APPENDIX A

Article for Reference: Lieberman, Gerald (2002). CLOSING THE ACHIEVEMENT GAP: Using the Environment as an Integrating Context for Learning. State Education and Environmental Roundtable.

APPENDIX B

Project-based Learning Methodology

After Chard and Katz.

Project Based Learning has the potential to increase a student's feeling of responsibility for, and control over, her own learning. Students who are allowed to define their own learning goals will be more engaged in learning. You can involve students in this process by helping them create their project assignment or project checklist. This pre-project activity gives students valuable experience in planning, and in setting their own goals and standards of excellence.

By working with learners to create individual project checklists, you and your students engage in a valuable discussion of learning goals, student interests, student and teacher expectations, personal strengths and weaknesses, and problem solving strategies. Such discussions can help build more authentic projects, in that they reflect student interests and skills. Using individualized checklists also allows students to pursue and experiment with different strategies. Allowing students to choose personal approaches to problems simulates real-world tasks in which multiple views and methods compete in the search for a solution.

Individualizing Project Based Learning may be used with all learners: to give structure to those who desire it, flexibility to those who crave it, or to allow time for building skills that are personally challenging. There are obvious applications for students. Individualized checklists not only help learners target certain skills, but they also help improve metacognition, self-regulation, and motivation.

Designing her own checklist will help a student think about what skills she already has, what skills she needs to improve, and what skills she may still need to acquire to complete a project. Together, you may also choose to hold a student responsible for setting a timeline and generating assessment criteria. How will the items on a student's checklist be weighted? Will the product be the goal? Or will assessment be integrated with the project, checking progress during the project in *addition* to the final product? When a student helps define her own goals and monitor her own progress, she becomes more self-regulated with special needs, but individualizing instruction in this manner benefits all students.

We believe that the following is an excellent format to follow for project learning, and would intend to use it for MCCS.

Three Phases

(Taken from Dr. Sylvia Chard's www.project-approach.com website)

Projects, like good stories, have a beginning, a middle, and an end. This temporal structure helps the teacher to organize the progression of activities according to the development of the children's interests and personal involvement with the topic of study.

During the preliminary planning stage, the teacher selects the topic of study (based on the children's interests, the curriculum, the availability of local resources, etc.). The teacher also brainstorms her own experience, knowledge, and ideas and represents them in a topic web. This web will be added to throughout the project and used for recording the progress of the project.

Phase 1: Beginning the Project

The teacher discusses the topic with the children to find out the experiences they have had and what they already know about it. The children represent their experiences and show their understanding of the concepts involved in explaining them. The teacher helps the children develop questions their investigation will answer. A letter about the study is sent home to parents. The teacher encourages the parents to talk with their children about the topic and to share any relevant special expertise.

Phase 2: Developing the Project

Opportunities for the children to do field work and speak to experts are arranged. The teacher provides resources to help the children with their investigations; real objects, books, and other research materials are gathered. The teacher suggests ways for children to carry out a variety of investigations. Each child is involved in representing what he or she is learning, and each child can work at his or her own level in terms of basic skills, constructions, drawing, music, and dramatic play. The teacher enables the children to be aware of all the different work being done through class or group discussion and display. The topic web designed earlier provides a shorthand means of documenting the progress of the Phase 3.

Phase 3: Concluding the Project

The teacher arranges a culminating event through which the children share with others what they have learned. The children can be helped to tell the story of their project to others by featuring its highlights for other classes, the principal, and the parents. The teacher helps the children to select material to share and, in so doing, involves them purposefully in reviewing and evaluating the whole project. The teacher also offers the children imaginative ways of personalizing their new knowledge through art, stories, and drama. Finally, the teacher uses children's ideas and interests to make a meaningful transition between the project being concluded and the topic of study in the next project.

This summary outline has explained some of the common features of projects, but each project is also unique. The teacher, the children, the topic, and the location of the school all contribute to the distinctiveness of each project.

Five Structural Features of the Project Approach

Discussion, Fieldwork, Representation, Investigation, and Display

Why are these features of project work described as 'structural features'?

"On the one hand, structure involves constraint as guidelines are established. Children do not simply do whatever they like. On the other hand, structure provides children with a framework that helps them understand what is expected of them. In this way structure can be liberating as well as constraining. For example, children can approach their work in unique and flexible ways while working within the general framework. This allows different perspectives to be recognized in the effort to reach a shared goal: the successful project." The Project Approach, Bk 2, Scholastic.

See table on next page

Features Chart

	Phase 1 Beginning	Phase 2 Developing	Phase 3 Concluding
Discussion	-Sharing prior experience and current knowledge of the topic.	-Preparing for field work and interviews -Reviewing field work -Learning from secondary sources	-Preparing to share the story of the project. Review and evaluation of the project.
Field Work	-Children talking about their experience with their parents.	-Going out of the classroom to investigate a field site -Interviewing experts in the field or in the classroom.	-Evaluating the project through the eyes of an outside group
Representation	-Drawing, writing, construction, dramatic play, etc. to share prior experience and knowledge.	-Brief field sketches and notes. -Drawings, painting, writing, math diagrams, maps, etc. to represent new learning.	-Condensing and summarizing the story of the study to share the project with others.
Investigation	-Raising questions on the basis of current knowledge.	-Investigating initial questions. -Field work and library research. Raising further questions.	-Speculating about new questions.
Display	-Sharing representations of personal experiences of the topic.	Sharing representations of new experience and knowledge. -Ongoing record of the project work.	Summary of the learning throughout the project.

APPENDIX C

Appendix C-1: SOLV Service Learning

We would anticipate using elements of the SOLV model described below (SOLV.org) to develop a variety of service learning projects. Students will compile service learning portfolios and participate in one or two "community celebrations" during the school year where they would present their work.

SOLV program for developing service-learning projects:

R Oregon K-6

SOLV offers *R Oregon*, a step by step program guide that helps students in elementary grades plan and complete a service-learning project. ***R Oregon* is aligned with Oregon's Career-Related Learning standards**; a matrix showing this alignment is included in the planning guide.

R Oregon helps students to "**Read**" their community and plan how they can help improve it; "**Research**" their service project and connect it to what they are learning in the classroom; "**Reflect**" on what they are learning about themselves and about working with others during the project; "**Recognize**" their success and thank everyone who helped; and "**Report**" on their accomplishments.

Appendix C-2: Example from SOLV

THEME: WATER AROUND US
PROJECT: WILDLIFE TUG O WAR
GRADE: 3/4

OBJECTIVE:
To recognize the danger of six-pack rings to area wildlife.

MATERIALS NEEDED:
Un-cut six-pack rings; two long pieces of rope.

ADVANCE PREPARATION:
Remember when you tried to put on your shoes from last year but they were too tight? Did they hurt your feet?
Animals don't have to wear shoes, but sometimes they find themselves wearing something that is too tight and uncomfortable. Sometimes it even kills them
Take this six-pack ring for instance. (Hold up a six-pack ring.) How can this plastic cause major problems for animals? Let's put ourselves in their shoes.

PROCEDURE:

1. Ask for two volunteers. Hand each one a six-pack ring. Tell them to break it using only their hands. If they can't, tell them to try together to break it. Ask the children if they think that a deer, sea gull, duck or otter would stretch a six-pack ring.

2. Fold two six-pack rings together lengthwise into four three-packs. Tie a piece of rope to each end and play tug-of-war, adding two children at a time. How many people did it take to break a ring? Can wildlife win in a tug-of-war?

3. Discussion:
    - If you were a fish, bird or seal and you had a six-pack ring around your neck, how could you free yourself? (Rub or scratch it off.)
    - If you didn't free yourself, what could happen? (You could strangle or starve.)
    - What can you do to prevent six-pack rings from entangling wildlife? (Cut the loops of each ring with scissors and dispose of properly.

4. Field trip with community partner (Benton County Soil and Water Conservation District, local farmer, OSU researcher): to nearby area to look for six-pack rings and other trash that endangers or hinders wildlife.

See map of subject on next page.

Theme: **WATER AROUND US** **Project:** Wildlife Tug-of-War **Grades: 3/4**

Content Standard or Benchmark						
Science	**Mathematics**	**English**	**History**	**Geography**	**Economics**	**Social Science Analysis**
Unifying Concepts and Processes Identify examples of change **(3)** *Life Science* Describe changes to the environment that have caused some species to become endangered **(5)** *Scientific Inquiry.* Asks questions and make predictions that are based on observations and can be explored through simple investigations **(5)** Design an investigation to answer questions or check prediction **(5)** Collect, organize and summarize data from investigations**. (5)** Analyze, interpret and summarize data from investigations **(5)** *Science in personal and Social Perspectives* Describe how daily choices of individuals taken together affect global resource cycles, ecosystems and natural resource supplies **(ccg)**				Explain how physical environments are affected by human activities and present opportunities, constraints and hazards for people. **(5)**		Writing Write in a variety of modes (expository) and forms (reports) appropriate to audience and purpose **(5)**

Extensions

Enrichment Activity:	Design an investigation to compare the strengths and photodegradable six-pack rings that have been exposed to sunlight for varying lengths of time. Ask the students to write a report on their results and to share it with a younger student audience and parents.
Community Action Strategy:	Ask students to survey the local school or community and make a graph showing the kinds of litter found. Brainstorm methods to reduce this litter. Work together to implement the plan and monitor how well it works. Report results to the principle or to the mayor
Character Education Link:	Responsibility, Citizenship
Career Education Link:	Teamwork, Problem solving

ccg) common curriculum goal **(cs)** content standard **(3)** 3rd grade benchmark **(5)** 5th grade benchmark

APPENDIX D

APPENDIX D-1

GUIDELINES FOR ART INTEGRATION AND EVALUATION

Smithsonian Institution

1. CREATE, PRESENT AND PERFORM: Apply ideas, techniques and processes in the arts. Students will be expected to
a) "Create, present and perform works of art."
b) "Apply the use of ideas, techniques and problem solving to the creative process and analyze the influence that choices have on the result;" Projects will involve student choices on how to represent various images using different techniques (drawing, painting, use of color, schematic versus detailed, etc.)
c) "Express ideas, moods and feelings through the arts and evaluate how well a work of art expresses one's intent;" Projects will allow students to interpret and evaluate their moods and feeling with respect to the study subject (water, birds, etc) and represent these through art work.
d) "Evaluate one's own work, orally and in writing." Self-improvement and criticism will be encouraged in final projects and portfolios, where students will evaluate their own work to choose the artwork that best represents their feelings and interpretations and representations. The project reports may include aspects of discussion of the art.

2. AESTHETICS AND CRITICISM: Respond to and analyze works of art, based on essential elements, organizational principles and aesthetic criteria.
a) Apply critical analysis to works of art.
b) Understand the interrelationships among art forms.
Aesthetics and Criticism may or may not be included in project-based learning, depending on the teacher and the nature of the project. Nonetheless, these standards will not be central to the offered arts program.

HISTORICAL AND CULTURAL PERSPECTIVES: Understand the relationship of works of art to their social, historical and cultural contexts, and the influence of the arts on individuals, communities and cultures:
a) Understand how events and conditions influence the arts.
b) Distinguish works of art from different societies, time periods and cultures.
c) Understand how the arts can reflect the environment and personal experiences within a society or culture, and apply to one's own work.
d) Understand the place of the arts within, and their influences on, society.

APPENDIX D-2

Example of Place-based project integrating Arts and Science

Modified from: River of Words, Watershed Explorer Curriculum: a multidisciplinary Approach to bringing Nature and Art to the Classroom by Robert Hass (riverofwords.org) and the *Smithsonian Guide for Educators***.**

Birds of a Feather

Flight has long fascinated people, from the legend of Icarus (1) to the story of vision and perseverance and experimentation around the Wright Brothers.

The background information provided for educators includes:
how birds are unique among animals, that they are the most varied of the vertebrates, how they are distributed in the world, what factors determine a birds range and migratory habits, the ecological role of birds (eating insects, including pests, pollination, distribution of seeds), and the beauty and symbology of birds (see reference above, p. 112 – 115). The teacher can choose the themes most relevant to the other topics being taught at the time and the level of the class.

Many links can be drawn to the local environment. The range and migratory habits make a clear link to students' personal observation and knowledge of birds. The nearby Finley wildlife refuge is an obvious choice for a field trip to undertake bird counts and learn about the migration and nesting habits of Canada geese, for example.

On or after the trip the students will make a drawing or painting that in some way involves birds (close up, in a landscape, specks in the sky…)

The field experience will include the collection of feathers. These will then be arranged in various ways for the students to create schemes of classification, thus honing critical thinking and systematization skills.

For appropriate grade level (3 and up), students examine 6 different kinds of feathers (rachis, semiplume, filoplume, down, bristle, powderdown) with a jeweler's loupes (see above reference

p. 116-117). The **objective** is that the students will learn to observe carefully and think about how the form relates to functions, a basic principle of zoology.

The students then draw in detail a whole feather and parts of a feather with barb and barbules. The drawing exercise helps the students become careful observers at a variety of scales and to think of function at a variety of scales.

The earlier interpretive art work and the detailed scientific drawings can then be viewed in the context of renderings of birds in art, and the meanings of classical and art historical representations of birds (such as the eagle- leadership, the vulture- death, the dove- love, the peacock- vanity), providing a segue to literature (Aesops fables, the story of Icarus, etc).

Based on the *Smithsonian Institution Guide for Educators*, parallel questions are to be asked of art works. Each art work (painting, print, drawing, photo) can be examined keeping in mind the focus and the analysis:

Focus:

What do I know about it?

How do I feel about it?

What would I like to know?

Analysis:

Is it the same of different from things around it?

Based on what I observed, why does it have the characteristics?

These are coupled with **Exploration**: What do I observe (color, texture, background, shape, structure, form, size) and **Connection:** Why should I care? Why did the artist care? Why was it selected fro a museum or publication?

By integrating the "scientific observational framework" with the "artisitic observational framework" the student finds connections. Finding different avenues of engagement is critical to appealing to multiple intelligences and consequent variable learning styles among students.

APPENDIX E

Project Learning in Grades K-5 currently in the Corvallis School District

The purpose of this appendix is to articulate the type and level of project learning presently pursued in district schools, so as to make clear the differences between these programs and that proposed for Muddy Creek Charter School.

We fully support the efforts these schools are making in scientific inquiry learning, but it is important to understand that MCCS is not simply a "more intensive" version of what is currently offered in 509J. Muddy Creek proposes to use an immersion-style program, where students are immersed through project-based learning – experiential, multi-disciplinary, largely constructed from their own interests and questions – in the rural, agricultural place that is south Benton County.

Projects are not to be confused with project – based learning. Most projects in the district are presently found under the umbrella of the 4-H Wildlife Stewards Program. There are three schools: Hoover, Jefferson and Lincoln that have varying degrees of participation in this program. While these projects use scientific inquiry to address some aspect of habitat creation and care, and make use of other disciplines in the completion of the projects, they are not the extensive, comprehensive, place-immersion program envisioned for MCCS. The "projects" are not project-based learning, where the project serves as the program framework and all subjects are brought to bear during every afternoon for a number of weeks.

The programs found at Jefferson, Hoover and Lincoln are summarized below. The information given here was obtained from the parent volunteers and teachers overseeing these programs.

Jefferson School

Jefferson has had a well-established creek restoration and habitat study on Dixon Creek. The 2006-2007 school year is a rebuilding one, to grow the volunteer base, primarily (the volunteer that had guided this project for a number of years is no longer involved), and to set a course for future plans. About 40 students prepared presentations for the Wildlife Stewards Summit held on April 21. These students work on their own time, during lunch, with the aid of two teachers and some parent volunteers.

Hoover School

Hoover began its Hoover Habitat Heroes in 2005/2006. As they put it, their goal is to offer "nature-based scientific inquiry" projects, primarily around the development of a creek restoration plan and to construct an interpretive trail around Dixon Creek. Participation has been across all grade levels and classrooms, but involvement varies substantially. Some students have had a tour of the habitat. More involved classrooms have worked on projects for the Wildlife Stewards Summit, participated in classes on habitat and mapping, invasive species and fish trapping and data collecting. One of the primary parent volunteers estimates that about _ of the student population has primarily been involved, with no more than eight field experiences so far this year.

Lincoln School

Lincoln is working to develop a habitat trail project, with all classes offering some amount of participation. Lincoln will also be hosting the Wildlife Stewards Summit this year. Actual involvement in the project thus far has primarily been from two elementary classes and the middle school program. It is expected that all classes will participate in some form this spring, be it planting, trail maintenance, signage (Spanish-immersion classes will translate signs into Spanish), etc.

In addition, following the program established at Inavale School, one third grade class is working regularly on a science-inquiry project. This class is studying forests, spending about three hours per week, with one field study day per month.

In summary, the MCCS program is pedagogically unique in that project-learning is at the core of the curriculum and involves students every day and at multiple levels from project development to assessment. This is profoundly different from what is offered in the district at the present time. The interest in field projects at several schools, however, indicates that there is a market for exporting project modules from MCCS to elsewhere in the district.

APPENDIX F

Identification of primary instructional materials and any major supplementary materials to be used in core academic content areas if known.

The MCCS has not chosen any primary or major instructional materials. MCCS plans to use state and district adopted curriculum that match the state standards in literacy and mathematics. While we will favor having science and humanities curriculum texts that are aligned with those used elsewhere in the district, the school's mission will require some different approaches and certainly supplemental materials will be needed.

Much of the specific project based curriculum will be developed using the incentive grant funding. There are many models of science and humanities projects available through published and web sources. In Oregon, the non-profit SOLV and 4H (through the OSU Extension) have project-based curricula aligned to the state standards. We will also use the Chard and Katz guidelines for project-based learning (e.g., Appendix B). There are also several charter schools in Oregon with place-based science approaches. Some of these schools have been visited and others will be visited for the possibility of gaining knowledge and partnering.

APPENDIX G

G-1: Description of the student assessment system: How student academic progress will be measured at each grade level and any specific assessment instruments that will be used in addition to OSAT.

G-2: Project scoring rubric- "Chocolate and Candy", Emerson Schools

G-3: Project Benchmark map- "Fashion", Emerson School

Appendix G-1:
Description of the student assessment system: How student academic progress will be measured at each grade level and any specific assessment instruments that will be used in addition to OSAT.

The student's academic progress will be measured and reported according to the following table:

Subject	Assessment	Frequency of Reporting	Source or Methods	Grade Level
Pre-Reading	Concepts of Print	Beginning & End of Year	Marie Clay	1 and students below grade 1.
Reading	Frequency Words	Quarterly	Dolch Word List	1-6
Reading	Frequency Words	Quarterly	Lois A. Bader Sight word list	Students above 8th grade level.
Reading	Reading level	Quarterly	Lois A.Bader	Students above 8th grade level.
Reading	Reading level	Quarterly	Developmental Reading Assessment. Pearson Education Inc.	1-6
Reading	Developmental continuum	Beginning and year end	First Steps by Heinemann	1-6
Writing	Developmental continuum	Beginning and year end	First Steps by Heinemann	1-6
Writing	Work samples	Quarterly	ODE scoring method. Teacher/volunteer committee scoring.	1-6
Spelling	Developmental continuum	Beginning and year end	First Steps by Heinemann	1-6
Math	Unit pre and post tests	On Going	ODE adopted math curriculum	1-6
Math	Tests	Quarterly	ODE practice bench mark tests.	3-6

Reading assessment starts with Concepts of Print. The MCCS will use this assessment to measure students' progress as they move into reading. The assessment will be useful for students below first grade level. The primary reading assessment tool will be the Developmental Reading Assessment by Pearson Education Inc. This tool includes reading miscue analysis and fluency. Dolch sight word lists will be used as a secondary assessment.

Students reading above their grade level in grades 1 through 6 will be assessed using Bader Reading and Language Inventory and Readers Passages Pkg. (4th Edition) by Lois A. Bader. This will ensure an assessment method for higher achieving students.

Writing will be assessed using First Steps Developmental Continuum at the beginning of school as a starting point and at the end of the school year to mark improvement. The progress of students will be assessed quarterly by scoring work samples using the ODE benchmark scoring method. A committee consisting of teachers and volunteers will be trained in the scoring method.

Spelling will be assessed using First Steps Developmental Continuum at the beginning of school as a starting point, and at the end of the school year to mark improvement. The progress of students will be assessed with weekly spelling tests from curriculum yet to be determined.

Primary math assessment will be OSAT practice tests. Practice tests will be taken every quarter. In addition, pre and post tests from the ODE approved math curriculum will be used to monitor quality of instruction and student progress.

DIBELS and NWEA MAP assessment tools were recommended by the Corvallis School District. The Muddy Creek Charter School could not evaluate these at this time. Their suitability for the Muddy Creek Charter School Program will be evaluated when the next phase of grant money is available. These applications could replace or augment the above assessment tools.

Appendix G-2

Chocolate & Candy
Project Scoring Rubric

Name: _____ Date: _____

	Teacher		Self	
Phases I & II (Brainstorming, Questions, Field Studies & Experts)	**Score:**			
• You collected at least 5 pieces of new information.	No	A little	Yes	Great!
• At least two other people's ideas and/or opinions were documented and identified.	No	A little	Yes	Great!
• Field Studies and expert visits were well documented.	No	A little	Yes	Great!
• You wrote specific and appreciative thank you notes.	No	A little	Yes	Great!
• You participated appropriately in all activities.	No	A little	Yes	Great!
Chocolate Tasting Writing				
• Your paper gave your reader a clear and interesting sense of your chocolate.	No	A little	Yes	Great!
• You included a variety of creative adjectives, nouns and adverbs in your writing.	No	A little	Yes	Great!
• All punctuation, spelling, and grammar were correct.	No	A little	Yes	Great!
• Your final draft was neat and aesthetically pleasing.	No	A little	Yes	Great!
• You turned in all drafts on time.	No	A little	Yes	Great!
Chocolate Fair Booth				
Information:				
• Includes at least 7 facts	No	A little	Yes	Great!
• Information is easily available	No	A little	Yes	Great!
• Facts & info are appropriate and interesting	No	A little	Yes	Great!
• All facts and info are on topic	No	A little	Yes	Great!
• All writing is in final draft form	No	A little	Yes	Great!
Design & Aesthetics:				
• Display is attractive	No	A little	Yes	Great!
• Everything is neatly assembled	No	A little	Yes	Great!
• Represents chocolate	No	A little	Yes	Great!
• All work is clearly displayed	No	A little	Yes	Great!
• Booth is well-organized	No	A little	Yes	Great!
• Includes details	No	A little	Yes	Great!
• Booth is colorful & aesthetically pleasing	No	A little	Yes	Great!
Incorporated Lifeskills				
• Caring	No	A little	Yes	Great!
• Problem-solving	No	A little	Yes	Great!
• Organization	No	A little	Yes	Great!
• Responsibility	No	A little	Yes	Great!
• Common-sense	No	A little	Yes	Great!
• Patience	No	A little	Yes	Great!
• Flexibility	No	A little	Yes	Great!
• Cooperation	No	A little	Yes	Great!
• Effort	No	A little	Yes	Great!
• Pride	No	A little	Yes	Great!
• Curiosity	No	A little	Yes	Great!
• Perseverance	No	A little	Yes	Great!

Emerson School, 2006/2007

Appendix G-3:

Benchmarks Addressed in the Fashion Project

Humanities/Social Studies
History:
Interpret data and chronological relationships presented in timelines and narratives.
Order events found in historical narratives.
Calculate time and infer information from timelines.
Identify cause & effect relationships in a sequence of events.
Understand how history can be organized using themes, geography or chronology.
Gather, use, and document information from multiple sources.
Identify characteristics of an event, issue or problem, suggesting possible causes and results.
Economics:
Understand that all economic choices have costs and benefits, and compare options of costs & benefits.
Know that whenever a choice is made, there is a cost.
Identify and give examples of consequences of economic trade-off & opportunity cost.
Recognize that nations interact through trade.
Identify the characteristics of money and the advantages of its use over barter.
Distinguish between barter & money and how they facilitate the exchange of goods.
Geography:
Know and use basic map elements to answer geographic questions or display geographic information.
Use maps and charts to interpret geographic information.
Identify the names of the continents and their relative size, shape, and location
English/Language Arts
Listen to and Read Informational Text
Read to perform a task
Informational Text: Demonstrate General Understanding -Recognize and/or summarize sequence of events, main ideas, facts, supporting details, and opinions in informational and practical selections. -Identify key facts and information after reading several passages or articles on the same topic.
Write for different purposes and to a specific audience or person, adjusting tone and style as appropriate.
Write multi-paragraph compositions that: • Engage readers with an interesting introduction. • Present important ideas or events using organizational structures, such as sequential or chronological order, cause-and-effect, or similarity and difference. • Develop new ideas in separate paragraphs. • Provide details and examples to support ideas. • Provide transitions to link paragraphs. • Offer a concluding paragraph that summarizes important ideas and details.
Use transitions (however, therefore, on the other hand) and conjunctions (and, or, but) to connect ideas.
Use a variety of descriptive words, demonstrating awareness of impact on audience.
Science
Physical Science
Distinguish among solids, liquids, and gases; Identify unique properties of each state of matter.
Recognize that heating and cooling cause changes in states of matter.

Health
Explain how healthful eating habits can lead to wellness.
Describe how media, cultural and family influences encourage healthy eating practices.
Math
Statistics: Determine the median for a set of data and understand what each statistic does & does not indicate about the data.
Probability: Determine the probability of a single event.
Data Analysis and Predictions. Analyze data from tables and bar graphs using mean, median, mode, and range, and draw conclusions.
Collect & Display Data: • Conduct experiments and simulations to determine experimental probability of different outcomes. • Represent and interpret data collected from probability experiments. • Understand basic concepts of sampling (e.g., larger samples yield better results, the need for representative samples).
The Arts
Identify personal preferences and their relationship to artistic elements.
Identify distinguishing features of works of art and their historical and cultural contexts.
Describe how historical or contemporary events influenced or influence works of art.
Create, present and/or perform a work of art, using experiences, imagination, observations, artistic elements and technical skills to achieve desired effect.

Emerson School, 2006/2007

APPENDIX H

Appendix H-1: Facility Statement.

In the event that the charter school applicant (Muddy Creek Charter School, MCCS) has not secured a facility at the time of submitting a public charter school proposal, MCCS agrees that:
If given any type of approval (conditional or unconditional) MCCS promises to provide to the school district liaison at least sixty (60) days before the intended date to begin operation of the public charter school, a suitable facility, occupancy and safety permits and insurance policies with minimum coverages required by the school district in school board policy and administrative regulation LBE that sets forth the requirements and processes for the school board in reviewing, evaluation and approving a public charter school.

If the charter school applicant (MCCS) fails to provide proof of ability to secure a facility and all necessary occupancy and safety permits and insurance that is required by the school district as a condition of approval by the due date, it will withdraw its application to begin operation of a public charter school for the upcoming school year.

By signing this document, I affirm that I am authorized to make the promises stated above on behalf of the charter school applicant, Muddy Creek Charter School. I understand that failure to fulfill the conditions listed above will result in an approval becoming void and will automatically revoke any type of approval that the school board previously granted to the charter school applicant.

NAME_____DATE_____

Appendix H-2: Plans and procedures for child nutrition programs.

MCCS plans to contract for meal service and free and reduced meal program application processing with the Corvallis School District. MCCS is plans to create a health and wellness policy that meets or exceeds the requirements of the Corvallis School District health and wellness policy.

The MCCS will provide a staff member or volunteer that has a food handler's license from the State of Oregon to serve meals and snacks. The MCCS will also provide setup and cleanup personnel.

MCCS is interested in the possibility of establishing a school garden to use as a learning forum regarding nutrition and the sources of food.

APPENDIX I

Operations Budget

The MCCS presents ONE budget for 90% of the ADMw and 60 students, K-5. The MCCS 5 year budget estimate shows a financially sound school. In the previous proposal, alternative budgets were presented for 80% of the ADMw and 80 students and in supplementary materials, a budget for 25 students. In each case, the budgets were balanced with some carry over year to year. The factor in balancing the budget is the amount of students contributing to the overhead of administrating the school. The contribution to carry over in the scenario presented here grows to $46,703. In the future, the unpredictable increase in expenses such as PERS or inflation will require staffing adjustments.

The budget does not include Federal Incentive Grant money. The intention of this budget is to show feasibility and sustainability using only ADMw funds. The Federal charter school grant money will be used for building the educational program. Certainly, some fundraising by parents will take place. However, no fundraising is included in the budget.

In the 5 year line item budget, Personnel Expenses are in one large category called Payroll Expense. The details of the Payroll Expenses are presented in the summary and estimate assumption section prior to the line item budget.

The 5 year budget:

Summary Table:

Item	Year 1	Year 2	Year 3	Year 4	Year 5
ADMw	6,017.00	6,197.51	6,383.44	6,574.94	6,772.19
Number of sub days	10	10	10	10	10
Bookkeeper	0.25	0.25	0.25	0.25	0.25
Instructional Assist.	1	1	1	1	1
Custodian	0.25	0.25	0.25	0.25	0.25
FTE admin assist.	1	1	1	1	1
FTE administration	0.25	0.25	0.25	0.25	0.25
FTE teachers new pers	1.5	1.5	1.5	1.5	1.5
FTE teachers old pers	1	1	1	1	1
Enrollment Kindergarten	10	10	10	10	10
Enrollment Grades 1-8	50	50	50	50	50
Enrollment Grades 1-9	0	0	0	0	0
Total number of students	60	60	60	60	60
Student population growth rate		0%	0%	0%	0%
Contingency	$9,171.63	$12,304.04	$ 9,805.12	$ 7,568.94	$ 7,854.16
Starting Balance	$ -	$ 9,171.63	$21,475.67	$31,280.80	$38,849.74
Ending Balance projection	**$9,171.63**	**$21,475.67**	**$31,280.80**	**$38,849.74**	**$46,703.90**

Revenue Estimates:

Revenue is based on the charter school receiving 90% of the ADMw. The estimate of $6,017 is the 2007-2008 ODE financial estimates for Corvallis School District. The ADMw rate was inflated 3% per year in the following years. Any reduction in the revenue projection would result in less staff or reduced salaries.

Enrollment estimates:

Enrollment estimates are set to 60 students.

PERS Estimate:

The PERS rates are predicted for public schools to be 17.64% for Tier 1/Tier 2 (old PERS) and 19.92% for OPSRP (new PERS). We chose to keep the same PERS rate as the 2006-2007 year because no other logic can prevail. We would hope the ADMw would rise to cover any PERS

increase in future years. Any increase in PERS without a coinciding increase would result in less staff or reduction in salaries. PERS cost were increased by 10% every year for inflation

Insurance Estimate:

Insurance estimates are based on rates from two charter schools with similar size staffs. The coverage includes moderate dental and medical plans for employee and family members. Typical co-payments for the medical are $20 per visit. Insurance will be restricted to employees working 40 hours per week. We did not factor inflation. Past history shows that these costs fluctuate independent of the inflation rate. In addition, not all employees will have families. Any inflation should be negated by the unknown family status of employees.

Utilities estimate:

The utilities estimates are an average of the Kings Valley Charter School and the Inavale School in the Corvallis District. Estimation is very difficult until a facility is chosen. The two schools the estimate is based on cover the size range necessary for the proposed school. Utilities costs were inflated by 10% per year.

Rental Agreement:

Rental prices are estimated based on discussions with potential landlords in the area.

Personnel assumptions:

	Monthly cost	**year**
Insurance family	$ 1,200.00	$14,400.00
Insurance employee spouse	$ 800.00	$ 9,600.00
Insurance employee	$ 350.00	$ 4,200.00
PERS old	17.64%	
PERS New	19.92%	
SS and Medicare	7.65%	
Unemployment Oregon	3.00%	
Student days	174	
Number days teachers and admin	190	
School weeks	39	

Salaries:

	Year 1	Year 2	Year 3	Year 4	Year 5
Teacher new pers	$ 28,000.00	$ 28,280.00	$ 28,562.80	$ 28,848.43	$ 29,136.91
Teachers old pers	$ 36,000.00	$ 36,360.00	$ 36,723.60	$ 37,090.84	$ 37,461.74
Administrator	$ 40,000.00	$ 40,400.00	$ 40,804.00	$ 41,212.04	$ 41,624.16
Admin assist	$ 10.00	$ 10.10	$ 10.20	$ 10.30	$ 10.41
Custodian	$ 10.00	$ 10.10	$ 10.20	$ 10.30	$ 10.41
Instructional Assist.	$ 10.00	$ 10.10	$ 10.20	$ 10.30	$ 10.41
Substitute teacher	$ 15.00	$ 15.15	$ 15.30	$ 15.45	$ 15.61
Bookkeeper	$ 15.00	$ 15.15	$ 15.30	$ 15.45	$ 15.61

Salaries have been inflated at 1%.

Payroll details for year 5:

	Pay rate	FTE	Base salary	PERS	SS and med	Insurance	Total Cost
Teacher new pers	$29,136.91	1.50	$43,705.37	$ 7,800.26	$ 4,654.62	$21,600.00	$ 77,760.25
Teachers old pers	$37,461.74	1.00	$37,461.74	$ 9,307.66	$ 3,989.68	$ 9,600.00	$ 60,359.08
Administrator	$41,624.16	0.25	$10,406.04	$ 1,857.21	$ 1,108.24		$ 13,371.49
Admin assist	$ 10.41	1.00	$15,817.18	$ 2,822.95	$ 1,684.53	$14,400.00	$ 34,724.66
Custodian	$ 10.41	0.25	$ 3,954.30	$ 705.74	$ 421.13		$ 5,081.17
Instructional Assist.	$ 10.41	1.00	$14,485.21	$ 2,585.23	$ 1,542.67	$ 9,600.00	$ 28,213.11
Substitute teacher	$ 15.61	1.00	$ 1,248.72	$ 222.86	$ 132.99		$ 1,604.58
Bookkeeper	$ 15.61	0.25	$ 8,116.71	$ 1,448.62	$ 864.43	$ -	$ 10,429.76
						Total	**$ 231,544.10**

All years were calculated the same way as year 5. Estimates for other years are available.

The 5 year budget:

	Year 1	Year 2	Year 3	Year 4	Year 5
Income					
1510 · Earnings on investments	0.00	0.00	0.00	0.00	0.00
1610 · Lunch program income	0.00	0.00	0.00	0.00	0.00
1910 · Rentals	0.00	0.00	0.00	0.00	0.00
1920 · Donations & Contributions	0.00	0.00	0.00	0.00	0.00
3101 · ADMw School Support	297,841.50	306,776.75	315,980.05	325,459.45	335,223.23
3200 · Implementation Grant	0.00	0.00	0.00	0.00	0.00

3201 · II-Implementation Grant	0.00	0.00	0.00	0.00	0.00
3210 · Planning Grant	0.00	0.00	0.00	0.00	0.00
4501 · Title I	0.00	0.00	0.00	0.00	0.00
4505 · Federal Lunch Program	0.00	0.00	0.00	0.00	0.00
4900 · Miscellaneous Income	0.00	0.00	0.00	0.00	0.00
5200 · Transfer of Funds	0.00	0.00	0.00	0.00	0.00
Total Income	297,841.50	306,776.75	315,980.05	325,459.45	335,223.23
Expense					
1000 · Instruction					
1100 · Regular Programs					
1111 · Primary, K-3					
111-310 · Instruction Services	0.00	0.00	0.00	0.00	0.00
111-322 · Repairs and Maintenance	0.00	0.00	0.00	0.00	0.00
111-340 · Travel	74.25	74.25	74.25	74.25	74.25
111-410 · Consumable Supplies	700.00	772.33	772.33	772.33	772.33
111-420 · Textbooks	0.00	0.00	0.00	0.00	0.00
111-460 · Non-Consumable Supplies	0.00	0.00	0.00	0.00	0.00
111-470 · Computer Software	0.00	0.00	0.00	0.00	0.00
111-480 · Computer Hardware	34.30	34.30	34.30	34.30	34.30
111-541 · Equipment-New	120.05	120.05	120.05	120.05	120.05
111-542 · Equipment Replacement	0.00	0.00	0.00	0.00	0.00
1111 · Primary, K-3 - Other	0.00	0.00	0.00	0.00	0.00
Total 1111 · Primary, K-3	928.60	1,000.93	1,000.93	1,000.93	1,000.93
1112 · Intermediate Programs 4-5					
112-310 · Instruction Services	1,000.00	1,000.00	1,000.00	1,000.00	1,000.00
112-322 · Repairs and Maintenance	378.44	378.44	378.44	378.44	378.44
112-340 · Travel	68.00	68.00	68.00	68.00	68.00
112-410 · Consumable Supplies	772.33	772.33	772.33	772.33	772.33
112-420 · Textbooks	0.00	0.00	0.00	0.00	0.00
112-460 · Non-consumable Supplies	1,196.95	1,196.95	1,196.95	1,196.95	1,393.90
112-470 · Computer Software	48.75	48.75	48.75	48.75	48.75
112-480 · Computer Hardware	0.00	0.00	0.00	0.00	0.00
112-541 · Equipment-New	0.00	0.00	0.00	0.00	0.00
112-542 · Equipment Replacement	0.00	0.00	0.00	0.00	0.00
1112 · Intermediate Programs 4-5 - Other	0.00	0.00	0.00	0.00	0.00
Total 1112 · Intermediate Programs 4-5	3,464.47	3,464.47	3,464.47	3,464.47	3,661.42
1100 · Regular Programs - Other	0.00	0.00	0.00	0.00	0.00
Total 1100 · Regular Programs	4,393.07	4,465.40	4,465.40	4,465.40	4,662.35
1121 · Secondary Middle School Program					
121-310 · Instructional Services	0.00	0.00	0.00	0.00	0.00
121-340 · Travel	0.00	0.00	0.00	0.00	0.00
121-410 · Consumable Supplies	0.00	0.00	0.00	0.00	0.00
121-420 · Textbooks	0.00	0.00	0.00	0.00	0.00
121-460 · Non-consumable supplies	0.00	0.00	0.00	0.00	0.00
121-480 · Computer Hardware	0.00	0.00	0.00	0.00	0.00
121-541 · Equipment-New	0.00	0.00	0.00	0.00	0.00

1121 · Secondary Middle School Program - Other	0.00	0.00	0.00	0.00	0.00
Total 1121 · Secondary Middle School Program	0.00	0.00	0.00	0.00	0.00
1131 · High School Program					
131-310 · Instructional Services	0.00	0.00	0.00	0.00	0.00
131-340 · Travel	0.00	0.00	0.00	0.00	0.00
131-410 · Consumable Supplies	0.00	0.00	0.00	0.00	0.00
131-420 · Textbooks	0.00	0.00	0.00	0.00	0.00
131-460 · Non-consumable supplies	0.00	0.00	0.00	0.00	0.00
131-480 · Computer Hardware	0.00	0.00	0.00	0.00	0.00
131-541 · Equipment-New	0.00	0.00	0.00	0.00	0.00
1131 · High School Program - Other	0.00	0.00	0.00	0.00	0.00
Total 1131 · High School Program	0.00	0.00	0.00	0.00	0.00
1000 · Instruction - Other	0.00	0.00	0.00	0.00	0.00
Total 1000 · Instruction	4,393.07	4,465.40	4,465.40	4,465.40	4,662.35
2000 · Support services					
2220 · Library/Media Center					
222-410 · Supplies	0.00	0.00	0.00	0.00	0.00
222-430 · Library Books	0.00	0.00	0.00	0.00	0.00
222-460 · Non-Consumable Supplies	0.00	0.00	0.00	0.00	0.00
2220 · Library/Media Center - Other	0.00	0.00	0.00	0.00	0.00
Total 2220 · Library/Media Center	0.00	0.00	0.00	0.00	0.00
2240 · Instructional Staff Development					
240-312 · Instructional Improvement	0.00	0.00	0.00	3,000.00	3,000.00
2240 · Instructional Staff Development - Other	0.00	0.00	0.00	0.00	0.00
Total 2240 · Instructional Staff Development	0.00	0.00	0.00	3,000.00	3,000.00
2310 · School Board					
231-300 · Purchased Services	723.00	723.00	723.00	723.00	723.00
231-340 · Travel	0.00	0.00	0.00	0.00	0.00
231-381 · Audit Services	2,920.00	2,920.00	2,920.00	2,920.00	2,920.00
231-385 · Management Services	0.00	0.00	0.00	0.00	0.00
231-410 · Consumable Supplies	308.13	308.13	308.13	308.13	308.13
231-460 · Non-Consumable Supplies	0.00	0.00	0.00	0.00	0.00
231-640 · Dues and Fees	265.33	265.33	265.33	265.33	265.33
231-651 · Liability Insurance	2,000.00	2,000.00	5,000.00	6,000.00	7,000.00
2310 · School Board - Other	0.00	0.00	0.00	0.00	0.00
Total 2310 · School Board	6,216.46	6,216.46	9,216.46	10,216.46	11,216.46
2410 · School Administration					
241-300 · Purchased Services	81.00	81.00	81.00	81.00	81.00
241-310 · Instruction Services	890.90	890.90	890.90	890.90	890.90
241-340 · Travel	74.76	74.76	74.76	74.76	74.76
241-351 · Telephone	1,360.10	1,360.10	1,360.10	1,360.10	1,360.10
241-353 · Postage	192.03	192.03	192.03	192.03	192.03
241-354 · Advertising	604.60	604.60	604.60	604.60	604.60
241-355 · Printing	3,512.72	3,506.72	4,006.72	4,006.72	4,006.72
241-399 · Other Purchased Service	619.81	619.81	619.81	619.81	619.81
241-410 · Consumable Supplies	2,320.00	2,320.00	2,320.00	2,320.00	2,320.00

241-412 · Community Outreach	0.00	0.00	0.00	0.00	0.00
241-414 · Staffing	0.00	0.00	0.00	0.00	0.00
241-416 · Consulting	523.00	523.00	523.00	523.00	523.00
241-460 · Non-consumable supplies	678.52	678.52	678.52	678.52	678.52
241-470 · Computer Software	29.99	29.99	29.99	29.99	29.99
241-480 · Computer Hardware	599.98	599.98	599.98	599.98	599.98
241-541 · Capital Outlay	0.00	0.00	0.00	0.00	0.00
241-640 · Dues and Fees	0.00	0.00	0.00	0.00	0.00
2410 · School Administration - Other	0.00	0.00	0.00	0.00	0.00
Total 2410 · School Administration	11,487.41	11,481.41	11,981.41	11,981.41	11,981.41
2500 · Support services-business					
2520 · Fiscal services					
252-351 · Postage	0.00	0.00	0.00	0.00	0.00
252-380 · Accounting Services	0.00	0.00	0.00	0.00	0.00
252-410 · Supplies	0.00	0.00	0.00	0.00	0.00
252-460 · Non-consumable supplies	0.00	0.00	0.00	0.00	0.00
252-640 · Dues and Fees	0.00	0.00	0.00	0.00	0.00
2520 · Fiscal services - Other	0.00	0.00	0.00	0.00	0.00
Total 2520 · Fiscal services	0.00	0.00	0.00	0.00	0.00
2540 · Plant services					
2542 · Care and upkeep of buildings					
254-322 · Repairs and Maintenance	1,099.68	1,099.68	1,099.68	1,099.68	1,099.68
254-325 · Electricity	13,000.00	14,300.00	15,730.00	17,303.00	19,033.30
254-326 · Fuel	10,500.00	11,550.00	12,705.00	13,975.50	15,373.05
254-328 · Garbage	566.87	566.87	566.87	566.87	566.87
254-329 · Other property services	0.00	0.00	0.00	0.00	0.00
254-410 · Supplies	1,412.12	1,412.12	1,412.12	1,412.12	1,412.12
254-460 · Non-consumable supplies	110.74	110.74	110.74	110.74	110.74
254-541 · Equipment	0.00	0.00	0.00	0.00	0.00
254-640 · Dues and Fees	20,000.00	20,000.00	20,000.00	20,000.00	20,000.00
254-653 · Property Insurance	2,000.00	2,000.00	4,000.00	5,000.00	6,000.00
2542 · Care and upkeep of buildings - Other	0.00	0.00	0.00	0.00	0.00
Total 2542 · Care and upkeep of buildings	48,689.41	51,039.41	55,624.41	59,467.91	63,595.76
2543 · Care and upkeep of grounds	400.00	400.00	400.00	400.00	400.00
2540 · Plant services - Other	0.00	0.00	0.00	0.00	0.00
Total 2540 · Plant services	49,089.41	51,439.41	56,024.41	59,867.91	63,995.76
2500 · Support services-business - Other	0.00	0.00	0.00	0.00	0.00
Total 2500 · Support services-business	49,089.41	51,439.41	56,024.41	59,867.91	63,995.76
2000 · Support services - Other	0.00	0.00	0.00	0.00	0.00
Total 2000 · Support services	66,793.28	69,137.28	77,222.28	85,065.78	90,193.63
4150 · Building Improvements					
415-520 · Building Improvements					
415-530 · Property Improvements	650.74	650.74	650.74	650.74	650.74
415-520 · Building Improvements - Other	0.00	0.00	0.00	0.00	0.00
Total 415-520 · Building Improvements	650.74	650.74	650.74	650.74	650.74
415-541 · Equipment	318.25	318.25	318.25	318.25	318.25

4150 · Building Improvements - Other	0.00	0.00	0.00	0.00	0.00
Total 4150 · Building Improvements	968.99	968.99	968.99	968.99	968.99
4160 · Janitorial Services					
416-113 · Salaries	0.00	0.00	0.00	0.00	0.00
416-211 · PERS-Employer contribution	0.00	0.00	0.00	0.00	0.00
416-212 · PERS Employee	0.00	0.00	0.00	0.00	0.00
416-220 · Social Security	0.00	0.00	0.00	0.00	0.00
416-231 · Workers Compensation	0.00	0.00	0.00	0.00	0.00
416-232 · Unemployment	0.00	0.00	0.00	0.00	0.00
416-410 · Supplies	0.00	0.00	0.00	0.00	0.00
4160 · Janitorial Services - Other	0.00	0.00	0.00	0.00	0.00
Total 4160 · Janitorial Services	0.00	0.00	0.00	0.00	0.00
6560 · Payroll Expense Clearing Acct	216,514.53	219,901.04	223,518.25	227,390.33	231,544.10
Total Expense	288,669.87	294,472.71	306,174.92	317,890.50	327,369.07
	9,171.63	**12,304.04**	**9,805.12**	**7,568.94**	**7,854.16**

APPENDIX J

STATE AND FEDERAL MANDATES/SPECIAL EDUCATION

J-1. DESCRIPTION OF HOW THE PUBLIC CHARTER SCHOOL WILL DELIVER SERVICES AND INSTRUCTION TO ENGLISH LANGUAGE LEARNERS (ELL)

J-2. DESCRIPTION OF HOW THE PUBLIC CHARTER SCHOOL WILL MEET THE UNIQUE LEARNING NEEDS OF STUDENTS WORKING ABOVE AND BELOW GRADE LEVEL INCLUDING BUT NOT LIMITED TO TALENTED AND GIFTED STUDENTS.

J-3. PLANS AND PROCEDURES FOR COUNSELING SERVICES.

Appendix J-1:
Description of how the public charter school will deliver services and instruction to English Language Learners (ELL).

Due to economies of scale, ELL requirements are a challenge for very small schools. The MCCS prefers the Corvallis School District retain primary responsibility for ELL testing, curriculum and evaluation. MCSS understands that Corvallis School District would keep the additional weight per ELL student. MCCS will staff at least one ELL endorsed teacher.

If the Corvallis School District is not able or interested in the above relationship, the MCCS will adopt the Oregon Department of education standards and curriculum. MCCS will staff at least one ELL endorsed teacher. MCCS will keep the additional funding per ELL student. The funding will be used to provide testing, curriculum and evaluation of these students. Some portion of the incentive grant funding will be used to purchase curriculum.

Appendix J-2:

Description of how the public charter school will meet the unique learning needs of students working above and below grade level including but not limited to talented and gifted students.

Talented and gifted students will be challenged in the standard curriculum through differentiation of assignments and instruction. No special pull outs or staffing will be provided for talented and gifted students. The direct instruction portion of the educational program will be individualized to ensure students are leveled and working at the right challenge level. The projects and other place-based activities naturally challenge talented and gifted students with open ended activities that make the educational objectives relevant.

The Muddy Creek Charter School is prepared for 20% to 30% of enrolling students to be behind grade level in reading. A similar percentage will also be behind in mathematics. The general approach to meet the needs of these students is described below:

Intervention Strategy

The small class size and intensive assessment strategy will ensure students are identified at the earliest possible moment. The MCCS will devote significant time and resources to closing the grade level gaps for students behind in Reading and Math. One highly qualified (as defined by the No Child Left Behind Act) instructional aide will carry out remediation activities under the supervision of the head teacher or other qualified classroom teacher. A schedule is presented at the end of this section that shows 13 students serviced by an instructional assistant for 20 hours a week.

The students will likely have some common groupings to increase the efficiency of the instructional aide's time. In this schedule students are grouped in 1 on 1 or 1 on 2 situations. The schedule as presented also has room to see more students on an

individualized basis. Although the evaluation committee showed no value for volunteers working with academically low achieving students, MCCS development team believes properly trained volunteers can augment this schedule. The primary methods and tools that will be used are Neurological Impress Method (NIM), Great Leaps, and Explode the Code.

The primary reading intervention will be the Neurological Impress Method (NIM). This method has proven results to increase fluency, comprehension, accuracy, voice, decoding and meta-cognitive skills. NIM was developed to teach brain-damaged soldiers to read again after World War II. NIM has been used successfully with those who had strokes and with others who had traumatic brain damage. NIM is based on two strategies: the first, to stop guessing and avoid phonics in the beginning, and the second, to practice enthusiastic and energetic reading. The concept is to impress (we could almost substitute embed or imprint) the correct way of reading onto the reader who has yet to master the process.

The method involves two people, a good reader acting as the model and imprinter, and the student, whose neural networks are to be trained by repetition and exposure to the printed page, the graphemes on the page and their associated lexemes or names.

In addition to the NIM intervention, MCCS will use a reading program called "Great Leaps". Great Leaps is divided into three major areas: (1) Phonics: developing and mastering essential sight-sound relationships and/or sound awareness skills; (2) Sight Phrases: mastering sight words while developing and improving focusing skills; and (3) Reading Fluency: using age-appropriate stories specifically designed to build reading fluency, reading motivation, and proper intonation.

Explode the Code curriculum will be used to provide systematic and explicit phonic instruction for students missing these skills. Students will build skills in phonological and phonemic awareness, decoding and encoding, vocabulary, comprehension, fluency and writing.

In the original document MCCS has committed to train staff in the Orton-Gillingham approach. This intervention will be for students with more severe reading issues.

Mathematics interventions will be based on the following objectives:

A. Avoid memory overload by assigning manageable amounts of practice work as skills are learned.
B. Build retention by providing review within a day or two of the initial learning of difficult skills, and by providing supervised practice to prevent students from practicing misconceptions and "misrules."
C. Reduce interference between concepts or applications of rules and strategies by separating practice opportunities until the discriminations between them are learned.
D. Make new learning meaningful by relating practice of sub-skills to the performance of the whole task, and by relating what the student has learned about mathematical relationships to what the student will learn about mathematical relationships.
E. Reduce processing demands by pre-teaching component skills of algorithms and strategies, and by teaching easier knowledge and skills before teaching difficult knowledge and skills.
F. Require fluent responses.
G. Ensure that skills to be practiced can be completed independently with high levels of success.

Appendix J-3:

Plans and procedures for counseling services.

Due to economies of scale, counseling services are a challenge for very small schools. The MCCS prefers the Corvallis School District retain primary responsibility for counseling services.

If the Corvallis School District is not able or interested in the above relationship, the MCCS will make use of local resources, such as Old Mill Center and Department of Health Services, for the most extreme cases.

APPENDIX K

LETTERS OF SUPPORT FROM DISTRICT TEACHERS, OSU FACULTY AND OTHER COMMUNITY MEMBERS

K-1 Hannah Gosnell

K-2 Lori Greenfield

K-3 Richard Meneghelli

K-4 Paul Bradley

K-5 Elizabeth Jordan

K-6 Chris Highfield

K-7 Linda Hentsch

K-8 Larry Enochs

APPENDIX L

VISION FOR AN OUTDOOR EDUCATION AND RESEARCH CENTER

Field-based, experiential learning is an important part of lasting learning. MCCS is committed to such deep and integrative educational experiences and we can envision extending the experience more broadly to other students in the district during the school year and possibly, in the way of summer programs, to students and teachers around the state. The most intense field science immersion program in the district is the 6th grade outdoor school, recently facing budgetary problems. A District field station would allow for field experiences throughout a student's education in 509J.

One vision is to create a Field Science Center in collaboration with MCCS by establishing a permanent research laboratory and field study area at and around the site of Inavale School, or another suitable site. Proximity to private and public lands used in a myriad of ways, from vast grass seed and Christmas tree farms to small growers, livestock, forestry, and a wildlife refuge, to name a few, provide opportunities for many projects as well as integrated research.

Muddy Creek Charter School is planning to build ties with OSU research faculty, particularly in the sphere of rural sustainability and watershed studies. As a rural public school close to Oregon State University, MCCS is in an excellent position for collaboration in rural education, and in agricultural and natural sciences. Dr. Enochs, rural education expert at OSU has expressed interest in undertaking rural education research involving MCCS (Appendix K). These collaborations will lead to funding opportunities for equipment, professional development of teachers, development of curriculum and more.

For the district there are enormous opportunities to be realized through using MCCS as a vehicle for building field-based science into the curriculum across the district. Oregon State University has many researchers expert in agricultural, natural, and physical sciences who would welcome opportunity to collaborate. The Muddy Creek watershed is the most intensively studied

watershed in Oregon with respect to land use. The area is ideally situated for a watershed-scale study of best land-use practices and many other aspects of field science.

Both rural sustainability and watershed studies are newly established strategic focus areas for Oregon State University. We believe that a partnership between university researchers and the Corvallis School District could be built that would be mutually beneficial. A long-term "observatory" style research base would be established and students would participate in mini-projects, such as soil sampling, water sampling, revegetation, species counts and the like to establish and maintain a regional data base (potentially to be posted on the GLOBE or other international research site.

The role of the charter school would be:

1. To help develop and maintain relationships with research sites
2. To collaborate on establishing successful research projects (modules) for students across the district. We would see this as a vehicle for service learning
3. To establish and maintain liaison with researchers and educators at OSU and other organizations in the region, such as the Benton County Soil and Water Conservation District and the Oregon Agriculture in the Schools Foundation.
4. To maintain the lab facilities so that visiting students can readily conduct experiments on field samples (soil drying experiments or the like).

We envision MCCS staff member obtaining partial support through the writing of grants to develop and support the Field Science Center and to build liaison and help raise grant money for a wide range of projects that would be of interest to classes across the district.

We are interested in developing of a district-wide rural field research center in collaboration with the school district.