Summit Middle School

Boulder Valley School District
Colorado

1999-2000

Annual Report to the Board of Education

Summit Middle School
1492 Knox Drive
Boulder, Colorado 80303

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Letter from the Board of Directors

We are proud to present Summit's fourth annual report to the Boulder Valley Board of Education. Furthering Summit's academic excellence and popularity among parents and students has been the hallmark of our fourth year. Internally, Summit has a more mature and self-assured administration, while continuing to enjoy a high rate of teacher continuity. Summit also takes much pride in the progress that it has made in the further development of Summit's standards-based curriculum.

As in past years, we would like to use this introductory letter to underscore some of the intangibles underlying Summit's success. The more tangible aspects of Summit's operations are documented in the remainder of this report.

One of the more noteworthy developments in the maturation of Summit as a school has been the increase in mutual trust among Summit's Board, staff, teachers, and families. We have an increasing awareness of our responsibilities, along with an increasing appreciation of what our job description implies in terms of contributing to Summit's overall success. The staff and teachers feel that they are in good hands when the Board considers issues such as budget, fundraising, site, school policy, curriculum, scheduling, enrollment, and even job performance and salary review.

The Board has developed a high degree of confidence in Summit's staff and teachers. Staff and teachers have likewise recognized the Board's confidence in them, and have noted in surveys that their requests and suggestions to the Board are acted upon in a timely fashion and received with enthusiasm. In turn, staff and teachers have taken an increasingly proactive approach to providing solutions to issues as they develop. Teachers at Summit are regarded as professionals who understand both the "big picture" and the "workings in the trenches." As such, not only are they entrusted with the day-to-day logistics of teaching, but they are also responsible for the development of Summit's standards-based curriculum, including evaluating how this curriculum articulates with the elementary schools that feed into Summit and the high schools that receive Summit graduates.

The Board, of course, reviews in depth the work of the teachers and the staff, eyeing it from the point of view of Summit's customers — its students and parents. The entire process has plenty of crosschecks built in, the heart of which is soliciting input from all the parties involved. Not only are Summit's staff, teachers, students, and parents surveyed, but Summit's graduates are also polled to follow up on the long-term value of Summit's program. Problems identified in the surveys are addressed immediately. The result has been increasingly high levels of satisfaction among Summit's families.

One of the points of appreciation most frequently heard among Summit's teachers is the opportunity for professional growth and development at Summit. This starts with Summit's mentoring and evaluation program, and has been further enhanced with the addition of

workshop opportunities. Summit's principal, Bernita Grove, and other administrators actively visit teachers in the classroom, providing them with advice on teaching strategies and classroom management. In addition, teachers are given release time as needed for peer observations. Faculty members for each core academic area are given opportunities to meet as a department to discuss curriculum changes, teaching strategies, and articulation issues to further refine each teacher's effectiveness in the classroom.

As in the past, parent volunteerism is a foundation of the school. Parents help not only with the mundane, but also with the school's sophisticated and technical needs. Of course, parents' support of their own students' desire to learn remains one of the foundations of Summit's success.

Summit's students remain the most remarkable component of the school. They are diverse in their backgrounds, abilities, and levels of preparation. However, they all quickly realize the level of challenge that is asked of them by Summit. It is how they rise to this challenge that is so remarkable.

Summit was honored by a visit from a delegation of educators from Osaka, Japan, this winter. Charged with proposing changes that will help invigorate the Japanese school system, the delegation was directed to Summit as one of several recommended charter schools. It was the reaction of the members of this delegation to Summit's students that best underscored what is special about Summit. Never had they seen such enthusiastic students. Never had they seen students so willing to try to answer questions or risk the wrong answer in their quest for knowledge. Never had they seen students so happy and so eager to learn.

Once again, this preface to the Annual Report gives us a welcome opportunity to express our sincere appreciation for the continued support of the Boulder Valley Board of Education and district administration. Though controversies and differences of opinion do arise from time to time, it is important to remind ourselves that this is a community effort and a learning process for all of us about the potential of charter schools to serve an important role in public education. It is our sincere hope that, with time, Summit will be recognized as an important asset to the Boulder Valley School District.

For all who have been involved in Summit's establishment and development, it has been an endeavor of which we can rightfully be very proud. Together we shall move ahead to face the challenges of Summit's future growth and potential.

Sincerely yours,

Summit Middle School Board of Directors
Scott Smith, Chair

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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 1999-2000 Academic Year

The 1999-2000 school year was the fourth 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 for 1999-2000. 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 200 new applications during the 1999 open-enrollment period. With additional applications received through the spring and summer, we received a total of 223 applications for the 1999-2000 academic year. Ultimately we admitted 95 students: 87 new 6th graders and eight new 7th graders.

Six students have left Summit since the start of the 1999-2000 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 open-enrollment law, a few students (e.g., children of subscribers) from outside the Boulder Valley School District (see Table 4.1). Summit's current enrollment is given in Table 4.2.

Table 4.1. Last School Attended Prior to Enrolling at Summit, 1999-2000 Academic Year

Public School	186
Private School	56
Out-of-District School	6
Home Schooled	2

Table 4.2. Enrollment by Grade Level, 1999-2000 Academic Year

6th	87
7th	89
8th	76

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 are given in Table 4.3.

Table 4.3. Percentage of Students in Different Ethnic and Categorical Groups

Group[1]	Summit	BVSD[2]	Southern Hills[3]	Base Line[3]
American Indian	0.4%	0.8%	0.2%	1.9%
Asian	7.5%	4.9%	2.4%	5.9%
Black	1.2%	1.7%	0.5%	3.6%
Hispanic	2.4%	11.1%	2.9%	10.3%
White (not Hispanic)	88.8%	81.5%	94.1%	78.3%
Special Education	4.0%	11.4%	17.4%	17.1%
Free / Reduced Lunch	4.0%	12.3%	4.5%	15.4%

[1]Colorado Department of Education designations

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

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

Attendance

From August 1999 to February 2000, the daily average attendance was 96.2%. Table 4.4 gives data for the first part of the current academic year. This is an improvement over the 94.8% daily average attendance over a similar time period a year ago.

Table 4.4. Percent Daily Average Attendance
(August 26, 1999 to February 8, 2000)

6th Grade	7th Grade	8th Grade	Overall
96.7%	95.7%	96.3%	96.2%

Enrollment Applications for the 2000-2001 Academic Year

Current sixth and seventh graders have priority for re-enrollment for the next school year. Of the 177 sixth and seventh grade students at Summit in 1999-2000, all have re-enrolled for the 2000-2001 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 open-enrollment period ended on January 28, 2000. We received 241 applications during the 2000 open-enrollment period (Table 4.5). Thirty-three applicants are in enrollment priority groups.

Table 4.5. New Applications Received
for 2000-2001 (by Grade Level)

6th Grade	7th Grade	8th Grade
183	41	17

In October 1997, to help us better manage our waiting list and to anticipate natural attrition, the Board of Education approved our proposal to offer enrollment to 105% of our student cap, or 263

students, with all risk of actual over-enrollment assumed by Summit. We are thus accepting 87 new students, with the expectation that a total of 250 will actually be enrolled in Fall 2000.

Applicants were distributed fairly evenly over the entire district. Of the total of 241 applicants, 23 were from the Southern Hills neighborhood attendance area, 34 from Centennial, 32 from Platt, 27 from Angevine, 18 from Base Line, 20 from Burbank, 17 from Louisville, 17 from Monarch, and 13 from Casey. A total of 50 were from independent (private) schools and two were home schooled. Many applicants submitted applications for open enrollment to several other schools in addition to Summit. Since Summit is not necessarily the first choice of all applicants, we expect to admit a number of students from our waiting list, as we do each year. Others will be admitted from the waiting list to replace any current students who move from the area.

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), 32% were in the initial offer group.

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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.

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 U.S. 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, 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, test a hypothesis, control variables, and collect 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.

2.1.10. Students can explain how physicists and chemists obtain information and list some topics and materials they study.

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, 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 observe, measure, and calculate quantities to demonstrate the laws of conservation of mass and energy within a closed 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, 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, 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, identifying 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) 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 issues 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 at 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.

4.3.4. Students can explain how oceanographers obtain information and list some topics and materials they study.

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 (AU)).

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, 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.

4.4.9. Students can explain how astronomers obtain information and list some topics and materials they study.

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 safety goggles when handling chemicals, hot liquids, glass ware or performing any activity that could harm the eyes and wearing appropriate clothing.

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 devises (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 the laboratory and the equipment used at the end of each session.

7.11. Students can use computers and other electronic resources for activities such as gathering information and constructing graphs.

Social Studies

Standard #1. Political Systems — Each student can demonstrate understanding of the significant political structures and legal systems that have served to govern human societies past and present, analyze the political causes of peace and conflict within and between them, and use this knowledge to draw independent conclusions about domestic and international political issues that affect their lives.

1.1. Tribal Systems — Students can identify the basic political structures of tribal systems, examine the factors that influence their development, analyze the balance between political efficiency and social/economic equity found within specific tribal societies, and compare/contrast them.

1.2. Autocracies/Oligarchies — Students can identify the basic political structures of autocratic and oligarchic governments, examine the factors that influence their development, analyze the balance between political efficiency and social/economic equity found within specific autocracies and oligarchies, and compare/contrast them with other political systems worldwide.

1.3. Theocracies — Students can identify the basic political structures of theocracies, examine the factors that influence their development, analyze the balance between political efficiency and social/economic equity found within specific theocracies, and compare/contrast them with other political systems worldwide.

1.4. Democracies/Republics — Students can identify the basic political structures of democratic and republican governments, examine the factors that influence their development, analyze the balance between political efficiency and social/economic equity found within specific democratic/republican societies, and compare/contrast them with other political systems worldwide.

1.5. Political Relationships Within and Between Societies — Students can characterize the relationships that exist between people and their governments, determine the causes and results of civil unrest within specific societies, and examine the inherent relationship that historically exists between political power and military power in virtually all societies. Similarly, students can analyze the motivations for, and results of, specific international alliances and conflicts, past and present.

Standard #2. Economic Systems — Each student can demonstrate understanding of the significant economic systems that have guided the production and distribution of limited resources in human societies, past and present, and how trade and technology have enhanced the production and distribution of resources within and between those societies.

2.1. Tribal Systems — Students can characterize the basic economic relationships found within tribal societies, examine the factors that influence their development, and evaluate how efficiently and equitably resources are produced and distributed within and between specific societies, past and present.

2.2. Capitalism — Students can identify the basic economic principles that define market-oriented economic systems, examine the factors that influence their development, and evaluate how efficiently and equitably resources are distributed within and between market-driven economies.

2.3. Communism — Students can identify the basic characteristics of communist systems, examine the factors that influence their development, and evaluate how efficiently and equitably resources are produced and distributed within communist economies and between other societies.

2.4. Socialism — Students can identify the basic theories that underlie socialist economies, examine the factors that influence their development, and evaluate how efficiently and equitably resources are produced and distributed within socialist societies and between other societies.

2.5. Trade and Technology — Students can identify and evaluate the influences of trade and technology in the production and distribution of resources in human societies throughout history.

Standard #3. Social Systems — Each student can demonstrate understanding of the significant cultural, religious, and class structures of world societies, past and present, and how the acquisition of new and borrowed knowledge has influenced the cultural systems within and between those societies.

3.1. Major World Religions — Students can identify the basic beliefs and principles that underlie the world's largest religions, evaluate the impact those belief systems have had on human societies throughout history, and draw independent conclusions about the historical relationships between religion, value systems, and political power.

3.2. Cultural Diversity and Daily Life — Students can identify unique cultural traits of a wide variety of societies, past and present, compare/contrast them to other cultures, and evaluate how cultural differences have led to alliances and conflicts within and between societies throughout history.

3.3. Arts and Literature — Students can interpret representative works of art and literature, draw independent conclusions about the values and beliefs held by that society, and analyze the dual role of the arts as a medium to reinforce or challenge deeply held values and beliefs.

3.4. Class Structures — Students can distinguish and evaluate a variety of systems used to organize people into classes, such as wealth, religion, race, gender, birth, education, guild, and caste, list the advantages and disadvantages of each, and compare/contrast them to other social systems used throughout history.

3.5. Education and Knowledge — Students can explain the inherent relationship between knowledge and power throughout human history, determine the processes by which knowledge is built and passed on from generation to generation, and examine the effects on a society of losing knowledge. Students can also identify selected philosophers and scholars who have influenced the world, and analyze representative works from those scholars.

Standard #4. Environmental Systems — Each student can demonstrate understanding of the significant ecological systems, physical features, and distributions of natural resources on the Earth, and how physical and human systems have influenced each other, both in the past and in the present.

4.1. Spatial Organization of the Earth's Surface — Students can identify and utilize a variety of tools to help them organize and study the surface of the Earth, including maps, globes, charts, pictographs, and satellite imagery, and use those tools to determine spatial patterns of land use and movement on the Earth's surface.

4.2. Impact of Physical Systems on Human Societies — Students can identify significant physical features, climates, biomes, and distributions of natural resources on the Earth's surface, explain the physical processes that shape them, and analyze their influence on the development of human societies, past and present.

4.3. Impact of Human Societies on the Earth — Students can identify significant social, political, and economic activities of human societies, past and present, that have dramatically altered the Earth's surface, examine how these activities influence the physical features, biomes, climates, and natural resources of the Earth, and draw independent conclusions about human processes that have irreversibly changed the Earth's physical systems.

Standard #5. Historical Inquiry and Research — Each student can demonstrate understanding of the processes involved in historical inquiry and research, create and test hypotheses, draw independent and meaningful conclusions from their research, and present those conclusions in a variety of formats.

5.1. Chronological Organization — Students can chronologically organize important people, events, issues, and civilizations into distinct eras, and use this information to identify patterns of continuity and change in history. As students progress, they can also use this information to analyze historic cause-effect and systemic relationships that effect the stability of the world today.

5.2. Developing Hypotheses — Students can identify, and successfully implement the steps involved in a successful research project, including the need to develop appropriate hypotheses to guide their research.

5.3. Obtaining and Analyzing Historical Data — Students can obtain data from a wide variety of primary and secondary sources, identify different resources of information in their community, analyze the inherent biases found in virtually all sources of information, and modify their hypothesis, if necessary.

5.4. Drawing Meaningful Conclusions — Students can use the research process to draw independent and meaningful conclusions about the world they live in.

5.5. Presenting Information — Students can present a hypothesis, a body of supporting evidence, and a conclusion(s) in a 10-page paper with citations or in one of the formats required by the National History Day competition.

Mathematics

Included are exit-level benchmarks, which each student will have completed by the end of Algebra I and either Geometry or Honors 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 arithmetical / 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, 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.

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Course Descriptions and Scheduling

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. Writing instruction focuses on the development of thoughtful content, compelling support, clear and sophisticated expression, organization, and technical accuracy and polish. Textbooks: *Grammar and Composition* (Prentice Hall), *Writers INC* (D.C. Heath).

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 full paragraph development and the simple essay. Students will improve their writing and speaking by learning new vocabulary from the literature they are reading. Formal grammar instruction includes identifying the eight parts of speech, distinguishing between and using types of nouns, learning commonly confused homonyms, and correctly using end punctuation and quotation marks.

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 to persuade and inform an audience. English II also features an in-depth unit on public speaking, including gathering and organizing information, developing audience awareness, and effective presentation. Grammar topics will include sentence structure, comma rules and other internal punctuation, and recognizing common roots, prefixes, and suffixes.

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 literature, exposition of author's style, and creative writing. Students will also focus on improving their own personal writing style and command of formal English language. Grammar instruction will include a review of the eight parts of speech, basic phrase types, 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 the second semester, students will apply what they have learned in their English classes by studying one author in some depth and with greater autonomy than in previous courses. 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 and exceptions, figurative language and other stylistic elements, special uses of punctuation, and improving syntax with phrases and clauses.

Science Department

The following is a description of the course offerings in the science curriculum. It is recommended that all students take the two core offerings unless mastery of the content and scientific principles is demonstrated. The two core offerings are Biological Sciences and the Environment and Physical Sciences and the Earth. It is highly suggested that incoming sixth graders enroll in Biological Sciences and the Environment.

Biological Sciences and the Environment

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 are addressed in this class. In addition, the course explores 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 are 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 are reinforced. Topics include history of the earth, weather and climate, mechanics of flight, acid and base reactions, genetics, and biotechnology. Faculty members' areas of expertise are utilized. Research is an emphasis of this course. Textbooks: *Physics* (D.C. Heath), *Chemistry* (Prentice Hall), *Earth Science* (D.C. Heath), *Biological Science* (Kendall / Hunt).

Chemistry/Physics

Modeled after 9th grade course work, Chemistry / Physics is the highest level of science Summit offers. 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

Social studies classes at Summit begin with Ancient World History. Beginning with prehistory, students are encouraged to ask "big questions" and build critical thinking and writing skills as they move through ancient cultures to the Renaissance and the Age of Exploration.

American History picks up where the Age of Exploration ended, as European explorers encounter the indigenous peoples of the Americas. Thinking critically about the balance of rights and responsibilities in the formation of the new nation, students survey the great ideas, heroes and "sheroes" of our American past. From the American Revolution to the Cold War, students examine the complex interactions of people, environment, and government.

World Geography and International Relations provides opportunities for students to assess the complex interrelationships of a global community from the Cold War forward. Using historical perspective and geographic themes, students study the realms and regions of the modern world. A capstone project in international relations provides an opportunity for students to demonstrate mastery of three years of critical thinking and knowledge of history.

World History and Geography

Summit's introductory history class surveys the development of several of the world's influential civilizations, from early prehistoric cultures to the European Renaissance and the Age of Exploration. Beginning with prehistory, students are encouraged to ask important questions and build critical thinking and writing skills as they move through ancient cultures, all the way to the Renaissance and the Age of Exploration. The development of map skills, basic geographical knowledge, historical role playing, and building historical models are components of this course. Textbook: Kreiger, Neill, and Reynolds, *World History: Perspectives on the Past* (McDougal Littell),

American History

American History is a survey of the political, social, cultural, and economic history of the United States. The course begins with the early civilizations that inhabited the land and concludes with contemporary America. The course examines the development of the U.S. as a nation and of its national character. Emphasis is given to the diverse people and cultures that coexist in America and issues arising from this mosaic. The course touches on the lives of major political and social leaders, as well as fundamental documents. American History emphasizes geographic locations and natural resources of our country, analyzing how the search for wealth and new frontiers shapes the nation physically, politically, and culturally. Textbook: Cayton, Israels Perry, and Winkler, *America: Pathways to the Present* (Prentice Hall).

World Geography and International Relations

An increasingly interdependent and populous globe demands serious attention and understanding of its citizenry. World Geography and International Relations explores humankind's relationship with the Earth and with each other. This course looks at the physical features of our planet, concentrating on inhabited lands. Students study the major landforms located in various regions while analyzing the relationship that humans have had, and still have, with the land. The course incorporates the disciplines of social sciences (anthropology, sociology, history, political science, economics, and religion) and literature in its study of modern states. A capstone project is the culminating product of three years of social studies at Summit. Textbook: Sager and Helgren, *World Geography Today* (Holt, Rinehart and Winston).

Mathematics Department

Student ability and track record are used to place students properly for best results. However, by the Summit charter, it is a matter of choice for the parent and student to make the final determination of which courses are appropriate. Students are encouraged to take the most difficult course in which they can succeed, but care is taken to avoid putting students in a situation where they are out of their depths. Most students take Algebra I or Algebra I Honors in 7th grade. All students will have taken at least Algebra I by the end of 8th grade.

Pre-Algebra

Pre-Algebra helps students build computational skills as they transition into Algebra. Topics include number theory; integers; numerical and algebraic expressions; one-step and multi-step equations; inequalities; fractions and decimals; graphing; perimeter, area, and volume; data analysis and display; ratio, proportion, and percent; scientific notation and precision. Textbook:, Price, Rath, and Leschensky, *Merrill Pre-Algebra* (Charles E. Merrill).

Pre-Algebra Honors

Pre-Algebra Honors is designed for the student who likes and excels in math. Students need to have already mastered basic computational skills, including decimals and fractions. This is a fast paced course. Students cover all pre-algebra plus additional challenging topics. Textbook: Davison, Landau, McCracken, and Thompson, *Prentice Hall Pre-Algebra* (Prentice Hall).

Algebra I

The course begins with a discussion of operations and variables, and the use of abstraction to simplify problem solving. Emphasis is placed on the order of operations and an axiomatic approach to "allowable" operations. Problem solving is presented in both creative and algorithmic approaches. The course includes quadratic and two-variable equations, linear and quadratic functions, rational and radical equations, probability and inequalities, and other topics selected for utility and challenge. Textbook: Foerster, *Algebra I* (Addison-Wesley).

Algebra I Honors

This is a faster paced and more rigorous course than regular Algebra I. It is intended for students who want an extra challenge. Students move quickly through the introductory topics, then concentrate on polynomials, quadratic equations, systems of linear equations, and functions. Textbook: Foerster, *Algebra I* (Addison-Wesley).

Geometry

Students solidify algebraic ideas and thinking skills while working with basic geometric figures. Topics covered include coordinate geometry, quadrilaterals, transformations, similarity, area, volume, problem solving, and proofs. Textbook: Jurgensen, Brown, and Jurgensen, *Geometry* (Houghton Mifflin).

Geometry Honors

This is a proof-oriented geometry class. A high level of dedication is required to succeed in this course since it requires students to step beyond the casual mode of thinking, to which most are accustomed, and learn a new way of thinking based on formal logical deductive reasoning. One result is that students improve their ability to think and express themselves more clearly and accurately in speech and writing and learn the difference between "common sense" and a valid argument. Content of this course includes angles and triangles, perpendiculars and parallels, polygons and their areas, similarity and congruence, coordinate geometry, constructions, symmetry and transformations, volumes of solids, and some introduction to trigonometry. Textbook: Moise and Downs, *Geometry* (Addison-Wesley).

Algebra II

This course is offered depending on sufficient level of interest. Algebra II usually follows Geometry, but is not dependent on Geometry for success. It is a fast paced presentation of 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, identities and equations. This very challenging course, similar in level of challenge to Honors Geometry, is intended only for top students. Textbook: Hall and Fabricant, *Algebra II* (Prentice Hall).

Foreign Language Department

At Summit, we teach Spanish, French and German. We emphasize all five skills of 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.

We divide 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 language courses at Summit, students who have met the required benchmarks enter high school in level III of their respective languages.

Technology Electives

Applied Technology

Students work in pairs on a variety of projects that include lasers, robots, satellites, tee-shirt design, hot-air balloons, computer assisted architecture, and more. This class is a hands-on, experiential, laboratory environment.

Beginning Programming

No experience is necessary in this beginner's programming class. Students work on personal computers with QBASIC to learn the basic principles of computer programming, including using variables, data input and output, use of loops, subroutines, and arrays. Students work at their own pace to create a variety of computer games that range from the simple to the more complicated with sound and graphics.

Advanced Programming

This class is for students with some programming experience in any language. Advanced topics include the proper use of subroutines, nested loops, and decomposition techniques using C++. Advanced students are allowed to work on independent projects suited to their abilities.

Other Electives

Philosophy

Students learn how to build a strong argument using logic and deduction. Topics discussed include metaphysics, epistemology, aesthetics, and ethics. Many of the classical philosophical arguments that have existed for thousands of years will be discussed.

Journalism

Students learn journalistic skills and writing and develop an in-school publication.

Drama

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

Dance Around the World

Students learn and practice dances from Africa, the Islands, and Latin America, and finally arrive at hip-hop.

Cooking

Students learn and practice the basics of food preparation, from their favorite snacks to nutritious meals.

Advanced Reading Techniques

Students acquire new reading strategies and learn when and how to apply them. The course combines instruction in a variety of reading techniques, with study hall time used to apply them to reading tasks in all subject areas.

Art Electives

Painting

Students learn to paint in many different media and styles, from Realism to Action Painting. Acrylic, tempera, and watercolor paint are used with a variety of techniques. Use of color is explored, with experimentation and individual expression highly encouraged. Students study artists of the past as examples of style.

Paper and Printmaking

This class includes a combination of papermaking and some simple printmaking techniques. Assignments include cast, three-dimensional paper objects, monoprints, embossed paper, and a small gift book. All materials used are nontoxic and water soluble.

ArtForms

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

Drawing and Cartooning

This class emphasizes the basics of drawing, using the theory of accessing the right hemisphere of the brain to see shape, quality of line, and texture in order to create an interesting composition rather than focusing only on the object. Students experiment with the expression and communication of ideas, distortion of faces, and the illusion of movement. Students create enjoyable drawings and a well-rendered, well thought out political cartoon.

Pottery/Crafts

This is a beginning class in clay construction and various craft media. Coil, slabs, and modeling are used to create pots and sculptures. Each student has the opportunity to make a pot on the

wheel. Crafts include basket weaving, kite-making, hand-painted calendars, and origami. All projects are originals designed and made by the students; no kits are used.

Sculpture/Woodshop

An introduction to three-dimensional designs and sculptures. We address the concept of content and meaning in the works created. Visual examples in slide format of each assignment are provided as stimulation and historical context. We construct three-dimensional objects from wire and cardboard, do a simple carving with plaster composite, and create site-specific sculptures with natural materials.

Music Electives

Drumming Up a Storm

Students explore all of the wonderful variety of percussion instruments, from triangles and claves to African drums and drum sets. Emphasis is on improvisation and learning rhythms from around the world. Students will make their own drums in the course of the semester. The best players will be prepared to perform in some school musicals. Prerequisite: No formal musical training necessary, just a love of jamming!

Jazz Band 1

Play great music for band. Students complete the Standard of Excellence Book 2, begin work in Jazz Ensemble Method, 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 is prepared. Performances are scheduled throughout the school year and at graduation ceremonies. Prerequisite: Completion of Standard of Excellence Book 1 or equivalent (intermediate musical experience); can be waived by successful audition.

Jazz Band 2

Advanced jazz ensemble work will continue in Jazz Ensemble Method and jazz history and literature. Emphasis is on sectional independence, improving improvisational skills, and expanding repertoire. The best players perform in school musicals and at graduation ceremonies. Prerequisite: Minimum of three years playing and audition or Jazz Band I at Summit.

Beginning Instrumental Music

Designed for students who would like to begin an instrument or with less than one year of instrumental training. Areas covered are basic sound production, whole, half, quarter, and eighth notes in combination, and scales to one flat and one sharp.

Orchestra/Select Strings

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

Choir

Students enjoy singing music from different cultures, as well as popular music. Emphasis is on 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. Prerequisite: Love of music.

Silver Rain

Silver Rain is Summit's 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 are held throughout the school year. Prerequisite: Choir and experience in reading and performing music. Membership by audition only.

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 1999-2000 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. In fact, all but four of our subjects include students in two grades, and the majority of subjects include students from all three.

In addition, we attempt to give our students their choices from varied electives. This year electives were: Art — ArtForms (Fall), Drawing and Cartooning (Fall), Pottery/Crafts (Fall), Painting (Spring), Print and Papermaking (Spring), Sculpture/Woodshop (Spring); Music — Beginning Instrumental Music (Fall), Drumming Up a Storm (Spring), Jazz Band 1, Jazz Band 2, Orchestra/Select Strings, Choir, *Silver Rain* (select choir); Drama (Fall); Journalism (Fall); Dance Around the World (Spring); Philosophy (Spring); Computers — Introduction to Programming (Fall), Applied Technology Lab, Beginning Programming, Advanced Programming; Advanced Reading Techniques (Spring); Health; Cooking; Study Hall; and Physical Education (every other day or every day; required unless waived). Electives not specifically designated were offered both Fall and Spring semesters.

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.

Balancing this schedule is eased by Summit's average core class size of 19 students, which takes into account five students from other schools and eight Summit students taking additional core classes as electives. Excluding study hall, core class electives, and physical education, our electives average 23.2 students per class. Overall, electives average 24.3 students per class.

6

Articulation of Curriculum with High Schools

English

Summit English teachers have met with both the Fairview High School and Boulder High School English Departments and serve on the Boulder Valley School District Middle Level Language Arts Curriculum Committee. Using information from these meetings, course descriptions, and scope and sequence documents, the Summit English department has created a curriculum that exceeds BVSD's middle-level standards and thoroughly prepares students for pre-IB Language Arts and advanced placement Language Arts courses at other area high schools. The choice of literary works, approaches to literature study, writing assignments and purposes, and grammar instruction provide the skills and knowledge for high achievement in challenging high school English programs. Depending on their final course at Summit and mastery of Summit benchmarks, students going on to Fairview will be recommended for 9th grade Language Arts or pre-IB 9th grade Language Arts. Students planning to attend Boulder High will be recommended to 9th grade Language Arts, Advanced 9th grade Language Arts, or, in some cases, to Advanced Composition and World Literature (10th grade honors level). Placement at other district high schools is determined on a case-by-case basis.

Foreign Language

Students who enter Summit Middle School as 6th graders in Beginning Level and graduate as 8th graders in Level II will continue on to Level III in high school. In most cases, students interested in the IB program can take IB III at Fairview. In the case of German, Level III and IB Level III are the same course at Fairview. Summit's language teachers have been in communication with both Boulder and Fairview High teachers to ensure that Summit courses dovetail into the high school programs.

Mathematics

Summit's mathematics teachers have met with the mathematics department and counselor at Fairview High School to discuss prerequisites for their IB program and possible substitution of our courses for theirs if our courses are equivalent in content. They have also met with Boulder High School teachers to determine the appropriate sequence of courses. Plans are under way to meet with other local high schools to discuss similar information.

Summit's goal is to work with the high schools so that our students will be well prepared to continue on in the high school courses. All students leaving Summit after three years are expected to have completed at least Algebra I. Summit's Algebra I course uses the Foerster textbook, a standard Algebra I text. Summit's curriculum covers most, if not all, of the skills and

concepts included in that text, giving the student a solid foundation to continue on to Algebra II. Our Honors Geometry text, by Moise and Downs, is the same one used in the Geometry Honors courses at most high schools in the area. Students are required to do well on the standard Moise and Downs tests (provided in the test booklet) and to be able to write rigorous proofs throughout the course. This course work should be equivalent to the standard set by area high schools for their Geometry courses.

Summit's mathematics department is open to feedback from the high schools. It is currently working on scope and sequence documents and flowcharts to suggest appropriate choices for high school courses based on courses completed at Summit.

Science

The Summit science curriculum meets or exceeds the middle school BVSD curriculum standards. Students from Summit should be well prepared to meet the challenges of high school. The curriculum does not conflict with course offerings at the high school level; rather, it enhances the knowledge and interest of the students as they advance in the high school curriculum. Fairview has accepted the Chemistry / Physics course offered at Summit as equivalent to their course offering. Students mastering this course at Summit will, upon entering ninth grade at Fairview, take IB Biology 1,2. Students who have taken Chemistry / Physics and have received teacher consent may take either Honors Biology or regular 10th grade Biology at Boulder High. Students taking Advanced Topics at Summit are placed at Boulder High in either Physical Science or Physical Science Honors. At Fairview, their choices include pre-IB Chemistry / Physics or Physical Sciences. Other district high schools have determined placement individually.

Social Studies

The Social Studies teachers at Summit have begun a series of discussions with their counterparts at Boulder Valley high schools in an effort to articulate curriculum between the different programs. The goal of these meetings is to determine the best combination of course offerings at both the middle and high school levels that will satisfy district and state requirements. We are also interested in learning what types of deficiencies and accelerations, both in content and in critical thinking skills, are typically observed at the high school level so we can discover ways to meet the needs of all Summit students.

Accreditation

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

7

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, and so students should be 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 on the current material. Summit math teachers are now developing and 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 this 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 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 (OM), Quiz Bowl, Science Club, French Club, Math Counts and Yearbook. Elective classes such as Journalism, Creative Writing, Basic Satellite Technology, Philosophy, 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, which offer 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.

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 1999, for the first time in Colorado, the CSAP was administered to the state's 7th graders. Summit students scored third highest in the state in both reading and writing, closely following Cheyenne Mountain Charter K-9 (Cheyenne Mountain District) and Stargate Charter K-8 (Northglenn-Thornton District). Table 7.1 is a comparison between Summit scores and Boulder Valley's scores for these tests.

Based on its scores on the 1999 CSAP, Summit was invited to apply for a John Irwin Colorado Schools of Excellence Award by the Colorado Department of Education.

Table 7.1. 7th Grade Scores on 1999 Colorado Student Assessment Program (CSAP) Tests

	Reading		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

Comprehensive Test of Basic Skills *(TerraNova)*

The CTBS *(TerraNova)* was given to all Summit students in 1999. No student was excluded because of special education status. The district did not administer the CTBS to middle schools in 1999.

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 7th-grade-level test is normed for students from the sixth month of grade 6 through the second month of grade 8. Our 6th graders, taking the 7th-grade test in April (the eighth month of grade 6), 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 requested 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.

Summit's Median 1999 Scores

Table 7.2 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. Overall, Summit students performed very well. Areas of relative deficiency are spelling for 6th and 7th graders and language mechanics for 7th graders.

Use of the Data

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. Parents are asked to compare this year's scores to those of last year and confer with the school if growth is not evident.

Table 7.2. Actual (Act.) and Anticipated Difference (Dif.)
Median National Percentile Scores, 1999 CTBS / *TerraNova*

	6th		7th		8th	
	Act.	Dif.	Act.	Dif.	Act.	Dif.
Reading	84.9	11.4	87.8	5.2	90.4	9.6
Vocabulary	88.7	19.4	86.4	5.3	88.8	10.9
Reading Composite	89.4	15.2	91.2	6.6	92.3	10.3
Language	84.5	9.2	88.0	6.0	88.8	8.3
Language Mechanics	86.0	12.1	80.0	-2.6	84.4	3.4
Language Composite	88.0	11.1	87.7	2.7	91.3	7.3
Mathematics	79.5	5.5	90.3	6.5	88.7	3.4
Math Computation	84.2	19.6	91.4	12.1	85.5	4.5
Math Composite	81.6	10.1	92.2	9.6	88.5	3.1
Total Score	**84.7**	**9.1**	**92.6**	**7.6**	**92.0**	**9.0**
Science	86.5	12.8	89.5	5.5	91.8	5.9
Social Studies	85.8	11.6	87.8	4.3	88.8	6.5
Spelling	69.2	-1.5	67.4	-10.2	88.9	14.8
Number Tested	80*		77		89	

*One 6th grade student did not take the Test of Cognitive Skills and is not included in the averages

In addition, Summit intends for most of its students to have actual scores higher than anticipated. 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.

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. Tests can provide useful information to students, parents, schools, and the public.

Table 7.3. Comparison of 1997, 1998, and 1999 Median *TerraNova*
National Percentile Scores for 1999's 7th and 8th Grade Classes

	1999 7th Grade		1999 8th Grade		
	1998	1999	1997	1998	1999
Reading	89.8	87.8	87.2	91.5	90.4
Vocabulary	88.2	86.4	88.7	87.0	88.8
Reading Composite	92.0	91.2	90.8	92.8	92.3
Language	88.9	88.0	88.4	87.8	88.8
Language Mechanics	81.5	80.8	78.5	75.8	84.4
Language Composite	88.5	87.7	87.3	87.2	91.3
Mathematics	92.2	90.3	87.9	84.9	88.7
Math Computation	74.0	91.4	64.6	81.0	85.5
Math Composite	86.6	92.2	80.5	85.0	88.5
Total Score	**91.6**	**92.6**	**90.0**	**91.6**	**92.0**
Science	88.7	89.5	91.1	88.4	91.8
Social Studies	87.0	87.8	86.6	90.5	88.8
Spelling	80.2	67.4	83.3	73.3	88.9

Longitudinal Comparison

Table 7.3 gives the median *TerraNova* national percentile scores for 1999's 7th and 8th grade classes during their years at Summit. There was significant improvement in math computation and significant deterioration in spelling for 1999's 7th graders. Total scores increased from year to year for our current 7th and 8th graders, which satisfies one of Summit's accountability goals.

Spread in Scores

Table 7.4 gives the national percentile "Total" scores for Summit's own 10th, 25th, 50th (median), 75th, and 90th percentile students. Summit students are narrowly clustered about the median, well above the national average. Even Summit's 10th percentile is at or above the national average.

Table 7.4. Spread in Scores

Grade	No.	90th	75th	50th	25th	10th
6th	81	98.0	94.9	85.0	70.3	49.6
7th	77	99.0	97.4	92.6	82.8	66.3
8th	89	98.8	96.9	92.0	82.4	71.2

8

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. Guidance was also provided by nationally recognized curriculum development consultant Dr. Finlay McQuade. Faculty members worked during the summers of 1997, 1998, and 1999, as well as periodically throughout the 1997-98, 1998-99, and 1999-2000 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.

Dissemination Grant

This year, Summit was awarded a $75,000 federal charter school dissemination grant by the Colorado Department of Education. The grant extends over a two-year period. The purpose of the grant is to allow Summit staff to develop materials, train teachers, and, in other ways, assist new schools in writing and implementing content standards to promote high student achievement.

Mini-Grants

Five Summit teachers received Foundation for Boulder Valley Schools Mini-Grants of between $500 and $600 to improve classroom education. The five teachers are Wendy Blakemore, Mery Molenaar, Sharon Sikora, Lisa Hanckel and Diana Stough.

Tools for Learning

Over $50,000 was raised in Summit's annual *Tools for Learning* fund drive for parents and families. Gifts ranged from $25 to $2500. A total of 165 families out of 234 contributed. Other families made material contributions of goods and services.

Student Awards

Science

Summit sent 19 projects to the Boulder Valley Regional Science Fair held on March 16, 1999. Summit students won many of the special awards: American Welding Society, Colorado Section (Anna Lindemann); Geneva Pharmaceuticals (Hildur Boylston, one of two first-place winners, and Tim Burchett, one of two second-place winners); McDonalds's Challenge 2000 Awards (Eric Hansford, Mathematics and Computer Science category, Steve Wilson and James Swirhun, Team category, and Sri Bangaru, Health and Behavior Science category); NCAR Atmospheric Science Award (Erik Ogilvie-Wigley); NIST Best Use of Measurement Science Awards (Anna Lindemann and James Norton); Roche Colorado Outstanding Zoology Award (Hildur Boylston). Of the ten middle school level projects that went on and represented the district at the Colorado State Science and Engineering Fair, five, including one team project, were from Summit.

At the Colorado State Science and Engineering Fair, all Summit projects received Grand Awards. In the category Math and Computer Science, first place went to "A French Monk's Puzzle" by Eric Hansford. In the category Physical Science, third place went to "Honey, I Love You" by Joan Meiners. In the category Physical Science, first place went to "Sound Propagation" by James Norton. In the category Zoology, first place went to "The Itsy Bitsy Spider's Web" by Hildur Boylston. In the category Team, third place went to "To Break a Bridge" by James Swirhun and Steve Wilson. The overall highest honors for all categories in the Junior Division went to James Norton. Joan Meiners received a $100 cash award from the American Association of University Women. Hildur Boylston, Eric Hansford, and James Norton were nominated to compete in the 1999 Discovery Young Scientist Challenge. James Norton made it to the semifinals.

Mathematics

George London and Jenny Rood received the highest scores at Summit, and among the highest in the state, on the American Junior High School Mathematics Examination. Twelve students won awards in the American Mathematics Competition: Eric Hansford, Brendan Horton, James Norton, and James Swirhun won first place awards; Galen Bascom, Paul Franz, Ryan Hamerly, and Alisa Yamisaki won second place awards; Elliot Paquette and Steve Wilson won third place awards; and Joshua Karpel and Jonathan Tsui won Certificate of Merit awards.

The Summit MathCounts team placed third in the district competition. The joint Summit-Southern Hills Math Olympiad team competed each month in the International Contest.

Summit received a plaque for participating in the American High School Mathematics Competition for the third year in a row. Jimmy Lynch received the highest score at Summit. Eleven students at Summit received awards for their scores.

Social Studies

Annie Oesterle, James Norton, Meg Kelley, Sarah Josey, George London competed in the state National History Day contest. James Norton won third place in the Individual Paper category, Junior Division.

Two Summit students will represent Summit at the district History Day in March 2000: Caitlin Smith *(Charles Hamilton Houston: The Man Who Killed Jim Crow)* and Alana Ricksheim *(Manifest Destiny, An Idea that Transformed America).*

Alan DeGrand won the Summit Geography Bee and will take the qualifying test for the state Bee.

Spanish

Several Spanish students placed in the National Spanish Examination. At Level 1, Ben Gardner placed second and Max Carey and Ashley Witt placed third. At Level 2, Adam Petherbridge placed first and Summit alumna Katherine Smartt placed second.

Music

Anna Lindemann won second place in the U.S. National Music Teachers Association Young Composers contest for her musical composition, *Garden Suite.*

Art

Elena English and Andrew Crocker exhibited their artwork at NCAR in March and April, and they were honored at a reception at NCAR. Ten Summit students were in the BVSD Art Show at the Boulder Library, May 9-30. They were Elena English, Andrew Crocker, Tim Burchett, Courtney Schultz, Erin Sweeney, Weston Trapp, Rachel Prentice, Nancy Petropavlovskikh, Gilly McGinnis and Tyler Fox.

Student Extracurricular Participation

Summit students participated in interscholastic sports: football, girls' soccer, boys' basketball, girls' basketball, girls' volleyball, wrestling, boys' volleyball, and track. They also engaged in intramural sports: co-ed flag football, 7th grade boys' and girls' basketball, 7th grade girls' volleyball, and 6th-8th grade weightlifting.

Music students gave three vocal and three instrumental performances at school during the year. *Silver Rain* performed at the National Charter Schools Conference in Denver, caroled on the Pearl Street mall in Boulder, and participated in a vocal clinic at Fairview High School. *Silver Rain* and the Summit Chamber Orchestra performed at the Interlocken Hotel in Broomfield. The Jazz Band played in the Jazz Festival at Fairview. Two dress rehearsals and two public performances of *Cinderella* were performed by students directed by Bill Burkhart and Lisa Hanckel.

Teacher Awards

Wendy Blakemore was selected by Citizens' Scholarship Foundation of America to receive a nonrenewable $500 Target Teachers Scholarship from store number 64 in Boulder. She will use it to further her Spanish language and teaching studies this summer.

The Summit Board of Directors presented its third annual Outstanding Teacher Award to math and technology teacher Ray Mueller during graduation on June 11, 1999. 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.

9

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, Social, Hospitality, "Meet & Mingle," Staff Appreciation, Science Fair, National History Day, 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, 1999-2000

- Terms expire May 31, 2000: James Cederberg; Christine Howard, Vice-Chair; Eric Lindemann; Hunter McDaniel, Treasurer
- Terms expire May 31, 2001: Martha Gorman; Barbry Hogue, Secretary; Scott Smith, Chair
- 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. During the 1998-1999 school year, the AAA Committee members were: Bernie Grove, Principal; Amanda Avallone, teacher and curriculum coordinator; Molly Heins, Summit parent; Barbry Hogue, Summit parent and Parent Volunteer Committee chair; Chris Howard, Summit Board of Directors representative; Emily Weigel, Summit parent and Summit representative to the District Accountability and Advisory Committee (DAAC); Kathy Reims, Summit parent; Audrey Block, Summit parent; and Lynn Eisler, Summit parent.

During the 1999-2000 school year, the AAA members are: Bernie Grove, Principal; Amanda Avallone, teacher and Curriculum Coordinator; Molly Heins, Community Representative; Barbry Hogue, Summit Board of Directors representative; Chris Howard, Summit Board of Directors representative; Kathy Reims, Summit parent and strategic planning coordinator; Audrey Block, Summit parent; MaryAnn Dangelo, Summit parent; Cathy Woods, Summit parent; Julie Dotson, Summit parent and DAAC representative; and Debbie Feyh, Summit parent.

Progress on 1998-99 AAA Goals

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

Content standards for all areas have been written. The Social Studies standards are being revised this year, so this goal will be continued.

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

Summit made significant progress toward meeting this goal during 1999. The faculty, under the guidance of the principal and curriculum coordinator, met three times (for a full day in April 1999, a half day in June 1999, and a follow-up session in August 1999) to list key cross-curricular thinking and study skills, identify gaps in the existing curriculum, and propose changes for the 1999-2000 academic year. Two full units — one on research and one on presentations and public speaking — were added to the curriculum, along with numerous lessons on test-taking, summarizing, self-assessment, planning and time management, taking notes, using the dictionary

and other references, active listening, and using a daily assignment planner. As of September 1999, all core classes included instruction in at least one of these interdisciplinary skills.

Goal 3. Create a master plan for professional development to support faculty in realizing Summit's mission (created 1997-98).

This plan was completed in February 1998. Implementation has been successful thus far and this goal will no longer be monitored.

Goal 4. Research alternatives for, and find examples of, assessment tools designed for high-achieving students (created 1997-98).

Available assessment tools were investigated. Last year, the determination was made to give the CTBS / *TerraNova* one grade higher than students' actual grade. 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 5. Relative weaknesses in academic areas, as indicated by CSAP and / or *TerraNova* results, will subsequently be addressed in curriculum and instruction (created 1998-99).

The relative weaknesses in academic areas as indicated by the *TerraNova* administered in March 1998 were in Spelling, Language Mechanics, and Math Computation. These areas were addressed by the staff in 1998-99. The scores shown in Table 11.1 are the median national percentile scores.

Table 11.1. Median *TerraNova* Scores in 1998 and 1999

	1998			1999		
	6th	7th	8th	6th	7th	8th
Language Mechanics	81.5	75.8	80.7	86.0	80.0	84.4
Math Computation	74.0	81.0	88.5	84.2	91.4	85.5
Spelling	80.2	73.3	72.8	69.2	67.4	88.9

In Language Mechanics, there was improvement in all three grade levels. In Math Computation, there was improvement in 6th and 7th grades and a drop in 8th grade. The Mathematics Department is addressing possible curriculum issues identified through the *TerraNova* "Item Analysis" of test questions. Performance in Spelling declined in 6th and 7th grades.

The CSAP in Reading and Writing indicated no weaknesses in the program. The percentage of students proficient or above in these skill areas was 96% and 94%, respectively. Only two students were scored "partially proficient"; none was "unsatisfactory."

The analysis of assessment results is a useful way to check the effectiveness of our curriculum against Summit, district, and state standards, and will be continued.

Goal 6. 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).

The longitudinal study in Table 11.2 (same data in Table 7.3) compares historical actual median CTBS / *TerraNova* scores of Summit's 1999 7th and 8th grade classes.

Table 11.2. Academic Growth as Measured by *TerraNova*

	1999 7th Grade		1999 8th Grade		
	1998	1999	1997	1998	1999
Reading	89.8	87.8	87.2	91.5	90.4
Vocabulary	88.2	86.4	88.7	87.0	88.8
Reading Composite	92.0	91.2	90.8	92.8	92.3
Language	88.9	88.0	88.4	87.8	88.8
Language Mechanics	81.5	80.8	78.5	75.8	84.4
Language Composite	88.5	87.7	87.3	87.2	91.3
Mathematics	92.2	90.3	87.9	84.9	88.7
Math Computation	74.0	91.4	64.6	81.0	85.5
Math Composite	86.6	92.2	80.5	85.0	88.5
Total Score	**91.6**	**92.6**	**90.0**	**91.6**	**92.0**
Science	88.7	89.5	91.1	88.4	91.8
Social Studies	87.0	87.8	86.6	90.5	88.8
Spelling	80.2	67.4	83.3	73.3	88.9

There was significant improvement in math computation and significant deterioration in spelling for Summit's 1999 7th graders, as was the case for 1998 7th graders (1999 8th graders). For Summit's 1999 8th graders, there was significant improvement in language mechanics and spelling. Despite above-grade-level testing in 1999, total scores increased from year to year for Summit's 1999 7th and 8th graders. Goal six was achieved but we will continue to monitor it.

Goal 7. 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. School administrators periodically reviewed these assessments. As part of their formal evaluations, teachers were able to explain to their evaluation teams the assessments they would use and the ways in which they provided useful data about student progress. In addition, some teachers piloted checklists and other record-keeping systems to track student achievement of benchmarks over the course of the year. Others developed "capstone assessments" to measure achievement of numerous benchmarks simultaneously at designated checkpoints (semester- and year-end, for example).

AAA Goals for 1999-2000

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).

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).

Associations

Summit is a member of the Colorado League of Charter Schools (CLCS), a Colorado nonprofit organization serving and supporting its 60 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.

Site Visit by the Colorado League of Charter Schools

The Colorado League of Charter Schools has instituted an accountability program to assess individual charter schools during their third year of operation. A team is sent to the school for two days of observation, conversation, and review of documents in order to help the school determine areas that need attention and whether the school is fulfilling its original mission. Summit was evaluated in Spring 1999.

The independent team, made up of representatives from the local community, other Colorado charter schools, and a Colorado school district, worked from a list of critical questions to be answered by Summit Board members, staff, parents, students, and Summit's accountability committee. Their report was issued after the two-day visit and included responses to all of the critical questions. It was extremely positive and contained helpful observations, commendations, and recommendations. Suggestions were made regarding improvement of the physical facilities, greater commitment to professional development, continuing to align standards with the curriculum and developing appropriate assessments, and developing and enhancing the relationship with the school district and the school board. Each of these suggestions was discussed or acted upon by the Summit community.

The concluding paragraph of the site visit report reflects the overall impressions of the team. "In conclusion, our team truly admired the accomplishments of Summit Middle School in its first two and one half years. The feeling of cohesion and teamwork is very special, and the board, staff and parents are commended for the strong sense of direction and purpose. But more importantly, the school is commended for its very significant accomplishments in overall student achievement and growth. You have a lot of very happy and satisfied students. Summit Middle School is an exceptional school in the eyes of this team. We wish you the best as you continue to progress towards your goals and objectives."

10

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, 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 infrastructure in place, less physical site work was required of volunteers this year.

The Parent Volunteer Connection (PVC) was established by a group of parents who had not been active with Summit before the opening of school. The PVC has been 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. (The PVC has 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, Faculty, Staff, Parent, and Alumni Surveys

During the month of January 2000, 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

Student satisfaction surveys were completed during each student's seventh period class. Student council members, under the guidance of faculty advisor Valerie Koch, had reviewed the survey format and questions, and understand the importance of the student perspective in establishing goals for Summit. Input was obtained from the students regarding satisfaction with the

educational experience; the level of challenge and pace in core courses; expectations for tests, papers and grading; instructional materials; amount of homework; instructors; class size; social events; electives; extracurricular activities; and discipline. Feedback was again sought about coordination of homework across core subjects, an area identified during the opening year as in need of improvement.

Most students (199) fully completed the surveys and many had comments. Almost 96% of the students expressed overall satisfaction with the educational experience at Summit. Regarding the coordination of tests, homework and papers across the core subjects, almost 84% stated that coordination does occur, which is an improvement from last year's 82% and 77% the year before that. Of the 32 students who indicated that homework was not coordinated, responses were evenly distributed among 8th, 7th and 6th graders. Board members and staff will try to identify reasons for the lack of coordination identified by students and improve it. There was noticeable consistency this year in positive student satisfaction with all aspects across the core subjects. It was clear that student satisfaction with class size decreases rapidly as the size increases. Board and staff members will review all of the comments, try to incorporate helpful suggestions, and address any other areas of concern.

Quotes from Students

- I think that the teachers are great and so are the other students!
- Summit meets my needs for wanting to learn.
- The teachers are *great*. Dr. Sikora, Mr. Burkhart, Ms. Frohbieter and Ms. Kapsak are *great!*
- I think the principal and assistant principal are the best.
- Mr. McGarrity is a great teacher. He is funny, and makes you remember things. He adds a lot to Summit. All of the teachers are enthusiastic.
- [Do you feel safe at Summit?] Yes, because I know all the teachers here and kids love one another.
- Ms. Griffiths is *cool!*
- Students are motivated to learn and help enhance my learning experience.
- Ms. Avallone is the best teacher ever.
- Everyone has been supportive and understanding.
- Ms. Avallone, Mr. McGarrity are good. Nice English department, I like English because of them.
- I want to recognize Coach because he's a great guy and I know that we can talk to him about *anything* and he will be there for us. And I have never been like this with any of my teachers. Thanks Coach, you're *great*!
- I liked Cooking and all of the Art classes. I just liked how Summit makes them really entertaining and fun.
- I love the peer group. I just came to Summit this year [as a 7th grader], but everyone welcomed me and accepted me. I hardly knew any of them from before, but already I have a whole ton of friends! Good work Summit!

Faculty and Staff Survey

Fifteen teachers responded to the staff survey in January 2000, 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. In

addition, responding teachers were virtually unanimous in their satisfaction with the school's administration and governing board. 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. Teachers cite shared site constraints as an obstacle to some of these plans.

Quotes from Faculty and Staff

- Students are bright, motivated, courteous, eager to learn, challenging.
- My greatest source of satisfaction at Summit is the room for creativity. I appreciate the potential to mentor teachers and to expand on existing programs. The opportunity to work on grants that potentially are farther-reaching than Summit and the potential to publish work about the successes and failures at Summit intrigue me.
- Working on and revising the social studies curriculum has been the greatest source of professional satisfaction. Establishing a positive relationship with my students has been satisfying both personally and professionally.
- I enjoy the small average class size, the wonderful staff and time to interact with them, and motivated and able students.
- We are listened to and being taken seriously by Bernie (principal) and the Summit Board. I feel truly supported in everything I do. Thanks.

Teachers indicated that they particularly appreciate:

- Academic freedom, student achievement, and of course the staff!
- Being able to work with a fun yet professional and mutually helpful, respectful faculty and staff.
- Watching the students learn and take pride in their achievements.
- Summit graduates coming back who are doing well because of their time at Summit.
- Working with exciting and motivated students; teaching a meaningful curriculum.
- Very collegial faculty and administration. Principal, coach, and curriculum coordinator who are very helpful and trustworthy. Very supportive parents.
- Watching lights illuminate faces as students "get it"; knowing that in some small way I am renewing culture and participating in a school that really makes a difference. I truly believe that teaching is the most important thing I could do with my life. Thank God for Summit. I love my work here.
- The teamwork of the staff and willingness to help whenever you need it.
- The success of my students!
- Seeing my students develop academically — especially those who decide to commit to working hard. By providing challenge and accelerated curriculum, we help those students to make enormous progress, and seeing them gain confidence and take pride in their achievements is my greatest source of satisfaction.

Parent Survey

A total of 95 completed parent satisfaction surveys was 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. All 95 of responding parents expressed overall satisfaction with the educational experience at Summit and almost 99% expressed satisfaction with the level of challenge. Almost 71% of parents indicated that the amount of homework was "about right," a decrease from last year's 79%. Almost 24% indicated there was too much homework, with 4% indicating there was too little. Comments were elicited to show possible reasons for a student's inability to complete homework. These ranged from "procrastination" to "time management" to "forgetting" to "too much homework."

This year's survey again asked parents to rank the preferred methods of communication between school and home. Results showed that the most frequently used methods were the phone, in-person, and e-mail. Parent satisfaction with faculty accessibility was over 94% and with knowledge of student progress over 96%. Of those responding to the question, 100% felt the Principal was accessible and over 95% felt the Board was accessible. As with the student surveys, consistency had improved in the parent surveys, with high levels of satisfaction in all aspects of all core subject courses.

Quotes from Parents

- Summit is a wonderful school. My son's intellectual and emotional growth has been way beyond expectations. Thank goodness for Summit! One of the best things of all is how each student at Summit feels safe. If only every child who wanted to could go to a school like Summit!
- I realize what an exceptional place this really is. Thank you for instilling a love of learning in my children. With all the terrible things that can happen to kids at this age, Summit has provided an environment that says, "it's okay to use your head and not get into trouble." Thanks to all of you!
- Great job to the outstanding teachers on the frontlines and the administrative staff and parents behind the scenes creating an outstanding academic experience for a lot of eager, talented kids. Summit's philosophy is admirable and its execution excellent.
- Summit has great teachers and a caring and challenging learning environment. We are thankful for all the effort that goes into making Summit one of the best schools in Colorado.
- I think Summit really has raised the standard for the entire school district, so has benefited not only our kids but also the broader community.
- Wonderful educational experience for our son; addresses mental, physical and emotional needs of a young teen. Unbelievable staff.
- Thank you for being willing to change teachers and levels where needed! Kudos to Mr. McGarrity and Mr. Burkhart for being especially inspiring teachers.
- Our son had been teased a lot at his elementary school, and after many talks with the principal and his teachers, nothing much every really changed. When it started again at Summit, I told him to talk to Coach Adams and I spoke to Bernie Grove. Well, guess what? I

don't know what magic wand you folks waved but it appears that the teasing has stopped. For some reason, I am not surprised. Thank you from one very happy Summit mom.

- Coach A has the only *real* fitness program I've seen in a public school. Thanks to him, my daughter really is fit (and gives thanks to Coach A when she beats the rest of us!). When she first began, she complained about the workouts. Now she brags about her newfound strength.
- Summit is the best educational choice parents could make for their child. We currently drive daily from Nederland, but if the school relocated to the eastern edge of the county, we'd follow Bernie, Coach A, and these teachers anywhere! Thank you!
- Conferences were great! All teachers knew my child, where she sits, how she participates, what her work is like, her strengths and weaknesses. It was a pleasure.
- The teachers are, in a word, excellent. The principal is professional, approachable and responsive to parents and students, and is highly respected for fully supporting excellence in staff performance and in student performance. What a joy and a blessing it is to be a part of this outstanding school community. It is a tremendous opportunity for the academic and social growth of our daughter. We could not be happier!
- I couldn't be happier with the teachers here at Summit! The individualized attention they provide for our child has enriched his life.
- It has been helpful to have periodic progress reports or updates sent to us informing us of missing work or quizzes plus grades on completed work.
- We're very satisfied with our son's educational experience at Summit so far. Great teachers, great administrators, great Board! Thanks for a great school!
- I'm glad that the Board, teachers, and staff are working on making the transition from 8th grade to high school as smooth as possible and will consider making adjustments so that Summit students are prepared to succeed in high school.
- English curriculum is superb. The new public speaking component of the curriculum is a valuable addition. Dr. Sikora's commitment to helping students with Science Fair projects is awesome. The approach that some teachers use of breaking big projects down into smaller chunks teaches students a very important skill. Keep it up! Do it even more! Thanks.
- The environment and the teachers at Summit are exceptional! The minimum starting salary should be $100,000 for such gems!
- 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 in 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.
- Thanks for providing an environment where learning comes first!

Alumni Survey

In January 2000, an alumni survey was mailed to current 9th graders who graduated from Summit in June of 1999. 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. There were 35 respondents out of 87 surveys sent out. The high schools represented are listed in Table 15.1.

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." In four out of five subject areas, over 75% of students rated the difficulty as about right. Foreign language had a wider range of responses, with 17 students saying the level

was about right. Students were then asked to rate their overall workload in academic courses, from "too much," to "about right," to "too little." Twenty-four students responded "about right," with six students responding "too much" and five students indicating somewhere between "about right" and "too much."

Table 15.1. Students Responding to Alumni Survey

Current School	Number
Fairview High School	21
Boulder High School	10
Monarch High School	1
Alexander Dawson Upper School	1
North Augusta (SC) High School	1
Sammamish (WA) High School	1

Alumni were asked whether they felt they had been appropriately placed in their courses at Summit; the vast majority responded "yes." They were then queried whether they had been appropriately placed in high school courses, with 24 students answering "yes" and 11 responding "no." Of those students who did not feel they were appropriately placed in high school, six comments were regarding Spanish and the other five had no commonality. Students were also asked if they had made any core course changes during their first semester in high school. Twenty-seven students had not and eight replied "yes," with the explanation being that the class was too hard or their overall workload was too much. The question "How were your high school course decisions made?" elicited the overwhelming response of students and parents together, many based on Summit teacher recommendations. In response to the question "Is anything required of you in high school, academically or socially, that you were not prepared for?" many of the Summit students attending one particular high school said they do not get to know other freshmen because they are taking sophomore or higher level courses. 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 information garnered from the alumni surveys is already being used by Summit administrators and faculty to make appropriate placement recommendations for high school courses.

Quotes from Alumni

Is anything required of you in high school, academically or socially, that you were not prepared for?

- Summit is so small and accepting of everyone, the people and social politics of high school are extremely different and hard to get used to. Socially, and otherwise, I miss Summit a lot.
- It's difficult being a freshman in all sophomore classes, but I wouldn't switch to all freshman classes.
- The large building and amount of people.
- The homework load; quantity. Not used to large classes.
- Not really, except you have to work harder on work in high school. Study a lot for tests, too!
- Way not prepared for drug scene.
- Socially, it's nothing like the friendliness at Summit.

What might Summit have done to make the transition to high school easier for you?

- The workload at Summit really got me prepared to balance volleyball, basketball and school work.
- Nothing. It was the perfect environment, even with the heavy workload, because now I know how to be organized and ready for everything.
- I think that Summit did a wonderful job preparing me for high school academically and socially. Good job.
- Increase of homework; not difficulty, but amount.
- For me, the hardest part was changing to such a big school with so many people. But I liked that Summit was small. Now I just want a small high school.
- Maybe have been a little bigger, but other than that, Summit was a great experience that I'm glad I took part in.
- Nothing. The transition was very easy for me. [This was a common response among respondents.]
- Summit should start talking about high school earlier. Maybe it will help kids to know high school possibilities in 7th or even 6th grade.
- Have the kids write essays in more than just English class.
- Talking one-on-one with a high school student in advanced classes would have helped.
- Had a more diverse campus. Following through with promises to listen to students, as in high school.
- I was well prepared in all of my classes, and the transition was fairly smooth.
- I'm not sure that Summit could have done anything to make it easier. My problems have been my own perception of nothing changing and being different, but it has, and that has been a cold slap in the face.
- High school is turning out to be okay, but I really miss the teachers and great friends from Summit. It was a wonderful school and I loved it. Thanks.

District Snapshot Survey

Below is a summary of the survey of Summit parents and staff conducted by the district in February 1999, during Summit's third 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 and February 1998. Although parent and staff satisfaction was quite high in 1997, it was even higher in 1998 and higher still in 1999. Among the middle schools in the district, Summit was by far the highest rated based on parent responses. In terms of overall average of parent responses, Summit was the highest rated among all schools in the district, including elementary schools.

Table 15.1. Weighted Average Results of Parents / Staff in District Snapshot Survey

	1997	1998	1999
Student Learning			
1. I am satisfied with the academic achievement of my student	3.4 / 3.6	3.6 / 3.6	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. 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
Category Average	**3.6/3.6**	**3.7/3.7**	**3.8/3.9**
Learning Environment			
4. I believe my student's school allocates its resources to support student learning	3.6 / 3.3	3.7 / 3.4	3.9 / 3.9
5. There is a clear and positive approach to discipline in my student's school	3.3 / 2.4	3.7 / 2.9	3.7 / 3.4
6. My student has a positive attitude about his / her school	3.5 / 3.4	3.7 / 3.3	3.9 / 3.7
7. My student's school provides a safe environment for learning	3.5 / 3.2	3.7 / 3.5	3.8 / 3.9
Category Average	**3.5/3.1**	**3.7/3.3**	**3.8/3.7**
Shared Decision Making and Collaboration			
8. At my student's school, staff and administrators work collaboratively	3.3 / 2.3	3.6 / 3.1	3.8 / 3.8
9. There is a fair and representative shared decision-making process at my student's school	3.3 / 2.2	3.5 / 2.8	3.8 / 3.4
10. At my student's school, the shared decision-making process works effectively	3.3 / 2.1	3.5 / 2.8	3.7 / 3.4
Category Average	**3.3/2.2**	**3.5/2.9**	**3.8/3.5**
Communication			
11. My student's teachers keep me informed about my student's progress	3.1 / 3.3	3.4 / 3.6	3.6 / 3.9
12. School staff members keep me informed about what is going on at the school	3.2 / 2.7	3.5 / 3.1	3.6 / 3.6
13. I receive timely responses to questions and requests for information from my student's school	3.4 / 2.8	3.6 / 3.1	3.7 / 3.8
Category Average	**3.2/3.0**	**3.5/3.3**	**3.6/3.7**
Effective Management/Leadership by the Principal			
14. The principal demonstrates personal and professional commitment to school improvement	3.5 / 3.4	3.6 / 3.5	3.8 / 3.8
15. The principal uses effective problem solving and decision-making skills	3.1 / 2.4	3.6 / 3.5	3.8 / 3.7
16. The principal of my student's school is an effective leader	3.1 / 2.3	3.6 / 3.4	3.7 / 3.8
Category Average	**3.2/2.7**	**3.6/3.4**	**3.8/3.8**
Grand Average	***3.4/2.9***	***3.6/3.3***	***3.8/3.7***

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Policies

Policy Development

Summit developed the policies necessary for the operation of the school as reported in its 1996-97 Annual Report. Summit continues to refine and clarify policies, and to issue additional policies as necessary. For instance, we have modified our enrollment policy for students who reapply after being waitlisted the previous year, and the Summit Board has adopted a new Gifted and Talented Education policy.

For the most part, this year has focused on consistent implementation of existing policies rather than formulating or revising policies. A description of Summit's policies that appeared in our previous Annual Report is included here for the reader's convenience.

Summit has in place the following policies and procedures, which replace specified district policies and procedures (district policy numbers are in parentheses):

1. Procedure: School Building Administration (CF)
2. Job Description: Principal (CFA*R)
3. Procedure: Personnel Records (GBL)
4. Procedure: Professional Staff Positions (GCA)
5. Procedure: Professional Staff Development Opportunities (GCL)
6. Policy: Evaluation of Professional Staff Teachers (GCN1; also: AFC1 AFC1R and GCN1R)
7. Procedure: Evaluation of Professional Staff Teachers (GCN1; also: AFC1 AFC1R and GCN1R)
8. Administrative Staff Evaluation Procedures: Principal (GCN2; also AFC2)
9. Policy: Discipline and Dismissal of Teachers (GCPD)
10. Procedure: Discipline or Dismissal of Professional Staff (GCPD1E)
11. Procedure: Non-school Employment (GCQA / GCQAA)
12. Procedure: Professional Research and Publishing (GCQB)
13. Procedure: Support Staff Development Opportunities (GDL)
14. Procedure: Evaluation of Support Staff (GDN; also AFD)

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 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 issues have been minor. Parent satisfaction with discipline is very high.

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Facilities and Budget

Site

In 1999-2000, Summit continued to share a site with Southern Hills Middle School. On February 24, 2000, the Boulder Valley Board of Education voted to relocate Summit to the Majestic Heights site in south Boulder for 2000-2001. This relocation was approved with Summit's input, cooperation, and consent. Initially, this relocation is for one year. The site presents challenges inherent in the use of an elementary school facility for a middle school program. For example, it lacks a suitable gymnasium, auditorium, music program facilities, and science labs. Summit is optimistic that, with cooperation from the school district, these issues can be provisionally addressed for the first year. The district is working with Summit on certain improvements to the science rooms and other items.

The Summit community looks forward to the opportunity to thrive at its new site. The site has an excellent location and access from two directions and is convenient to public transportation. It has nice outside areas and classrooms of ample size. Summit believes that the site can accommodate up to 400 students, and has pending a request for an increase in its enrollment cap for 2000-2001 from 250 to 300 students. These students could be accommodated in the facilities presently located on the site.

Summit also believes that the site has potential to be a long-term solution. Long-term use of the facility would require a long-term commitment from the district sufficient to justify substantial investment by Summit in improvements to the site. Summit looks forward to discussions with the district about making this potential a reality. Summit continues to explore the possibility of a non-district site as a long-term solution, most likely shared with Peak to Peak Charter School.

Summit would like to take this opportunity to thank all of those at Southern Hills — students, teachers, administrators, office staff, custodians, lunchroom staff, and parents — who have worked with us over the past four years. We have enjoyed our relationship with them and we wish them tremendous continued success. Despite the intrusion of political issues, on a day-to-day basis, the shared site has worked quite well. Summit believes that the real lesson from this experience is that sharing of a building does work if district and building leadership are dedicated to making it work.

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 the 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.

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 will be revised based on final legislative action, which determines actual revenues. This revised budget will be provided to BVSD by June 30.

Revenues

For the 1999-2000 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 10.1.

Table 10.1. Operating Revenues

Per-Pupil Operating Revenue	85%
Budget Elections	10%
Fundraising	2%
Carryover from 1997-98	2.7%
Activity Fees	0.3%

In addition to direct revenue, Summit received shared usage of the Southern Hills Middle School 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 PPOR and a 100% concession of Capital/Insurance Reserve funding. The total amount of this concession for 1999-2000 was over $232,000.

Fundraising

Summit *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, reference books, and compensation to retain key faculty members.

Expenses

Table 10.2 shows Summit's operating budget allocations for 1999-2000, including all adjustments approved by the Summit Board as of this writing.

Table 10.2. Operating Expenses

Teachers' Salaries	55%
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 1999-2000 is $34,700. 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 the 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 0.6% 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 $111,000 into the 1999-2000 fiscal year. Approximately $75,000 of this balance was either directly or indirectly restricted to cover salaries and encumbrances that were incurred during 1997-98, leaving an unrestricted carry-forward of $36,000. Summit has no outstanding liabilities or debts at this time.

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Faculty, Staff, and Board of Directors

Summit's strength as a school depends on the quality of its faculty. In early 1996, the teacher selection committee received over 100 applications from all across the country in response to job postings at the BVSD Education Center, ads in area newspapers and on the Internet, and word of mouth.

The selection process, then and now, consists of an initial screening of application materials by the selection committee chair. The entire selection committee then scrutinizes complete materials of qualified applicants. The applicants with the strongest credentials are invited to teach a demonstration class to Summit student volunteers while being observed by committee members. Over 50 different Summit students participate in the teaching demonstrations.

After a demonstration class, the students provide their insights and opinions in response to a set of questions presented by selection committee members while other committee members answer a candidate's questions and discuss details of the Summit curriculum. Following the students' input, a candidate is interviewed for 45 minutes. After the candidate has left the interview, the committee discusses the students' comments and their own impressions of the candidate.

The files of recommended teachers are submitted to the Summit Board of Directors, meeting in executive session, for discussion and approval. 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 enthusiasm 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, written under the leadership of former Summit teacher Chris Koch, to become a Designated Agency for the Alternative Teacher License Program was approved by the Colorado Board of Education. The program was first implemented in the 1997-98 school year and has continued through subsequent academic years. 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 to the students in our community. Currently on Summit's staff are teachers with a variety of backgrounds, including a marine researcher, several college instructors, a professional musician/conductor and a professional artist, as well as professional teachers. 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.

Some instructional programs and activities that have been developed for Summit's Alternative Teacher Training Program are: Classroom Management, BVSD Curriculum Council Meetings, Standards-Based Curriculum and Instruction, Reading and Writing Across the Curriculum, Critical Thinking, Learning Styles, Assessment Techniques, Using Assessment Results, 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, Amanda Avallone, mentor teachers, Summit's principal, and a representative from the university setting. Candidates select a primary mentor teacher from their field who teaches in a secondary school. 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. This year, two teachers, Ingrid Fotino and Ray Mueller, are taking advantage of the program.

Teacher and Administrator Profiles

Here are profiles of the Summit teachers and administrators for the 1999-2000 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 1. Highest Academic Degree for Faculty Members (Including Part-Time Faculty)

B.A./B.S.	M.A./M.S.	Ph.D./Ed.D.
6	13	2

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 (Assistant Principal, 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.

Amanda Avallone (English, Curriculum Coordinator), 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. Now in her fourth year at Summit, she divides her time between classroom teaching and working with Summit staff on curriculum and instruction, as well as assisting the principal in a variety of administrative capacities.
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. 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. Also 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 her home state of 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 has returned to school to obtain her Colorado school counseling certificate. She is in the Counseling Psychology and Counselor Education program at the University of Colorado at Denver, and expects to graduate in May 2000. 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.

Wendy Blakemore (Spanish), 1997

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

As part of her college career, Ms. 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, Ms. 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, Ms. 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 camp in Minnesota. She recently had a personal educational review at *El Centro Bilingüe* in Cuernavaca, Mexico.

Ms. 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 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

Master of Music in Conducting, University of Southern California; M.A. Composition, University of Pittsburgh; B.A. University of Arizona.

Mr. Burkhart serves as Music Director of the Lyric Theatre's Children's Opera Program and as Resident Conductor of the Lyric Theatre. He is also Director of the Ghost Ranch Chamber Orchestra, New Mexico. He is a Ph.D. candidate in music at the University of Colorado.

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 trilevel, multigenerational training orchestra for string players. He has appeared as guest conductor for orchestras throughout the country.

In addition to his orchestral experience, Mr. 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. Mr. Burkhart has enjoyed wide operatic experience as Assistant Conductor of the Arizona Opera Company and Conductor of Operas at the University of Southern California.

Mr. Burkhart's vision for Summit Music includes an active musical theater group; vocal, string, chamber music, and jazz ensembles; and composition classes.

Stephanie Donaton (Science, Health, Physical Education), 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 recently 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.

Dr. Fotino lives in Boulder with her husband. Her two daughters graduated from Boulder High. She loves sport 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, Science), 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.

Derica Griffiths (Social Studies), 1999

M.A., Teaching English to Speakers of Other Languages; B.A., Secondary Education with emphasis in History, Arizona State University.

Ms. Griffiths was born and raised in Phoenix, Arizona. From 1992 to 1996, she lived and taught in Bucharest, Romania, as a Peace Corps volunteer. She also taught social studies for grades 8-12 at the American School of Bucharest, which serves the diplomatic and foreign business community. Upon her return to the U.S., Ms. Griffiths completed an M.A. in Teaching English to Speakers of Other Languages (TESOL) at the School for International Training in Vermont. She recently moved to Boulder from Missoula, Montana, where she was the program coordinator for the Soros grant to the University of Montana. There, she also taught academic English in the University's intensive English program for foreign students.

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.

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 (German, Mathematics), 1996

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

As the daughter of an Air Force captain, Ms. Koch had the opportunity to travel early in life. When she was three years old, her father was stationed in Stuttgart, Germany. Thus began a seven-year stay for Ms. Koch, where she learned to speak German through friends, school, and with the help of her parents. She attended German schools from kindergarten through fifth grade and lived in three different towns.

After returning to the United States at age eleven, Ms. Koch proceeded to forget her German in the course of a few short weeks. She did not have the opportunity to speak German again until she took courses in college. She decided to go back to Germany, and spent one year studying at the University of Regensburg and traveling throughout Europe.

Summit Middle School has provided Ms. Koch an excellent opportunity to share what she knows with young students. She brings enthusiasm and action to her classroom. She believes that language is a living, active being, which needs to be fed a diet of practice and humor. She engages her students in practical activities to learn the language.

Tanya Lenz (English), 1999

M.A., English Literature, University of Colorado, Boulder.

Ms. Lenz recently spent an interesting year exploring the fast-paced business of entrepreneurial Internet technology and electronic commerce before deciding to "indulge her love of the written word: learning, teaching, and spending time with youth of all ages." When she doesn't have her nose buried in a book, she is usually running, swimming, biking, hiking, skiing, or otherwise enjoying the Colorado mountains and sunshine. She also enjoys jazz and classical music, baking and cooking, road racing, volunteering in the community, laughing and talking with friends, learning to play chess, and exploring new horizons (and summits!) of all sorts. She cannot imagine a better venue from which to celebrate the birth of a new millennium.

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 hiking, skiing, and swing dancing with his wife, Caryn, with whom he lives in Northglenn.

Mery Molenaar (Science), 1997

M.S. Physics, University of Colorado, Boulder; B.S. Mathematics and Physics Education, Hogeschool Holland, The Netherlands.

After graduating from a four-year teacher training college, Ms. Molenaar taught mathematics and physics at several secondary schools in her native Netherlands. In 1991, she was offered the challenging opportunity to teach at a public secondary school in Tanzania, Africa. She worked at Msalato Girls' Secondary School in Dodoma as a science and mathematics teacher until 1993.

In 1994, Ms. Molenaar moved to Colorado to work on a graduate degree in physics at the University of Colorado at Boulder. During her studies, she taught introductory physics recitation and laboratory classes. To further develop and improve her teaching skills, Ms. Molenaar participated in the Graduate Teaching Program and received a Graduate Teaching Certificate in 1996 from the Graduate School. Also in 1996, Ms. Molenaar was awarded the Outstanding Teaching Assistant designation by the American Association of Physics Teachers.

Ms. Molenaar is delighted about the abundance of teaching resources available in Boulder County, and tries to bring speakers from different fields of science to her classes. She is dedicated to keeping her classes alive with demonstrations, hands-on experiments, and examples from daily life.

Ms. Molenaar has a strong interest in using technology in her classroom. During her teacher training, she specialized in the use of computers in science and mathematics education. Her future goals include implementing computerized experiments, simulations, and use of the Internet in her science classes.

Ray Mueller (Mathematics, Computer Science), 1997

B.A. Philosophy, University of Colorado, Boulder.

Mr. Mueller began working with youth in Boulder in 1982 with the YMCA School-Age Child Care Program. As Director of Youth Services at the YMCA, he helped build a successful school year and summer camp program that served 20 elementary and middle schools throughout Boulder County. During his time with the "Y," he was instrumental in establishing programs for kids from birth through the teenage years, including the Scott Carpenter Skate Park.

Mr. Mueller studied computer science at the University of Colorado in Boulder, and has programmed in PASCAL, BASIC, and C++. He is also familiar with UNIX and Windows platforms. He has worked as a consultant for the Colorado Department of Education, and has volunteered with the Boulder Community Network and Project Self Sufficiency, providing technical assistance and public orientation classes about the Internet and the World Wide Web. Mr. Mueller was the recipient of the 1998-99 Summit Outstanding Teaching Award.

With his wife, Michelle, and his daughter, Journey, Mr. Mueller enjoys hiking, camping, cross-country skiing, and snorkeling.

Sharon Sikora (Science), 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, Metro, CU-Denver, Community College of Denver, and the 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.

Susan Weissberg (Resource Specialist), 1996

M.A. and B.A. Learning Disabilities, University of Northern Colorado.

Growing up with the mountains, Aspen, and the great weather kept Ms. Weissberg in Colorado as she finished her undergraduate studies in special education. Her first postgraduate job was doing something that came naturally: skiing. Being the first woman on the Aspen ski patrol paid the bills, but soon Ms. Weissberg landed her first "real" job as a teacher in Bigfork, Montana. Working in Bigfork was a great teaching experience, and she found the Flathead Valley "full of the nicest people and prettiest scenery on earth."

Four years later, Bigfork's population dropped from 900 to 899 when Ms. Weissberg left for a position with the Dept. of Defense, teaching English as a second language to U.S. military dependents in Germany. The opportunity to learn about the German culture and to work with a cross-section of the American population not often encountered in small towns such as Aspen or Bigfork, while gaining further teaching experience, will always be a fond memory for her. To gain more expertise in the field of learning disabilities, Ms. Weissberg returned to the University of Northern Colorado where she earned her master's degree.

Ms. Weissberg has worked in the field of learning disabilities for fourteen years and is even more enthusiastic about her area of expertise than when she began. She says, "The students with whom I am working at Summit Middle School are very bright but have different styles of learning. We do not regard these differences as true 'disabilities' in the popular sense of the word, but rather as cognitive styles which students need to understand in order to maximize their great potential. Many very accomplished people — such as Thomas Edison, Hans Christian Anderson, and John F. Kennedy — had such different learning styles." Ms. Weissberg is excited to be at Summit and feels that it gives her the opportunity to work with an outstanding group of students, parents, and faculty. She is available to all students for consultation.

Moira Woolsey (Cooking), 1996

Certificate of Education and Home Economics, University of Bristol, England.

Ms. Woolsey teaches two popular electives at Summit and provides many types of administrative and teacher support. She enjoys traveling and has lived in England, Scotland, California, New York, and Colorado.

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