rankings in Level 01A, 5 of the top 10 in Level 1A, and 3 of the top 10 (with only 6 students testing) in Level 2. All Summit students who took the exam ranked among the top 34 in their levels. This is the fourth year Summit students have done well, competing against mostly high school students.

Music and Dance

Joy Fest, an accomplished pianist, advanced to state competition in the 2000 Colorado Federated Music Festival as a 6th grader.

Anna Lindemann and Hildur Boylston danced in the Boulder Philharmonic production of Sleeping Beauty in 2000. Hildur also danced in productions of The Nutcracker in Boulder and Denver during the 2000 holiday season.

Art

The Boulder Valley School District Art Show, which opened May 14, 2000, displayed art work by six Summit students: Vivian Lu, Kellan Toohey, Patty Adamson, Lila Morency, and Vani Vivekanandan.

Three Summit students, Linden Majack, Greer Hansen, and Hildur Boylston, had art work published in the 2000 edition of the Boulder Valley School District's literary magazine, *Roundup*.

Teacher Awards

The Summit Board of Directors presented its fourth annual Outstanding Teacher Award to English teacher Amanda Avallone during graduation on June 9, 2000. The award consists of a plaque and \$750. A companion plaque is displayed in the Summit administrative office. The award was established by the Board to recognize a teacher who exemplifies qualities valued at Summit: love of learning, hard work, knowledge of subject matter, exceptional teaching skill, dedication to students, and inspiration for students. The Board considers quality of teaching in relation to number of years of teaching experience.

8

Governance and Accountability

Summit is a school that is accountable and responsive to students and parents. A seven-member Board of Directors, elected by the parents and teachers, constitutes the official governing body of Summit Middle School. Day-to-day administration of the school is carried out by the principal, the assistant principal, the office staff, and the guidance counselor. The Board makes policy, controls the budget, consults with the principal, conducts evaluation of the principal, participates in teacher evaluation, makes and implements hiring decisions, decides enrollment questions, provides expertise, volunteers for special projects, remains available as a resource, and serves as a review panel for any protests of administrative decisions.

The Board of Directors remains committed to the fundamental tenet of the original organizers that our primary responsibility is to the parents and students in our school. These are the customers of Summit, and thus the ultimate governing body of Summit. The Board holds regular public meetings at the school every two weeks. The first agenda item for each meeting is parent concerns not covered elsewhere on the agenda.

The Board continues to effect policies and procedures that are based on this principle. For example, at Summit courses are "self-selected." That is, the professional staff offers guidance to parents and students, but the ultimate course selection is the decision of the students and parents to the extent possible, subject to scheduling constraints. We do not restrict classes to any specific age grouping within the 6th, 7th, and 8th grade levels at Summit. To ensure open communication with parents and feedback from our community, we publish a biweekly newsletter, *Summit News*, and conduct regular, thorough surveys of parents, students, staff, and alumni to evaluate our performance. Some results of our recent surveys are included in this report.

We believe that the above policies, among others, have led to the high level of community support for, and parental involvement in, our school. Positive feedback abounds. Our fund raising goals were significantly exceeded this year. An overwhelming majority of Summit families voluntarily contributed to our fundraising campaign. Our parent volunteer program is extremely active in virtually all aspects of the school.

Committees

The need for committee work has been considerably reduced since the first year of operation. Standing committees remain in place to meet needs as necessary. The most active committees are the Accountability, Assessment, and Accreditation Committee (AAA); the Parent Volunteer Connection (PVC); and the Fundraising Committee. Other standing committees are Hiring, Budget, Hospitality, Staff Appreciation, Science Fair, National History Day, Newsletter, and Teacher and Staff Support. Ad hoc committees are appointed as necessary to perform specific tasks, and these remain a valuable part of Summit's operations.

Summit Board of Directors, 2000-2001

- Terms expire May 31, 2001: Martha Gorman, Barbry Hogue, Scott Smith
- Terms expire May 31, 2002: Jim Cederberg, Chris Howard, Hunter McDaniel, Betsy Phelan
- Ex-Officio: Bernita Grove, Principal

Accountability, Assessment, and Accreditation Committee

The purpose of the Accountability, Assessment, and Accreditation (AAA) Committee is to provide analysis and application of internal and external accountability measures, regular assessments based on internally created and district-provided surveys and measurements, and to facilitate the individualized accreditation process put in place for Boulder Valley schools by Colorado State statute. This committee performs the functions of the School Improvement Team (SIT) as required by the Colorado Department of Education.

The AAA Committee is composed of members representing the Summit Board of Directors, parents, faculty and staff, and the community at large. For the 2000-2001 school year, the AAA members are: Kathy Reims, Chair, Summit parent and strategic planning coordinator; Bernie Grove, Principal; Amy Anderson, Community Representative; Barbry Hogue, Summit Board of Directors representative; Chris Howard, Summit Board of Directors representative; Audrey Block, Summit parent; MaryAnn Dangelo, Summit parent; Cathy Woods, Summit parent; Julie Dotson, Summit parent and Summit representative to the District Accountability Advisory Committee (DAAC); and Debbie Feyh, Summit parent. Kendra Bartley, school counselor and Amanda Avallone, Curriculum Coordinator, served as advisory members.

Progress on AAA Goals for 1999-2000

Goal 1. Summit Middle School will establish standards for all content areas (created 1997-98).

Content standards for all areas have been written. The content standards have been organized into benchmarks and used daily in assessing subject mastery and teaching effectiveness. Strategies to track benchmark mastery have been developed.

Goal 2. Summit teachers will teach study and research strategies for gathering data and organizing and communicating information (created 1997-98).

In 2000-2001, Summit continued to build on the significant progress made in 1999-2000 toward meeting this goal. The faculty, under the guidance of the principal and curriculum coordinator, met in January 2000 to review the cross-curricular skills expected of students and the timeline for instruction. This goal will continue to be monitored with the aim of continuous improvement.

Goal 3. Continue to research alternatives for, and find examples of, assessment tools designed for high-achieving students (created 1997-98).

No new assessment tools were considered. Summit continues to give the CTBS/TerraNova one grade higher than students' actual grade to enhance assessment of stronger performing students. The committee will continue to monitor assessment, integrating the information gained from the CSAP and internal benchmarks. New norm-referenced assessments will be considered, as they become available.

Goal 4. Relative weaknesses in academic areas, as indicated by CSAP and/or *TerraNova* results, will subsequently be addressed in curriculum and instruction (created 1998-99).

No relative curricular weaknesses were indicated by careful unit analysis of CSAP and *TerraNova* scores. This area will continue to be monitored to assure that prompt curriculum changes can be implemented should the need arise.

Goal 5. Students in the 7th and 8th grades will demonstrate at least one year's academic growth over the previous academic year as measured by an increase in the class median national percentile total score on the *TerraNova* standardized test from 6th to 7th grade and from 7th to 8th grade, respectively (created 1998-99).

This goal was satisfied again in 1999-2000, as documented in Table 6.5.

Goal 6. Summit's internally administered assessments will demonstrate that students master at least 80% of core area benchmarks (created 1998-99).

During the 1998-1999 academic year, all core area teachers received instruction in creating assessments that measure student progress toward benchmarks. Throughout the year, teachers crafted unit plans that tied culminating activities — such as projects, tests, and essays — to specific and clearly identified benchmarks. All departments are now tying assessments to specific benchmarks. Teachers can identify the benchmarks addressed on a given assessment. Each department has developed a consistent system for tracking students who do or do not meet the goal.

Goal 7. Summit students will have an average daily attendance of at least 96% (created 1999-2000).

Student attendance from August 2000 to February 2001 was 95.36%. Though this attendance percentage falls just short of the target of 96% attendance, mitigating factors such as a bad flu season or a small number of students being absent for an extended period of time can greatly influence average attendance figures.

AAA Goals for 2000-2001

- Goal 1. Summit Middle School will establish standards for all content areas (created 1997-98).
- Goal 2. Summit teachers will teach study-and-research strategies for gathering data and organizing and communicating information (created 1997-98).
- Goal 3. Continue to research alternatives for, and find examples of, assessments tools designed for high-achieving students (created 1997-98).
- Goal 4. Relative weaknesses in academic areas, as indicated by CSAP and/or TerraNova results, will subsequently be addressed in curriculum and instruction (created 1998-99). Summit will also strive to develop a pilot evaluation of internal benchmark tracking to determine if this measure can use as another tool to evaluate effective curriculum.
- Goal 5. Students in the 7th and 8th grades will demonstrate at least one year's academic growth over the previous academic year as measured by an increase in the class median national

percentile total score on the TerraNova standardized test from 6th to 7th grade and from 7th to 8th grade, respectively (created 1998-99).

Goal 6. Summit's internally administered assessments will demonstrate that students master at least 80% of core area benchmarks (created 1998-99).

Goal 7. Summit students will have an average daily attendance of at least 96% (created 1999-2000).

Participation in Research Study

Summit participated in a study entitled "A Practical Guide to Assessment and Accountability in Schools" commissioned by the Hubert H. Humphrey Institute of Public Affairs at the University of Minnesota. The report shows how families and schools can have a more accurate picture of student achievement.

Associations

Summit is a member of the Colorado League of Charter Schools (CLCS), a Colorado nonprofit organization serving and supporting its 79 charter school members. It serves three primary functions: (1) as a clearinghouse for information and resources from which charter school groups can draw, (2) as a technical support group, and (3) as an advocate for the charter school movement. A member of Summit's Board of Directors, Chris Howard, is serving a two-year term on the CLCS Board of Directors.

9

Community Support

Summit was conceived by a group of parents in January 1995. The number of parent volunteers working to make Summit a reality grew steadily throughout the process of applying to the district, the appeal to the State Board of Education, and the contract negotiations. Thereafter, the number of volunteers continued to grow with each successive public meeting. We continued our organizational structure, relying on committees to gather information, explore options, and bring recommendations for discussion and voting by the full organizing committee, and later, the Board of Directors.

Volunteers worked long hours prior to the opening of Summit at the Southern Hills site, to solicit, move, and arrange donated furniture to furnish the faculty work area/lounge, science lab, office and classrooms. Other volunteers worked to prepare the soil and lay sod around Summit's newly acquired modular units.

With Summit's move during summer 2000 from modular classrooms at the Southern Hills site to the building that previously housed Majestic Heights Elementary School in South Boulder, there again was tremendous support and donation of countless hours of elbow grease and moving expertise from Summit's dedicated parent volunteers. Parent volunteers coordinated the move and the sequence of facilities upgrades necessary to make the new site reasonably suitable for a middle school program. With some moving assistance from the BVSD, over the course of the summer parents packed, moved, cleaned, unpacked, painted, built, repaired, organized and reorganized an entire school's worth of materials so that Summit students and staff would have a refurbished building ready for them when the academic year started on August 24, 2000.

The Parent Volunteer Connection (PVC) was established in Summit's first year by a group of parents who had not been active with Summit before the opening of school. The PVC continues to be invaluable in organizing volunteers during each year of operation. The PVC Committee coordinates recruitment of volunteers to assist with a wide range of projects. Some volunteer organization is based on subject area to address special teacher requests and events. (One PVC goal is to have an organizer for each subject area to recruit volunteers to help with special teacher requests and events.) In addition, PVC volunteers are scheduled on a regular basis for lunch supervision, office help, and support in the teacher work area and office for tasks such as telephoning, copying, preparation of classroom books and other materials, and stamping of new literature paperbacks.

Strong parental endorsement of Summit's program and mission is reflected in the large percentage of parents who volunteer. Consistently, over 50% of the families of Summit students contribute time and energy in some volunteer capacity to support the school.

Student, Parent, Faculty, Staff, and Alumni Surveys

During the months of January and February 2001, satisfaction surveys were distributed to the major Summit constituencies: students, faculty, administrative staff, parents, and recent alumni. We highly value feedback from all members of the Summit community in continuing to create, within the guidelines of our mission and goals, the best school possible for Summit's stakeholders.

Student Survey

Most students (211) fully completed the surveys and many had comments. Questions regarding overall experience, extracurricular activities, discipline, feeling safe, core subjects and electives provide direct feedback to the Board and staff. The responses in all areas were positive overall. Teacher transition in English, German and Special Education had a negative impact, as did relatively larger class size in several classes. Trends are evaluated, and improvement plans are initiated based on this important feedback.

Quotes from Students

- The teachers are so enthusiastic! I love it.
- Summit is challenging and the staff is great!
- For the most part I enjoy school because I want to test my knowledge and see what I can do.
- I enjoy school because I look forward to learning something interesting every day
- It is fun and each teacher presents the information in a different way so each class is different.
- School is awesome but starts way too early.
- It is a fun, safe place where I learn.
- I love school, both socially and academically.

Regarding favorite elective classes:

- *Silver Rain* is a wonderful and enjoyable experience.
- Drama has helped me be more confident.
- I like art and P.E. because I love to draw and I'm athletic.
- I loved philosophy because I love debating and learning about different ideas.
- The teacher was wonderful. I also really liked film.
- I enjoy all of them because I get to pick them, so they fit me.
- Dr. Burkhart is awesome for *Silver Rain*. The class is really fun, and we have opportunities to share our music with the community.
- The Japan class is fun, exciting, and educational. P.E. is fun and exciting.

Parent Survey

A total of 92 completed parent satisfaction surveys were received. Input was solicited regarding overall satisfaction with Summit; the pace and level of difficulty of courses; the satisfaction with critical thinking skills, content, instructional materials, instructional approaches, and course expectations in each core subject; amount of homework; communication about student progress; and accessibility of the faculty, administrative staff and Board of Directors.

Most parent respondents addressed every question on the survey and made comments throughout. Fully 97% of responding parents expressed overall satisfaction with the educational

experience at Summit. Regarding homework, 72% of parents indicated that the amount was "about right" and 22% indicated there was too much homework. To better understand this area, parents were also asked to list the amount of time their child does homework per week. The average for those answering "about right" was 8.2 hours per week whereas the average for those answering "too much" was 15 hours per week. We suspect some of this difference is due to study hall electives that some students take. We will continue to evaluate this area.

There were again high levels of satisfaction with the relationships with the administration, faculty, and Summit Board. The level of satisfaction with individual core classes was very high with many positive comments about individual classroom experiences and teachers.

Quotes from Parents

- Summit is a wonderful, rewarding middle school experience for my child and we feel fortunate that she was selected to attend.
- We are *so* pleased with our daughter's experience at Summit. She is challenged and adjusting to middle school. She feels like she belongs and has a commitment to the Summit community.
- We have been very happy with Summit and recommend it to our friends.
- We will always be grateful for what Summit has done for both of our daughters. Keep up the good work!
- I would like to commend and support the creative ways the teachers and staff make the school work. I'm sure it isn't always simple and I thank you for your efforts.
- Summit is great. BVSD should recognize the fact that high schools are eager to recruit Summit students.
- Summit is a haven for children who want to learn. The staff and faculty are incredibly dedicated, committed, and supportive.
- The enthusiasm of teachers is fantastic and contagious.
- The teachers are exceptional both in character and in the expertise they hold in their respective subjects. This school is a jewel in the community and has been a gift to our daughter.
- We are thrilled to be a part of this excellent school.
- We continue to be most grateful and impressed by the high level of expectations, teacher competency, and teacher, parent, staff and alumni-parent dedication and commitment at Summit.
- Our children are encouraged to be the best they can be.
- We continue to feel incredibly fortunate that our children have the opportunity to go to Summit. Thank you!
- My daughter is enjoying learning again. Her teachers are excellent and make her excited about school on a daily basis.
- I feel confident my child is receiving a rigorous education, unique in its individualization and academic coordination.
- The new campus, though not ideal, is an enormous improvement.
- You have stellar teachers, staff, and fabulous attitudes towards children and their individual needs.
- It has been a good year. My son is happy, and he is excited about his grades knowing he really earned them.
- Our experience with Summit has been outstanding. I am a teacher at another BVSD school
 and am disappointed that the school district still treats Summit with such disrespect when
 they could be embracing the great things you do implementing the successful programs that
 you offer.

 What an incredible learning opportunity for children in BVSD. We feel so fortunate to have had this unique experience to fully prepare our child for high school with the most accelerated classes he was capable of handling.

Faculty and Staff Survey

Eighteen teachers responded to the staff survey in February 2001, and all respondents answered fully, including comments.

Teachers' responses and comments indicate greatest satisfaction with the attitudes and achievements of students, the support and inspiration of their colleagues, and opportunities to develop professionally through mentoring, developing curriculum, and writing grants. Comments and scores also indicate an even more positive relationship with parents, with 80% responding that parent volunteers had been helpful to them in the previous year. All in all, teachers believe that Summit is fulfilling its mission and challenging students, especially those willing to work hard, whatever their abilities.

Workload and the demands of the job continue to be a concern for teachers. The average number of hours spent on lesson planning, grading, committees, extra-curricular activities, and meeting with students and parents has decreased, due in part to several part-time teachers who have opted for a reduced assignment compared to previous years. Teachers look forward to a time when scheduling may allow for either a reduced class load or a daily schedule that decreases the number of daily lesson preparations and/or students each teacher sees on a given day.

Teacher suggestions include experimenting with scheduling to accommodate identified student needs, better balancing classes and allocating resources by increasing student enrollment, and allowing for more departmental time for curriculum work and integration across disciplines.

Quotes from Faculty and Staff

- Positive relationships foster true intellectual growth in so many families. I treasure being part
 of that.
- I appreciate bright, lively students, challenging curriculum, and the constant possibility and encouragement to learn more and improve as a teacher.
- It's great helping motivated students to achieve at a high level, regardless of ability.
- I enjoy helping students achieve personal success and the positive interaction among teachers by sharing ideas and expertise.
- The curriculum work I did over the summer has made me feel more confident than ever as a teacher.
- The kids are outstanding and there is a sense of community.
- I appreciate both the opportunity to teach an exciting curriculum to motivated students and working with talented and energetic professionals.
- I enjoy working and creating curriculum with colleagues, tracking success of activities and working with students.
- I finish every class smiling and proud to teach.
- The best parts of my job are working with an amazing staff and wonderful students who love to learn, having freedom to try innovative activities and projects in class, consistency in my department, getting to know the kids and watching them learn and grow.

Alumni Survey

In January 2001, an alumni survey was mailed to current 9th graders who graduated from Summit in June of 2000. The alumni survey is done annually, as are the satisfaction surveys, with the purpose of gathering more information relevant to setting goals and improving the school. A total of 21 surveys have been received thus far of the 73 sent out.

The students were asked to name the last course taken at Summit in all of the core academic areas and to identify their current courses in high school in those same academic areas. They were asked to rate the level of difficulty of these high school courses, choosing "too difficult," "about right," or "too easy." Complete survey results are not yet available because surveys continue to arrive. Based on those received so far, most respondents said they were well prepared for high school, with several noting that the transition would be easier if Summit were larger. The final question on the survey was "What might Summit have done to make the transition to high school easier for you?" The vast majority of students replied that Summit did an excellent job in preparing them for high school. The feedback garnered from the alumni surveys is used by Summit administrators and faculty to inform appropriate placement recommendations for high school courses.

District Snapshot Survey

Below is a summary of the survey of Summit parents and staff conducted by the district in February 2000, during Summit's fourth year of operation. We consolidated the responses using the following scale: Strongly Agree = 4, Agree = 3, Disagree = 2, Strongly Disagree = 1, Don't Know/No Opinion = 0. Unlike district compilations, which typically consolidate "Strongly Agree" and "Agree" as both indicating satisfaction, this scale differentiates the two.

The weighted averages are shown for parents/staff. Questions for staff paralleled those for parents; the parents' version is given. Also given, for comparison, are the survey results from February 1997, February 1998, and February 1999.

Over the past four years, Summit has reached a very high level of parent and staff satisfaction. Improvement may be possible in the areas of discipline and decision making (questions 5 and 8). Among the middle schools in the district, Summit is by far the highest rated based on parent responses. A recent analysis of the district's "Snapshot" survey for 1998 and 1999, which also weighted parents' responses, noted, "At the middle level, Summit, a charter school, had the highest parent satisfaction ratings by a wide margin" [K. R. Howe and M. A. Eisenhart, *A Study of Boulder Valley School District's Open Enrollment System*, October 2000, p. 116].

Table 9.1. Weighted Average Results of Parents/Staff in District Snapshot Survey					
	1997	1998	1999	2000	
Student Learning					
 I am satisfied with the academic achievement of my student 	3.4/3.6	3.6/3.6	3.8/3.9	3.8/3.9	
2. My school sets high and realistic expectations for my student	3.6/3.6	3.7/3.7	3.8/3.9	3.9/3.9	
3. The curriculum at my student's school provides a solid foundation for my student's future	3.7/3.6	3.8/3.9	3.9/3.9	3.9/3.9	
Category Average	3.6/3.6	3.7/3.7	3.8/3.9	3.9/3.9	

Table 9.1 (continued). Weighted Average Results of P	arents/Sta	ff in Distric	t Snapsho	Survey
	1997	1998	1999	2000
Learning Environment				
4. I believe my student's school allocates its	3.6/3.3	3.7/3.4	3.9/3.9	3.9/3.9
resources to support student learning	0.0./0.4	07/00	07/04	0.0./0.0
5. There is a clear and positive approach to	3.3/2.4	3.7/2.9	3.7/3.4	3.8/3.6
discipline in my student's school 6. My student has a positive attitude about his /her	3.5/3.4	3.7/3.3	3.9/3.7	3.9/3.8
6. My student has a positive attitude about his/her school	3.3/ 3.4	3.17 3.3	3.9/ 3.7	3.9/ 3.6
7. My student's school provides a safe environment	3.5/3.2	3.7/3.5	3.8/3.9	3.9/4.0
for learning	0.07 0.2	0.17 0.0	0.07 0.0	0.07 1.0
Category Average	3.5/3.1	3.7/3.3	3.8/3.7	3.9/3.8
Shared Decision Making and Collaboration				
8. At my student's school, staff and administrators	3.3/2.3	3.6/3.1	3.8/3.8	
work collaboratively				
9. There is a fair and representative shared	3.3/2.2	3.5/2.8	3.8/3.4	
decision-making process at my student's school	0.0 /0.4	0 % /0 0	0 7 /0 4	
10. At my student's school, the shared decision-	3.3/2.1	3.5/2.8	3.7/3.4	
making process works effectively	3.3/2.2	2 5/9 0	9 0/9 5	
Category Average	3.3/2.2	3.5/2.9	3.8/3.5	
Decision Making				
8. I know how decisions are made at our school				3.6/3.7
9. I know how to become involved in school				3.7/3.7
decision-making, if I choose				
10. The school decision-making process is fair,				3.7/3.6
consistent, and in the best interest of students				
Category Average				3.7/3.7
Communication				
11. My student's teachers keep me informed about	3.1/3.3	3.4/3.6	3.6/3.9	3.7/3.9
my student's progress	0.17 0.0	0.17 0.0	0.07 0.0	0.17 0.0
12. School staff members keep me informed about	3.2/2.7	3.5/3.1	3.6/3.6	3.7/3.7
what is going on at the school				
13. I receive timely responses to questions and	3.4/2.8	3.6/3.1	3.7/3.8	3.8/3.9
requests for information from my student's				
school				
Category Average	3.2/3.0	3.5/3.3	3.6/3.7	3.7/3.8
Effective Management / and ambig by the Driveine				
Effective Management/Leadership by the Principal 14. The principal demonstrates personal and	3.5/3.4	3.6/3.5	3.8/3.8	3.9/3.9
professional commitment to school	3.3/ 3.4	3.07 3.3	3.0/ 3.0	3.9/ 3.9
improvement				
15. The principal uses effective problem solving and	3.1/2.4	3.6/3.5	3.8/3.7	3.8/3.9
decision-making skills	0.17 2.1	0.07 0.0	0.07 0.1	0.07 0.0
16. The principal of my student's school is an	3.1/2.3	3.6/3.4	3.7/3.8	3.8/3.9
effective leader				
Category Average	3.2/2.7	3.6/3.4	3.8/3.8	3.8/3.9
Grand Average	3.4/2.9	3.6/3.3	3.8/3.7	3.8/3.8
Grand Average	U. 7/ A. U	J.U/ J.J	J.J/ J. /	J.U/ J.U

10

Policies

Summit has developed the policies necessary for the operation of the school. Summit continues to refine and clarify policies, and to issue additional policies as necessary. This year has focused on consistent implementation of existing policies as well as formulating or revising policies for inclusion in the Summit Charter Renewal Application.

Replacement Policies

Summit has in place the following policies and procedures, which replace specified district policies and procedures.

Section A: Foundations and Basic Commitments

AFC-1 Evaluation of Professional Staff, Teachers

AFC-1-R Evaluation of Professional Staff, Teachers (Regulation)
AFC-2 Evaluation of Professional Staff, Administration

Section C: General School Administration

CF School Building Administration (and Principalship)

CFA*-R School Bldg. Admin. (and Principalship) (Job Description) (Regulation)

Section G: Personnel

GBL Personnel Records

GBM Staff Complaints and Grievances

GBM-R Staff Complaints and Grievances (Regulation)

GCA Professional Staff Positions

GCA-R Professional Staff Positions (Regulation)
GCBA-1 Professional Staff Salary Schedules, Teachers
GCL Professional Staff Development Opportunities
GCN-1 Evaluation of Professional Staff, Teachers

GCN-1-R Evaluation of Professional Staff, Teachers (Regulation)
GCN-2 Evaluation of Professional Staff, Administrators

GCPD Suspension and Dismissal of Teachers (And Contract Nonrenewal)
GCQA/GCQAA Nonschool Employment/Consulting Activities by Prof. Staff Members

GCQAB Tutoring for Pay

GDBE Support Staff Vacations and Holidays
GDL Support Staff Development Opportunities

GDN Evaluation of Support Staff

Section I: Instruction

IC/ICA School Year/School Calendar

ID School Day

IIAA Basic Learning Materials Selection and Adoption

IIAB Supplementary Learning Materials

IKA/IKAA/IKAB Grading Systems/Final Examinations/Student Prog. Reports to Parents

IKAD Parent Conferences

IKB Homework

Section K: School-Community Relations

KH Public Gifts to the Schools

KHA Solicitation of Gifts and Donations

KL Public Complaints

KLB Public Complaints About Curriculum or Inst. Materials or Strategies KLB-R Public Complaints Curriculum or Inst. Materials or Strategies (Reg.)

Summit Policies

The following policies and procedures are specific to the operation of Summit and do not necessarily correlate to a BVSD policy or procedure:

- 1. Job Description: Counselor
- 2. Job Description: Office Manager
- 3. Additional Criteria for Evaluation of Administrative Staff
- 4. Administrative Staff Evaluation Procedures: Counselor
- 5. Administrative Staff Evaluation Procedures: Office Manager
- 6. Homework Policy
- 7. Gifted and Talented Education Policy
- 8. Grading Policy
- 9. Parent-Teacher Communication Policy
- 10. Parent-Teacher Conferences: Child Resource Team
- 11. Cooperation with Fairview High School

Teacher Evaluations

The Summit Board of Directors recognizes that a thorough, regular appraisal of teaching performance is critical to the realization of Summit Middle School goals. The primary goals of teacher evaluation are the assurance of quality instruction, the strengthening of the school staff, and the growth of individual staff members.

The evaluation procedure integrates both formal and informal performance observations into an annual evaluation report written by the principal for each teacher. Informal observations are conducted by the principal. Formal observations are conducted by an Observation Team comprised of the principal and members of the Summit Board of Directors or their designees. The annual evaluation report, based on pertinent documentation from the teacher's Professional Development File and the observations, is submitted to the Board of Directors.

Teacher evaluations are based on the following:

- 1. Progress toward the successful completion of the teacher's performance and professional goals, as identified in his or her Professional Development Plan;
- 2. Input from students and parents;
- 3. Teacher's contributions to the overall welfare, promotion and quality of the school;
- 4. Formal classroom observations by the Observation Team, based on the following criteria: (a) knowledge of content, (b) context for learning, (c) lesson structure, (d) instructional strategies, (e) flexibility and responsiveness, and (f) classroom environment.

Grading Policy

Summit offers courses at different levels in each of its five core subjects: English, mathematics, social studies, foreign language, and science. In addition, students can choose from a rich assortment of electives.

Detailed grading procedures are developed in each subject area based on the following principles:

- 1. Grades measure individual student achievement, as measured by performance.
- 2. In order that grades accurately reflect student achievement, grade inflation is neither encouraged nor tolerated.
- 3. Letter grades are given for all core courses, on a scale of A to F. At the teacher's option, and with the concurrence of the Principal, an elective course may be evaluated on a pass/fail basis.
- 4. In cases where numerical scores are given for student work, grades are calculated on the following basis: A = 90% and above, B = 80% to 89%, C = 70% to 79%, D = 60% to 69%, F = below <math>60%.
- 5. Pluses and minuses may be attached to letter grades at teacher discretion. A "plus" means achievement near the top of a grade range and "minus" near the bottom.
- 6. Grades are reported to parents quarterly (the end of October, mid-January, the end of March, and the beginning of June).
- 7. In addition, mid-quarter progress reports are sent to the parents of any student who is earning a grade of D or F.
- 8. Each semester, the two quarter grades (and a semester exam grade, if appropriate) are averaged for a semester grade and reported to parents, along with the current quarter grade.
- 9. While the basis on which grades are calculated varies from subject to subject, in general the letter grades have the following meaning: A = Outstanding, B = Proficient, C = Adequate, D = Deficient, F = Unacceptable.

Attendance and Homework Policy

Homework is an integral aspect of the ambitious curriculum Summit Middle School offers. Homework assignments emphasize genuine learning and build upon concepts and skills presented in the classroom, rather than stressing rote, repetitive drill, and "make-work." Students generally have some homework every night.

Students who neglect their homework will be less able to contribute to subsequent class discussions and objectives and will, at times, slow the pace of the class. Homework will vary from daily math assignments, social studies projects, and musical instrument practice, to long-

term assignments such as research papers, literary essays, and special projects. Students should expect to devote substantial, but not inordinate, time to homework. The time spent at home will vary from student to student depending upon the individual's organizational ability, work habits, and aptitude for particular subjects. Should a student regularly spend more than three hours a night on homework, it may be an indication that he or she is improperly placed or needs additional assistance. Parents are advised to contact the school counselor or individual teachers if this occurs. Summit welcomes feedback from parents on the quality of homework assignments and the time required to complete homework.

Because of the level and pace of most courses at Summit, students need to attend school regularly, unless prevented by illness or emergency. Parents are strongly encouraged to plan family vacations and other optional events at times that will not conflict with the school calendar.

Excused absences include, but are not limited to, those caused by illness, injury, surgery, medical appointments, family emergencies, bereavement, religious holidays, participation in scheduled extracurricular events, school field trips, and in-school suspensions. Once the student returns to school after an excused absence, it is that student's responsibility to obtain a list of missed assignments. He or she has twice the number of days missed to make up the work for full credit. Beyond that time limit for excused absences, or in the case of unexcused absences, individual teachers have discretion regarding credit for missed work.

In general, if some serious reason, like illness, prevents a student from attending school, students are advised not to attempt to do homework until well enough to return to school. Obviously, some circumstances that require an absence also permit the student to work on those assignments he or she is missing. In that case, a student or parent may call the Homework Hotline for the missed assignments.

Summit will not, as a rule, provide homework assignments in advance of anticipated absences. However, individual teachers may, at their discretion, provide assignments in advance, and the Summit office can assist parents in contacting a student's teachers with such a request. Summit's teachers strive to help students catch up on missed work due to excused absences.

Summit gives all students a daily assignment planner at the beginning of the academic year to help them plan their time effectively.

Summit Homework Hotline

Summit maintains a Homework Hotline on the Daily Camera's *InfoCall* system. Summit's teachers are willing to go the extra kilometer to make homework information readily available to all students. This service allows parents to monitor homework habits and to become active partners in their student's education.

Students can use the hotline to confirm assignments. Parents can call to make sure students are completing all assignments in a timely manner. Some recordings contain just the following day's assignment, whereas others may include information for the next few weeks. Messages may also contain test and quiz reminders and important dates for long-term projects. The category numbers are be published regularly in the *Daily Camera* and in *Summit News*, Summit's biweekly newsletter. The Homework Hotline does not excuse any student from entering homework assignments in his or her assignment book when they are given. However, it provides a backup and a source of accurate information should a student miss school or otherwise lose track of an assignment.

Discipline Policy

Summit's discipline policy remains in effect. At the beginning of each year, students are given a Summit Student Handbook, which contains the discipline policy and much additional information to assist students and parents in gaining familiarity with Summit.

Administrative procedures are in effect for handling discipline-related problems, including thorough record keeping and participation in the district's computerized reporting system. Summit's administrators continue to work closely with teachers on classroom management. Overall, disciplinary problems have been minor. Parent satisfaction with discipline is very high.

Enrollment Policy

For Summit to attract a representative cross-section of BVSD students and to provide fair access to all potential enrollees, BVSD is obliged to include information about Summit Middle School in any descriptive publications about district schools. Summit publishes and distributes its own informational brochure, *Reach for the Summit!*, concerning its program and conducts information sessions for prospective students and families.

- Summit's open enrollment policy is derived from its contract with the Boulder Valley School District
- The open-enrollment period, set by the district, is usually during the month of January. Application forms may be obtained beginning in November.
- The number of students allowed to enroll at Summit is limited by contract. More students apply than can be accommodated. To avoid admitting students just after school begins and disrupting families' plans, Summit is allowed to admit up to 5 percent more students than its enrollment cap.
- The number of students in each grade level is set by the Board of Directors.
- Students may apply for enrollment in only one grade level.
- Summit discourages applications from students entering from grades below 5th grade. Exceptions that may be in the best interest of the child may be considered only after a thorough evaluation by Summit's principal and counselor, with testing as necessary.
- Summit has priority groups for enrollment, subject to the number of openings in each grade level. The priority for enrollment during the open-enrollment period is:
 - 1. Currently enrolled students.
 - 2. Children of the school organizers.
 - 3. Children of school employees. (Children of new employees hired after the end of the open enrollment period are allowed to enroll, even if it causes the school's enrollment cap to be exceeded.)
 - 4. Siblings of currently enrolled students and of Summit graduates. (A Summit graduate is a student who completes 8th grade at Summit.)
 - 5. Residents of the Boulder Valley School District who applied during the previous year's open-enrollment period, who were not offered a place at Summit, and who reapply during the current year's open-enrollment period. Applicants retain their order on the waitlist from the prior year.
 - 6. Residents of the Boulder Valley School District.
 - 7. Residents of districts other than Boulder Valley.
 - 8. Students whose applications are received after the end of the open-enrollment period.

- Students' order within priority groups 1 through 7 will be determined by lottery, if necessary, conducted by the district's Research and Evaluation Office after the end of the open-enrollment period. Groups 1 through 4 are usually all admitted. Students in Group 5 retain their order on the waitlist from the prior year and are not subject to a new lottery. Therefore the lottery usually will apply only to Groups 6 and 7.
- All students in Group 1 must re-enroll for the following year during the open-enrollment period.
- All students who apply after the end of the open-enrollment period are added to the waiting list, in the order applications are received, in Group 8.
- All applicants subject to the lottery receive a separate lottery number. In the case of siblings applying for the same grade, parents may elect to receive one lottery number for all.
- Students will usually be notified of their initial enrollment status by mid-February.
- Students who are not selected initially are placed on Summit's waiting list. Openings are filled from the waiting list through the fall semester. Separate waiting lists are maintained for each grade level and priority group.
- Because of the difficulty students have catching up on missed material, openings are not filled during the Spring semester.
- Students must confirm their intention of enrolling within the time allotted in their notification of admission, which may be 10 days or less.
- To be fair to students on the waiting list, students who have accepted a place at Summit must inform the school if their plans change. By accepting an offer of admission to Summit, parents agree to be bound by this requirement.
- Students may apply to more than one focus, charter, or neighborhood school. However, a student may accept only one offer of admission. Students admitted to Summit from the waiting list must notify their previously accepted school.
- Incorrect information may invalidate an open-enrollment request.
- Summit does not maintain waiting lists for students who wish to be admitted in future years.
- Students who matriculate as 6th graders are expected to graduate from Summit and enter high school in three years, after the completion of 8th grade.
- Approval for attendance at a school under open enrollment is not continuous from the middle level to the high-school level. Students must reapply when they reach the high-school level if they wish to attend a school other than their district-designated neighborhood high school.
- District policy provides no guarantee that a student who disenrolls from Summit may reenroll in his or her neighborhood middle school.
- Students who enroll in a school other than their district-designated neighborhood school are responsible for their own transportation. If space is available on an existing transportation route, parents may petition for "ridership" by contacting the district's Transportation Office after the school year begins. Parents must petition every year for space-available ridership.
- Any questions and disputes concerning enrollment at Summit are resolved by Summit's Board of Directors.

11

Facilities and Budget

Site

Commencing with the 2000-2001 school year, Summit has been provided with a district facility at 4655 Hanover Avenue in south Boulder, formerly the site of Majestic Heights Elementary School. Summit moved into the Hanover Avenue site during the summer of 2000. The school district made certain modifications to the site, such as removing playground equipment, installation of science laboratory equipment to meet code requirements, installation of used lockers, remodeling of makeshift dressing rooms, and implementation of bond project telecommunications improvements. The district also provided some assistance with the move. Summit has done what it can to adapt to the site, at a cost to Summit of approximately \$50,000 to date. Summit has purchased furniture, audio-visual equipment, library materials, physical education and athletic equipment, hallway and gym lockers, and other items. Summit has also refurbished and painted various areas of the school.

Summit's teachers and staff enjoy the site and the autonomy in planning and scheduling that it allows. The site, however, has inherent limitations that must be addressed if the facility is to become an adequate long-term site for Summit. As an elementary school facility, it is substandard for a middle school program. The classrooms and outside surroundings are fine, but the building has only an elementary school multi-purpose room. This is not serviceable as a gymnasium for middle school activities. The room itself is far smaller than a middle school basketball or volleyball court. The ceilings are low and do not allow for basketball and volleyball. There is no facility for performances or performance rehearsals. The effects of these limitations are severe. Summit has conducted P.E. classes, basketball practices, and volleyball practices outside whenever possible. Students use a section of hallway and an old kindergarten cloak room as changing rooms. Summit cannot host indoor sporting events.

Serviceable gymnasiums are, of course, part of the standard specifications for middle school facilities in BVSD. Summit students are entitled to similar consideration. Summit has therefore worked to address these deficiencies in the current contract negotiations. There is general agreement that Summit will continue to occupy Majestic Heights, with the inclusion of the second on-site portable building, during the 2001-2002 school year. Current negotiations suggest keeping Summit at the Majestic Heights site for the duration of the contract, unless the district elects to move Summit to suitable middle school facility, and are seeking a way to address the gymnasium deficiency with a temporary gymnasium.

Budget

Overview

As a public institution, financial integrity is of utmost importance at Summit. Summit has chosen to build its financial management procedures on those used by the Boulder Valley School District. All of Summit's operating revenues are held by BVSD and are disbursed through normal BVSD procedures for payroll, purchasing, and petty cash. Grant revenues are also held with BVSD. Summit operations are included in the annual audit of all BVSD finances conducted by an external accounting firm.

Fundraising for Summit is conducted by a 501(c)(3) organization, Supporters of Summit, ID 84-1487925. This organization retains it funds in conservative cash-equivalent vehicles which earn income until they are required for purposes designated by the Summit Board. Supporters of Summit will provide its support through direct grants to Summit's BVSD accounts, from which expenditures are made using normal BVSD procedures.

Budgeting and Expenditure Management

Summit uses a tiered approach to managing its expenditures. The overall budget for the school is organized into approximately 25 major line items, each of which aggregates multiple account codes. Management responsibility (including expenditure authorization) for most line items is delegated to the Principal. Responsibility for the remaining line items, comprising more than 90% of expenditures, primarily compensation, is retained by the Summit Board.

The Summit Office Manager produces monthly reports, using data from BVSD's CIMS, to track expenses/encumbrances for each line item. The Summit Board then uses this information to make budget adjustments where required. The Office Manager also manages the allocation of each budget line item across the account codes it aggregates.

Summit develops its budget for the upcoming school year in March, for submission to BVSD no later than April 1. This initial budget is revised based on final legislative action, which determines actual revenues. This revised budget is provided to BVSD by June 30.

Revenues

For the 2000-2001 school year, Summit received operating funds from the following sources: direct per-pupil funding from School Finance Act, per-pupil share of funding from the 1991 budget election, a share of the 1998 budget election, fundraising, and activity fees. The breakdown of revenue from these sources is shown in Table 11.1.

Table 11.1. Operating Revenues

Per-Pupil Operating Revenue	86%
Budget Elections	10%
Fundraising	2.0%
Carryover from 1999-2000	1.5%
Activity Fees	0.3%

In addition to direct revenue, Summit received usage of the Majestic Heights site, together with utilities, maintenance, insurance, and custodial services. These facilities were provided by BVSD

in exchange for a 15% concession on School Finance Act Per Pupil Operating Revenue (PPOR) and a 100% concession of Capital/Insurance Reserve funding. The total amount of this concession for 2000-2001 was over \$240.000.

Fundraising

Summit's *Tools for Learning* fundraising drive raised over \$50,000. These funds will be used to meet a variety of needs at the school, including science equipment, an optical scanner for tabulating assessments against curriculum standards, reference books, and compensation to retain key faculty members.

Expenses

Table 11.2 shows Summit's operating budget allocations for 2000-2001, including all adjustments approved by the Summit Board as of this writing.

Table 11.2. Operating Expenses

	r
Teachers' Salaries	56%
Administrative Salaries	22%
Special Education	13%
Administrative Expenses	6%
Instructional Expenses	1%
Contingency Reserve	1%
Equipment/Furnishings	1%
Other	1%

As can be seen, the largest share of Summit's operating budget is allocated to salaries and benefits, first for Summit's teachers and second for in-school administration. This allocation reflects the Summit Board's strong priority to maintain small class sizes taught by teachers with at least a baccalaureate degree in their subject area. Summit pays its staff competitive salaries, which are negotiated individually. Summit's average teacher salary in 2000-2001 is \$35,600. As our faculty members gain experience over the next few years, we expect the proportion of Summit's budget devoted to teacher salaries to increase steadily.

The next largest budget categories are Special Education and Administrative Expenses. All of the former and much of the latter are purchased from BVSD based on BVSD's average per-pupil expenditure. Instructional materials, equipment, and other expenses are similar to those at other district schools.

Summit's internal contingency reserve was budgeted at 0.7% prior to school opening as a hedge against the possibility of an enrollment shortfall. After that risk had passed, the Summit Board gradually allocated reserve funds to meet various educational needs.

Balance Sheet

Summit carried an operating funds balance of approximately \$44,000 into the 2000-2001 fiscal year, net of encumbrances. Summit has no outstanding liabilities or debts at this time.

12

Faculty, Staff, and Board of Directors

Summit's strength as a school is directly related to the quality of its faculty. The selection process consists of an initial screening of application materials by the chair of the Selection Committee. Complete materials of qualified applicants are then scrutinized by the entire committee.

The applicants with the strongest credentials are invited to teach a demonstration class to Summit student volunteers while being observed by committee members. After each class, the students provide their insights and opinions in response to a set of questions presented by committee members while other committee members answer the prospective teacher's questions and discuss details of the Summit curriculum. After an applicant departs, the committee discusses the students' feedback and their own impressions of the candidate. Some applicants are invited back for an in-depth interview.

The files of recommended teachers are then submitted to the Summit Board of Directors, which meets in executive session to discuss each candidate. Approval is contingent upon successful contract negotiations, handled separately by the Hiring and Benefits Committee, security checks by BVSD, and approval of the Board of Education.

The result has been a group of teachers who are not only extremely well qualified, but who have outstanding skills and the enthusiasm needed to bring out the best in middle-school students. By any measure, students and parents have been amply rewarded for the confidence they have placed in Summit.

Summit Alternative Teacher License Program

In August 1997, Summit's proposal to become a Designated Agency for the Alternative Teacher License Program, written under the leadership of a Summit teacher, was approved by the Colorado Board of Education. The program was implemented in 1997-98 school year. The goal of the program is to provide a high-quality teacher training program at a reasonable cost for people who have unique knowledge and skills to offer the students in our community. Currently on Summit's staff are teachers with a variety of backgrounds. The Alternative Teacher License Program is an incentive in attracting highly qualified people to the teaching profession. Summit hopes to provide program candidates with the skills and knowledge they need to succeed in the public education system, whether they stay at Summit or move on to other public schools.

Summit's Alternative Teacher Training Program is based on the provision of a support team and the fulfillment of 225 contact hours of instruction and activities. Eighty of these hours are mandatory; the balance will be determined by the candidate's university course work, professional experience, or relevant life experience. Listed here are some of instructional programs and activities which were developed for the first year of Summit's Alternative Teacher Training Program: Classroom Management Workshop, BVSD Curriculum Council Meetings,

Curriculum Review and Overview, Interdisciplinary Learning, Teaching Methodologies, Learning Styles, Assessment Techniques and Evaluation at Summit, State and/or National Standards, Evaluation of Standardized Test Scores in Subject Area, Design Pre-Test and Post-Test Assessment, Legal and Ethical Considerations in Teaching, Students' Rights and Limitations, Charter Schools in Today's Education System, Students with Special Needs, Learning Disabilities, Issues Facing Bright Middle School Students, Understanding the Twice-Exceptional Student, Gender Equity in the Classroom, Cultural Equity in the Classroom, Computer Technology in the Classroom.

The Support Team for each alternative teacher candidate consists of Summit's curriculum coordinator, mentor teachers, Summit's principal, and a representative from the university setting. Candidates select a primary mentor teacher in their field at the middle school level and a secondary mentor in their field from the high school level. The curriculum coordinator works closely with candidates and mentor teachers to assess candidates' knowledge and skills, customize training plans to address areas of deficiency, observe candidates in the classroom, and meet regularly to measure progress toward the completion of the program. Mentor teachers are required to observe teacher candidates on a regular basis and give constructive feedback, assisting with long-range, unit, and daily lesson planning, as well as classroom management skills. Three Summit teachers are currently participating in the Alternative Teacher License Program: Stephanie Donaton, Cheryle Kapsak, and Patrick McGarrity.

Teacher and Administrator Profiles

Here are profiles of the Summit teachers and administrators for the 2000-2001 academic year, along with primary area(s) of responsibility at Summit and the year each joined Summit's staff. Some of the teachers are employed part time. Currently, all electives are taught by Summit's regular teachers. From time to time, members of the community-at-large with particular areas of expertise are hired to teach special, one-time elective classes.

Table 12.1. Highest Academic Degree for Faculty Members (Including Part-Time Faculty)

	(
B.A./B.S.	M.A./M.S.	Ph.D./Ed.D.
8	13	4

Bernita (Bernie) Grove (Principal), 1997

M.A. Special Education/Gifted, University of Denver; B.A. Speech and Drama, Colorado State University.

Ms. Grove was an English teacher for 14 years and has worked as lead teacher and as a curriculum specialist. She was a speech and debate coach and has directed plays. Ms. Grove was an elementary school principal for three years and was a high-school assistant principal for five years. She holds a master's degree in special education/gifted from the University of Denver and an administration endorsement from Colorado State University. She has taught at Adams State College and been a federal education grant evaluator. Having returned to Colorado from Oregon in 1997 to become principal at Summit, Ms. Grove demonstrates exceptional administrative experience, skill, and enthusiasm.

Kirk Adams (Dean of Students, Physical Education), 1996

B.S. Physical Education, Health and Recreation, minor in Sociology, St. Joseph's College, Rensselaer, Indiana.

A native of Indiana, Mr. Adams has taught in the Boulder Valley School District for 16 years and in Indiana for 3 years. He has long been regarded as a teacher who has made a significant difference in students' lives. His high school and middle school career also includes coaching football, baseball, wrestling, and basketball. He has been the recipient of numerous honors and awards, and in 1990, he received a national teaching award for intellectual design and gender equity in physical education. Mr. Adams spends summers with students touring Africa, Australia, New Zealand, or countries in Eastern and Western Europe. He has visited more than 25 countries and is planning more overseas excursions with students in the future.

Creating a caring and supportive environment in which students can develop academically, emotionally and physically is important to Mr. Adams. He has high expectations for his students and encourages them to demand the same of themselves in all areas of their lives. One of his objectives as a teacher is to enhance each student's individuality.

Mr. Adams enjoys life and learning. Outside of teaching, he likes hunting, fishing, camping, traveling, skiing, and relaxing with family and friends. His wife, Marlene, and sons, Hunter and Brock, provide him with continued love and support.

José Antonio (Tony) Alcantara (Mathematics), 2000

B.A. Forestry, Pennsylvania State University.

A Honduran by descent, he is a Pennsylvanian by ascent. He spent several summers in Alaska. He earned a second degree in zoology, spent a year and a half participating in an immunology Ph.D. program, taught science at the New Jersey School of Conservation, taught and led trips for the New Hampshire Audubon Society, taught at the Keystone Science School, worked with atrisk children in the BVSD, taught for the University of Colorado Science Discovery program, completed a secondary science certification program through CU, did his student teaching at Glenwood Springs High School, and taught science at Roaring Fork High School in Carbondale. He likes to rock climb.

Amanda Avallone (English, Assistant Principal for Curriculum and Instruction), 1996

M.A. Education, University of Colorado; B.A. English, University of Connecticut.

Born in the foothills of New England's Berkshires, Ms. Avallone grew up in small-town Connecticut. After college, she returned to her alma mater, a highly regarded progressive public high school, where she taught English and French for eight years. Ms. Avallone next taught Upper School English at The Lovett School, a selective independent day school in Atlanta, Georgia. In addition, she worked as a curriculum writer for CNN Newsroom, Turner Broadcasting programs, and electronic field trips. Other experiences in education range from teaching Windows applications at corporate sites to instructing children in Kenpo Karate.

Even as a classroom teacher, Ms. Avallone has always had a strong interest in curriculum, instruction, and improvement of education. Ms. Avallone coordinated Summit's curriculum

development effort and acts as a mentor for other Summit teachers. Now in her fifth year at Summit, she divides her time between classroom teaching and serving as Assistant Principal of Curriculum and Instruction.

Ms. Avallone and her husband, Bryce, live in Boulder with their two cats. On most weekend afternoons (at least when no piles of essays await grading), you can find them on either the ski slopes or hiking trails of the Front Range.

Kendra Bartley (Counselor), 1997

M.A. Counseling Psychology & Counselor Education, University of Colorado at Denver; M.A. Human Development, St. Mary's University, Minnesota; B.A. Psychology, University of Colorado, Boulder.

Ms. Bartley is a Colorado native who grew up in Boulder. After graduating from Boulder High, she went to school in Norway for a year, and learned to speak Norwegian fluently. She is also a musician, and began teaching guitar and performing while still in high school. During her teens, she spent her summers working for the Boulder Parks and Recreation Department as a counselor in the summer day camp programs and as a music and drama specialist.

Throughout her life, Kendra Bartley has worked in many areas related to the fields of counseling and education. During her college years, she worked as a sensory-motor integration therapist with autistic and neurologically impaired children, and as a music and drama specialist with developmentally disabled children and adults. Later, she was employed as an adult education teacher in the Ventura County School District in California, teaching life skills classes to adults and seniors with disabilities.

While living in Minnesota, Ms. Bartley received an M.A. degree in Human Development, with a focus on child and adolescent development. As part of her program, she conducted an evaluation of a bully-victim prevention program that was being piloted in six schools, and then served as a technical advisor in the further development of the program. Upon returning to Colorado, Ms. Bartley became a member of the Longmont Violence Prevention Group, and wrote a federal grant to help fund Clearview Educational Center, a program for middle and high school students who had been expelled from the St. Vrain Valley School District. Later, Ms. Bartley became employed as a counselor at Clearview.

Recently, Ms. Bartley completed a second master's degree in public school counseling from the University of Colorado at Denver. She feels that her background in counseling and human development has allowed her to work with individual students and their families, as well as on a school-wide level, to insure that students' academic, social, and developmental needs are met. Over the years, she has most enjoyed the wonderful sense of community and support that has come from being involved with the students, families, faculty and staff at Summit.

Mark Bawek (Special Education), 2001

M.Ed. University of Minnesota; B.A. Human Services and Chemical Dependency Counseling, Metro State University, Minnesota.

Mr. Bawek brings a cheerful disposition and a caring attitude to his work with Summit students designated for special education services. He gained experience in special education working as a resource teacher and teaching in self-contained classrooms at the elementary and middle school

levels. He currently divides his special education teaching time between Summit and Peak to Peak Charter School.

Mr. Bawek was raised on a small dairy farm in southern Minnesota, where he attended school through high school. He earned a degree in electronics design (with a minor in math) at Winova VoTech and then worked several years as a design technician at Rosemount Inc. in Minneapolis. He also claims school bus driving experience on his resumé.

Wendy Blakemore (Spanish), 1997

B.A. Spanish (minor in Italian), Stanford University.

As part of her college career, Mrs. Blakemore took independent study in Tepoztlán, Mexico, in 1973 and attended "Stanford in Italy" in 1974. Having gained a passion for travel and learning in a foreign environment during her studies, Mrs. Blakemore became a flight attendant/purser with TWA upon graduating from Stanford. Flying allowed her the opportunity to visit many parts of the world. The Spanish-speaking countries, whose language, history and culture she loves to share with students, particularly fascinated her.

With the addition of a husband and two children, Mrs. Blakemore stayed closer to home by flying less. She started teaching Spanish to preschoolers, which coincided with her children's schedules. To combine her interests in children and Spanish as her own children grew older, she expanded her teaching activities. Retiring from TWA in 1989, she has taught Spanish in a variety of settings to many students: preschoolers at school and in home groups; kindergarten to 5th graders in the Elementary Spanish Program; as a tutor for middle, high school, and college students; and as a counselor and instructor at Concordia Language Villages, a language immersion summer camp in Minnesota. Mrs. Blakemore feels that her private language instruction at levels below and above Summit Middle School allows her to better evaluate how our curriculum melds with the whole BVSD language experience and beyond.

Mrs. Blakemore participated in an educational review at El Centro Bilingüe in Cuernavaca, Mexico. In 1998, she and Ms. Stough took a group of middle school students to Yucatan, Mexico. In August 2000, she received a Target Grant to attend a Spanish Immersion Seminar of 12 teachers through the Concordia Language Villages. Mrs. Blakemore has also received two Boulder Valley Foundation Mini-Grants to create indigenous instruments in the classroom.

Mrs. Blakemore is married to Kit Blakemore, an attorney, and has two children, Katy and Patrick. Her children's activities fill most of their family free time, but she tries to find a few hours each day (usually at 5:00 AM!) to run, cycle, swim, or just get outside. All the Blakemores love to travel when they can. Their most recent trips were to Spain, Italy, and Great Britain.

William Burkhart (Music), 1996

Doctor of Musical Arts in Instrumental Conducting and Literature, University of Colorado; Master of Music in Conducting, University of Southern California; M.A. Composition, University of Pittsburgh; B.A. University of Arizona.

Dr. Burkhart serves as Music Director of the Steamboat Springs Chamber Orchestra and "Intensity Women's Vocal Jazz." He is also Director of the Ghost Ranch Chamber Orchestra, New Mexico, and has served as Music Director of the Lyric Theatre's Children's Opera Program and as Resident Conductor of the Lyric Theatre.

Before coming to Colorado, he served as Music Director of the Pittsburgh Civic Orchestra, I Solisti Chamber Orchestra of Pittsburgh, and the Westmoreland Youth Symphony. He founded and directed the Westmoreland Junior Strings, a tri-level, multigenerational training orchestra for string players. He has appeared as guest conductor for orchestras throughout the country.

In addition to his orchestral experience, Dr. Burkhart has conducted choirs for more than 20 years, including the University of Pittsburgh's Heinz Chapel Choir, with which he toured California. He has directed youth musicals and has trained young singers throughout his career. Dr. Burkhart has enjoyed wide operatic experience as Assistant Conductor of the Arizona Opera Company and Conductor of Operas at the University of Southern California.

Dr. Burkhart's vision for Summit Music includes an active musical theater group; vocal, string, chamber music, and jazz ensembles; and composition classes. In demand as a guest conductor, Dr. Burkhart has led musical productions at Broomfield High School and Fairview High School.

Stephanie Donaton (Science, Health), 1999

M.S. Biological Sciences, University of North Carolina at Wilmington; B.S. University of Michigan, Ann Arbor.

Ms. Donaton was an environmental consultant dealing with wetlands, mitigation, and permitting on the Georgia coast. She also studied urban wildlife and ecology while teaching college level Biology and earning her license in kick boxing (watch out!). She was born in New York but her family now resides in the mountains of North Carolina. She moved to Boulder from Savannah, Georgia.

Ingrid Fotino (Mathematics), 1999

Ph.D. Courant Institute of Mathematical Sciences, New York University; M.A. Columbia University; B.A. Barnard College; Baccalaureate (with Honors) Lycee Francais de New York.

Dr. Fotino taught Calculus I, II, III at Colorado School of Mines, and College Algebra, Finite Mathematics, Calculus II and III at Metropolitan State College of Denver. She also taught Romanian grammar and culture at Harvard University, an enrichment program in beginning French at University Hill Elementary School, mathematics for Cours Universitaires de France, and junior high Geometry, Algebra and Set Theory. Most recently, she substituted in Mathematics and French for BVSD, and taught a group of low-achieving math students at the high school level. While teaching at Summit, Dr. Fotino completed the requirements for the Alternative Teacher Licensing Program. She is currently working on Summit's *Geometry* and *Algebra II/Trigonometry* benchmarks.

Dr. Fotino lives in Boulder with her husband. Her two daughters graduated from Boulder High. She loves sports and travel and engages in either whenever possible. She started and is very active in a relief organization for needy families in Romania.

Greta Frohbieter (Mathematics), 1996

B.S. Civil Engineering, University of Washington, Seattle.

Ms. Frohbieter worked as an engineer in the aerospace industry for several years before beginning her teaching career. She brings to the classroom a broad perspective on the math topics

she teaches, and enjoys presenting applications from her experiences to add interest to various concepts.

Ms. Frohbieter was born and raised in the Seattle area and moved to New Jersey to work at RCA AstroElectronics, a satellite manufacturer. There she worked closely with NASA on the development of earth-observing space platforms, winning awards for excellence in engineering. A highlight of this work was planning the construction of a large space platform by the Space Shuttle's robot arm, in conjunction with astronauts at NASA's Johnson Space Center.

Some volunteer tutoring sparked her desire to teach, and she completed New Jersey's alternative teacher certification program through Trenton State College, for which she was awarded the Geraldine R. Dodge fellowship. Before her relocation to Colorado, she taught math for several years in a public middle school in Trenton, which she found both challenging and rewarding.

With her husband and two children, Ms. Frohbieter enjoys Colorado's excellent skiing and hiking opportunities, and appreciates continuing her teaching career here in the atmosphere of academic excellence offered by Summit.

Steve Goldhaber (Applied Technology, Programming), 2000

Ph.D. and B.S. in Physics, Massachusetts Institute of Technology.

Dr. Goldhaber is teaching Applied Technology and Programming for Summit this year. Dr. Goldhaber grew up around the Apollo program and never lost his interest in science and technology. After studying and teaching Physics at MIT, he embarked on a career in high technology working as a network software engineer at firms such as Thinking Machines and Cisco Systems. In his spare time, he enjoys music, karate, hiking and skiing.

Carola Gorschboth (German), 2000

M.A. German and American Literature and Linguistics (minor in Psychology and Pedagogy), University of Göttingen, Germany.

Carola Gorschboth was born and raised in Edertal-Wellen, which is located between Frankfurt and Kassel in the state of Hessen, Germany. Folklore, story telling, and visits to historic places were strong elements of her childhood near Kassel, where the Grimm brothers collected many of their famous fairy tales. She demonstrated a love of language, literature, and history early on and decided at a very young age to become a teacher.

After graduation, she spent one year in Cincinnati, Ohio, studying and working as an au pair. Upon returning to Germany, she studied at the University of Göttingen and worked as a tutor, a translator, a restaurant personnel manager, and a research assistant. Combining her interests in literature and history, she wrote her thesis on "Role Models and Character Development in Novels of Adolescence by African-American Women Writers."

Other professional interests include teaching methodology and curriculum development. A post-graduate fellowship brought her to University of Colorado, Boulder, where she continues to teach German to college students.

In her free time she enjoys music, biking, traveling, and spending time with friends. She likes teaching students of all ages. After having taught preschoolers, teenagers, and adults, she joined

the staff at Summit Middle School with enthusiasm. She hopes to convey to her students not only knowledge, but also a never-ending interest in learning more about the language and the cultures of the German-speaking countries.

Lisa Hanckel (French, Drama), 1996

B.A. Art History, Smith College; Institute of Art, Sorbonne University, Paris.

One of Ms. Hanckel's references calls her a "Renaissance Woman of the 90's" because of her diverse interests. She has worked as an HIV counselor, a recreational therapist for an adolescent treatment center, a translator, a caterer, an assistant curator for an art museum, an artist, and a marine biology research assistant in Belize. She enjoys traveling and meeting new people, which has led her to become trilingual.

Ms. Hanckel was born in Boulder and first demonstrated her aptitude for languages in high school by winning first place in the state in the National Spanish Examination after living in Mexico for a school year. Since then, her love of language and the arts has continued to blossom. She spent her junior year of college in Paris, where she studied art history and theater performance at the Sorbonne and a theater school, and taught English. She continues to dance, travel, and practice her languages with native speakers whenever possible. She has recently taken up African drumming and tap dancing. In her spare time, she enjoys hiking, reading, going to concerts, and spending time with her friends and family.

Sam Havens (Social Studies, Physical Education), 2000

B.A. Economics, Carleton College.

Mr. Havens brings his academic background in Economics, History and Political Science to the teaching of American History and his experience coaching junior high, high school and college students to the teaching of P.E.

Before coming to Summit, Mr. Havens spent a year teaching English in Nagano, Japan through the JET (Japanese Education and Teaching) Program. While in Japan, he also combined his interests in athletics and working with young people through coaching volleyball and soccer. He continues as a volunteer coach for the Boulder Youth Soccer Association. In his spare time, in addition to coaching and playing soccer, Mr. Havens enjoys movies, travel, reading, and sharpening his sense of humor.

Kathy Hutton (Art), 1996

M.F.A. Sculpture, University of Colorado, Boulder; M.A. Art Education, Eastern Washington University; B.F.A. Painting and Printmaking, Virginia Commonwealth University.

Ms. Hutton is originally from Virginia. She lived on the west coast until 1987, when she moved to this area to attend CU.

Ms. Hutton has been teaching art since 1985 as a college instructor, most recently at Metro State College. In addition, for the past six years, she has worked with at-risk youth and has taught at the Expeditionary School in Denver. She continues to teach evening community college classes.

She has had over 50 exhibitions of her work. She had a one-person show in Chicago in 1996. She is a collaborator on an exhibition, "Wake Up Little Susie: Pregnancy and Power before Roe vs. Wade," which has been touring the nation's colleges and universities since 1992. She produced this historical sculpture installation while an associate at the Rocky Mountain Women's Institute. Since 1990, she has worked as a professional artist, exhibiting in cooperative galleries. For two years, she was president of the Edge Gallery in Denver, and is currently a member of the co-op Pirate Gallery, also in Denver.

Cheryle Kapsak (Social Studies), 1998

M.A. Interdisciplinary Studies in Social Sciences: Psychology, Sociology, Religious Studies, University of Montana; B.A. Religions of the Upper Mesopotamian Basin, University of Montana; Flute Performance, New England Conservatory of Music, Boston.

Ms. Kapsak grew up in Montana in a family of musicians and environmentalists. She headed east to Boston, and studied flute for four years. She returned to Montana every summer to hike and camp. She has always loved teaching and has taught most of her adult life in a variety of settings, from a poor neighborhood school in Chicago to a prep school in Omaha, Nebraska. For the past several years, she has been teaching and designing curriculum at Regis University. Ms. Kapsak received the Regis Professor of the Year Award and, on three occasions, the Excellence in Teaching Award. Ms. Kapsak now lives in Longmont with her husband and three daughters.

Valerie Koch (Mathematics), 1996

M.A. German Studies, University of Colorado; B.A. Germanic Studies, University of Colorado.

Mrs. Koch began college as an Electrical Engineering major, but decided during an elective German course that she preferred that course of study. While finishing up her master's degree in German at the University of Colorado she decided she loved teaching German and decided to pursue teaching as a career. She was one of the founding teachers at Summit Middle School in 1996. She taught German and was instrumental in developing the curriculum for the German classes.

Life does come full-circle, and the opportunity to teach algebra presented itself during Summit's first year. Mrs. Koch found that she loved teaching math and in subsequent years has taught both German and math. During that time she both taught and developed the *Pre-Algebra, Algebra,* and the new *Advanced Algebra/Introduction to Geometry* courses. She also has been actively involved in writing and developing curriculum and standards for the math department.

When she became pregnant in 2000, she knew she had to make a decision between teaching math and teaching German. Tough as it was, she decided to become solely a math teacher and has enjoyed every minute of it. Her daughter, Sophia Claire, was born on October 27, 2000. Mrs. Koch is having fun juggling her professional and personal lives.

Alexandra Londos (Social Studies), 2000

M.A. Social Studies, University of Colorado (in progress); B.A. Political Science, University of Vermont; Teacher Certification Program, Colorado State University.

Ms. Londos brings strong teaching credentials and charter school teaching experience to Summit. Along with her academic background in History and Political Science, she has developed and

written curriculum for Ancient World History, American History, World Geography, Pre-Algebra, Environmental Ethics, Health and Fitness, and Special Education. She served as chair of the Social Studies Department and as a Special Education teacher at Eagle County Charter Academy, as well as authoring the school's 7th and 8th grade Language Arts curriculum, prior to joining Summit's faculty. Ms. Londos has been a National History Day judge, a student council sponsor and Knowledge Bowl sponsor. She was honored with a nomination for Educator of the Year for Eagle County in the 1999-2000 school year. Ms. Londos' extracurricular interests include playing and coaching basketball, volunteering for Special Olympics, and other community recreation activities.

Patrick McGarrity (English), 1998

M.A. English, Texas A&M University; B.A. English, Texas A&M University.

Mr. McGarrity is a native of the Texas Panhandle where he attended high school on the dry west Texas desert plains. As an undergraduate at Texas A&M University, he studied literature and philosophy. After graduating with honors, he remained at A&M for his master's degree, emphasizing the study of American literature and designing curriculum for and instructing in literature, writing, and public speaking. In his final semester at A&M, he received the departmental award for teaching excellence. Excited to be a part of Summit Middle School, he pursues a cross-disciplinary approach to the humanities, integrating philosophy, film studies, and creative writing into the progressive English curriculum. In his spare time, he enjoys time with his wife, Caryn, and infant daughter, Katie, at home in Northglenn.

Juilane McMurtrey (Library Media Specialist), 2000

M.A. in Information Technology/Library Media, University of Colorado, Denver (in progress); B.S. Geological Land Use/Geology, Metropolitan State College.

Ms. McMurtrey has been in education for a number of years, first as a corporate trainer in manufacturing and then as a teacher in Boulder Valley Schools. Although born in Memphis, Tennessee, she has lived in Boulder for 35 years. If you listen carefully, however, you can hear her slip into a southern drawl when under pressure. As a teen, Ms. McMurtrey was a peer counselor for the Boulder Mental Health Center. She later worked in an occupational rehabilitation center helping mentally disabled patients become self-sufficient by training them in work skills. She has volunteered as a tutor for inmates at the Boulder Juvenile Detention Center. She is excited to work at Summit, developing and creating a library to support student learning and teaching students the many methods of information retrieval and use.

Ms. McMurtrey is a certified secondary science teacher and a certified Web Developer for Learning Environments. She is a member of the Gamma Theta Upsilon Geographical Honors Society, the American Library Association, the Young Adult Library Services Association, the American Association of School Librarians, the Library and Information Technology Association, and the Colorado Educational Media Association. She is listed in the 2001 "Who's Who Among Students in American Universities and Colleges." She lives in Boulder with her daughter, cat, and three-legged golden retriever.

Deborah Sanders (English), 2000

M.A. Curriculum and Instruction, University of Colorado, Boulder; B.A. Communications, University of Colorado, Denver.

Ms. Sanders, although a forever Californian, completed her higher education in the dusty dry state of Colorado. She joined Summit's staff after spending the last seven years teaching a wide variety of courses at the high school level in the Boulder area. Among these, she has taught journalism, composition, creative writing, American and British literature, global science, biology, film, and video, in addition to several levels of English. Ms. Sanders is thrilled and delighted to have the opportunity to work with Summit's students and to help them build a strong foundation for their English studies through middle school and into high school.

Sharon Sikora (Science Coordinator and Science Teacher), 1996

Ph.D. Chemistry, University of Denver; M.S. Chemistry, University of Denver; B.A. Zoology, Pomona College.

Dr. Sikora works hard to bring her love of science to her students by being an enthusiastic and energetic lecturer. She often uses demonstrations in her classroom to provoke excitement and curiosity while creating an atmosphere where students feel confident to express their ideas. She offers encouragement and promotes critical thinking. Believing that learning is a continuous process, she feels a deep responsibility as an educator to continually further her knowledge. She was the recipient of the 1996-97 Summit Outstanding Teacher Award. In 1997-98, she was one of three finalists for Colorado Teacher of the Year. Dr Sharon Sikora attended the 1998 National Teacher Forum, one of two representatives from Colorado and the only representative from a charter school.

Dr. Sikora received her teacher certification in the summer of 1997 from the Colorado Board of Education. That summer, she also served on the advisory board for a radio show, Sonic Boom, sponsored by the American Association for the Advancement of Science and the National Science Foundation to communicate science to teenagers. Prior to teaching at Summit, Dr. Sikora taught at the university level. She received the Outstanding Graduate Teaching Assistant of the Year award at the University of Denver. She has also taught at the Denver Museum of Natural History where she developed curricula and taught tens of thousands of students of all ages across the state.

Dr. Sikora enjoys working with the other science faculty and the principal to create an innovative science program at Summit. She believes that although students come to Summit with a variety of backgrounds, they are unified in a fundamental desire to learn. She hopes to nurture that desire within these young scientists.

Diana Stough (Spanish), 1996

M.A. Spanish Language and Literature (minor in Women's Studies), Colorado State University; B.A. Liberal Arts and Spanish (minor in Latin American Studies and Asian Studies), Colorado State University.

A Colorado native, Ms. Stough brings a love for the Spanish language and culture to the classroom. She lived in Mexico as an undergraduate student in Guadalajara (1989) and as a graduate student in Puebla (1991). She taught Spanish at the university level for six years, at

Colorado State University, Metro State College, CU-Denver, Community College of Denver, and the Colorado School of Mines. While living in Mexico, she taught English at the University of the Americas and at a private school.

Ms. Stough has several achievements in the area of professional development. In 1994, she attended two Women's Studies conferences at the University of California, San Diego, and at the University of Missouri, Columbia. She presented a joint project about the El Salvadoran poet and author Claribel Alegría, who is an outspoken advocate of the ongoing liberation struggle in her country. Ms. Stough also attended a conference in Tegucigalpa, Honduras, in 1992 where she did simultaneous translating from English to Spanish and from Spanish to English. There she presented a paper on the global coffee industry and the role it plays in the Honduran economy and well being of its people. In 1993, she presented a joint session at the Colorado Conference of Foreign Language Teachers about alternative approaches to teaching grammar and vocabulary in the classroom.

Ms. Stough believes in the "total physical response" approach to second language acquisition: her classes are very active. She believes students retain more of a foreign language if they are physically and emotionally involved in it. She is constantly studying ways to teach culture in the classroom, based on her philosophy that language cannot be taught as an entity separate from the culture of a people. She enjoys sharing her experiences living in Mexico and traveling through Spain, Honduras, and Chile.

Tony Striffler (German), 2001

M.T.S. Biblical Languages, Emory University; B.A. German and Religion, Gettysburg College, Pennsylvania.

Mr. Striffler is a native of Staten Island, New York. After attending Xavier High School in Manhattan, he left New York for the historic town of Gettysburg, Pennsylvania. While at Gettysburg College, he majored in German Language and Literature and spent part of his junior year in Cologne, Germany. Upon his return to Gettysburg College he was inducted into the honorary Germany Society, Delta Phi Alpha, and was awarded the German Department's Excellence in Achievement Award at his graduation.

After completing college, Mr. Striffler began graduate studies at Princeton Theological Seminary but then transferred to Emory University's Candler School of Theology, where he earned a Master of Theological Studies. He currently works as a chaplain at St. Joseph Hospital in Denver.

In the fall of 2000, Mr. Striffler was awarded an honorary Doctor of Divinity degree for his writing and reflections on "The Ecumenical Movement in the New Millennium". When he is not working, he can usually be found at home playing with his two miniature dachshunds, or playing the viola with Summit's Select Strings.

Peter Teasdale (Physical Science), 2000

Honors Degree, Zoology, University of North Wales Bangor; Post-graduate Certification in Education, University College of North Wales Bangor.

Mr. Teasdale comes to Summit with a diverse range of experience. Most recently, he taught in the International Baccalaureate Program at Poudre High School on a teacher exchange, with assignments in biology and advanced biology. Prior to his arrival in the United States, he taught

integrated science, GCSE Biology and Physics, AP Biology, and Environmental Science at Ullswater Community College in the United Kingdom. Earlier in his academic career, he served as the Head of the Lower School Science department at Lindisfarne College, an independent school, and taught at Samual Kings School and the Lakes School.

While in the UK, Mr. Teasdale coordinated the introduction and development of new science courses. He developed a Study Skills program, coordinated teacher training to introduce scientific methods and materials, created a website for the International Baccalaureate Biology course, and contributed to the development of an interdisciplinary unit on the environment.

Mr. Teasdale has led student expeditions to Nepal and Alaska. He was awarded a Glaxo Wellcome Environmental Science Fellowship that allowed him to join a team of scientists on an Earthwatch project studying the wolves and moose of Isle Royale.

Mr. Teasdale is an avid bicyclist, having completed cross-country trips in England and mountain circuits. He has recorded his travels in photographs, and has been invited to lecture about his journeys. He lives in Nederland with his wife, Wendy.

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