

1. Vision of the School (Scored by External Review Panel)

- a) In succinct terms, describe the educational philosophy and pedagogy of the proposed school.

Austin Discovery School will create an educational program that is responsive to the unique needs of our student population. We will use innovative teaching methods and strategies that are aligned with the TEKS objectives.

We believe children come to school with a great deal of prior knowledge and curiosity. They learn best when teachers build on this curiosity by helping them pose real questions about the world around them and subsequently helping them conduct in-depth investigations to answer those questions. A school should offer:

“a rich and interesting curriculum full of powerful ideas and experiences aimed at inspiring its students with the desire to know more, a curriculum that sustains students’ natural drive to make sense of the world and trust their capacity to have an impact upon it.”

--Deborah Meier, *The Power of Their Ideas*

Unique Child-Centered Curriculum

Our curriculum has three important aspects that provide for students learning needs:

Individualized Instruction in which teachers plan activities to help children acquire skills and strategies at their level,

Integrated Project Work in which students conduct in-depth investigations of important themes and apply skills and strategies to solve real-world problems, and

Goal Setting by Both Teacher and Student that creates a partnership to promote a love for learning and thirst for further knowledge. It empowers the student to take an active role in their own learning process by making them accountable for their own success.

It is our belief that children come to us eager to learn and explore the world; therefore, it is up to us as educators to create an environment that actively embraces learning. A well-designed program of pro-social instruction will include training in cooperative conflict resolution and in methods of achieving one’s goals that do not require intimidation or manipulation. At the Austin Discovery School, caring, sharing, helping and empathizing are actively encouraged. We feel that taking the time to teach children to be caring individuals is not at the expense of academics, but will actually enhance academic success through increasing the student’s comfort level and thereby increasing their brain’s learning capability (Daniel Siegel, *The Developing Mind: How Relationships and the Brain Interact to Shape Who We Are*; Mel Levine, *A Mind at a Time*; Jane Healy, *Your Child’s Growing Mind*).

Teachers in our school will share our common vision. We will attract teachers who demonstrate knowledge and understanding, skill in application, love for children, and the total commitment to student success. They will work from common understandings and practices about teaching and learning. They are, themselves, learners for life.

Essential Concepts Underlying Our Philosophy

Essential concepts underlying our philosophy of teaching and learning include:

The conditions for learning
The teaching/learning cycle
Constant reflective practice

The Conditions for Learning

Central to the daily operation of the school will be the conditions that must be in place for learning to occur: observation, imitation, integration and reflection (Brian Cambourne, *The Whole Story* 1988). This model was established by observing children in natural learning situations like walking and talking. Engagement in the new learning occurs when the child is immersed in a context that uses knowledge and skills naturally. Significant people in the child's life model and demonstrate authentic use of the skills in daily interactions helping the child observe and draw distinctions about the new knowledge. The child imitates these demonstrations, receives feedback, practices and uses the skill, and learns from mistakes. Soon the child integrates the skill into his body of knowledge and can even reflect on other applications of the skill. All the while, these models fully expect the child to succeed and when mastery is attained, hold the child accountable to apply the new learning independently.

We feel that these conditions are central to effective classroom environments. We believe that if a student is not making the expected progress, we as educators must look at the conditions for learning and ask, "Which condition is not in place for this child?"

Teaching/Learning Cycle

The Austin Discovery School will focus on the fundamentals of the teaching/learning cycle: recognize the learner, the resources, and the approaches available. Teachers will focus instruction to the individual student's teaching point on a daily basis. Focusing instruction becomes a matter of matching resources and approaches with the student's needs. In a reading classroom, for example, the teacher might assess the student by conducting a running record or analyzing a writing sample. After evaluating the assessment and identifying student strengths and approximations (i.e., what the student does right most of the time), the teacher determines the next teaching point for that individual student. The teacher now knows the learner's need and must match the appropriate resources and approaches to accelerate the student's progress. The teacher selects a book or any other resource that has the appropriate match of supports and challenges for the learner. The approach selected might be teacher directed or independent student discovery but will be appropriately balanced with the resources, supports, and challenges and student need.

Reflective Practice

Quality instruction cannot occur without constant reflection on where the child is today, what he or she knows and 'almost' knows held in tension with his/her potential growth. Teachers must reflect on what worked with each child, what concerns still exist, and the ever present "WHY?" That is, "Why am I doing what I'm doing with this child? How do I know this is appropriate for this child? What strengths does this child have? What data supports my decisions?" We must go back into the professional literature and development on a frequent basis to deepen our own understandings about the teaching/learning cycle, the reading/writing process, and the many other issues of instruction. Knowledge of current research,

professional dialogue, and knowing the learners, the resources, and the approaches are essential to the skillful teacher who produces focused instruction on a daily basis.

We believe not only that all children can learn but that all children do learn. We will ensure that we are supporting the federal statute that no child is left behind. It is our job as educators to tap into their innate curiosity, their thirst for learning and to make sure each child is successful in their academic career.

- b) Discuss the educational innovations that will distinguish this school from other schools.

Our school will distinguish itself from other schools in many ways that are readily seen in the classroom, with the teachers and the teaching methods, and in the school community:

The classroom:

Students will participate in multi-age classrooms such as Kindergarten and First grade together (“K-1”) in order to allow students to work alongside their peers as well as with students at other levels.

Student teacher ratios will be low: approximately 16 students to 1 teacher (and sometimes down to 11:1 when paraprofessional teacher assistants are in the classroom.)

The teachers:

Teachers will work collaboratively in a team-teaching approach in order to offer more personalized attention and professional collaboration.

Teachers will start the school year with professional development training not only in specific aspects of our charter in order to enhance the school community as a unified team. Some of these include: Cognitive Guided Instruction (CGI), Bridges to Mathematics, Math Alive!, Social Studies/History Alive!, Literacy Learning Network and authentic assessment techniques.

Teachers will get weekly professional development on Friday afternoons covering a range of educational topics.

Most classrooms will have available to them a teaching assistant for specific periods of the day in order to give children more individual learning time, as well as attract new teachers and qualified teachers who know they will be well supported.

Teachers will be certified in gifted and talented education as well as general special education within the first two years.

The teaching methods:

Students will be offered an integrated curriculum where students are actively engaged in the process of their own knowledge.

Daily instruction will be based on continual assessment of the individual student’s needs.

Student mastery of standards and benchmarks will determine movement from one instructional level to the next without regard to traditional units of time or student age.

Student /teacher led three-way conferences with parents will be held three times a year.

Agreements will be developed between students, parents and teachers regarding learning goals, as well as responsibility and accountability for the attainment of these goals.

Students will develop skills to evaluate their work based on the use of portfolios, rubrics, and presentations.

Reports to parents regarding student progress will be presented in a narrative based on the student’s progress towards learning goals and supported by a portfolio along with variety of

assessment tools such as authentic, process, naturalistic, and rubric (as explained in Section 3j).

Students will be required to take at least one foreign language beginning in kindergarten. The science curriculum will be supplemented by the Junior Gardener curriculum which teaches students the beginnings of horticulture, agriculture, and botany utilizing real gardens. The students will build, plant, maintain, and harvest common organic vegetable gardens. This will help to incorporate a healthy lifestyle by becoming actively involved in nutrition.

The school community:

Our school will be on a year long calendar system to minimize the knowledge lost during extensive summer breaks.

Students attend a half of an instructional day on Fridays so we can offer teachers training for professional development. This ongoing training time is an integral part to our curriculum plan to maintain a cohesive, collaborative teaching environment.

Regularly scheduled events will be held to emphasize the home-school community.

Parenting seminars will be offered to help parents work with their own children as well as becoming a more effective member of our school culture and community.

A partnership with a culinary school is being researched to eventually provide school lunches and snacks that are organic and vegetarian, as well as supporting local farmers.

Student enrichment will eventually be offered on Friday afternoons. Students will learn handcrafts such as knitting, crocheting, sewing and woodworking as part of a fine arts curriculum /after school program. Instrumental music, creative movement, theater and drama will be a part of the performing and visual arts curriculum and can be expanded in our after school program.

2. Education Plan (Scored by External Review Panel)

- a) Describe the scope and sequence of the proposed education program, including special education and bilingual/English as a second language (ESL), addressing each grade level the school will serve, including how the school will incorporate the Texas Essential Knowledge and Skills (TEKS).

The 501(c)3 cooperate board for the Austin Discovery School has researched and culminated specific curriculum programs that we think will provide the most innovative and exemplary school experiences for our students. We have reviewed the curricula and aligned them with the grade appropriate TEKS.

Figure 1 summarizes the curriculum programs. Then, each curriculum programs will be discussed within their subject areas. Finally, sequential grade-specific aspects of the curriculum programs will be discussed.

Summary of Curriculum Programs

The Austin Discovery School’s curriculum programs are summarized in Figure 1 below.

Figure 1. Summary of the Curriculum Program

<u>Subject Area</u>	<u>Curriculum Program</u>
All Subject Areas	<ul style="list-style-type: none">• Learning Environment• Special Education• ESL

Math	<ul style="list-style-type: none"> • Bridges to Mathematics and Math Alive by the Math Learning Center • CGI
Language Arts	<ul style="list-style-type: none"> • Literacy Learning Network
Science	<ul style="list-style-type: none"> • Inquiry-based Learning • Junior Gardener
Social Studies / History	<ul style="list-style-type: none"> • Social Studies/History Alive! by Teacher's Curriculum Institute
Art/Music	<ul style="list-style-type: none"> • Social Studies/History Alive! by Teacher's Curriculum Institute
Wellness & Physical Education	<ul style="list-style-type: none"> • • emphasis on cooperative exercises

Scope of Proposed Educational Program

Each curriculum program will be discussed in the areas of the Learning Environment, Special Education, ESL, Math, Language Arts, Science, Social Studies/History, Art and Music, Wellness and Physical Education, and Community Service.

All Subject Areas

A positive learning environment, special education, and ESL are aspects of our curriculum that affects all subject areas.

The Learning Environment

The key components of a positive learning environment are: the use of space in the classroom, both inside and out, the use of time during the day, and the appropriateness and variety of the resources available. In the curriculum, teachers will examine these components to ensure that the learning environment is one in which children feel comfortable and safe, yet stimulated to learn and explore and take the risks involved in learning. Teachers will also ensure that both the environment and the resources provided will promote the achievement of our learning expectations. The state curriculum will serve as our minimum standard.

Special Education

The type of hand-on, interactive curriculum that we offer in all subject areas provides the perfect arena for including Special Education students in the general classroom (as described more fully in Section 10, below.)

All Austin Discovery School teachers will be certified General Special Education by our third year of operation. We believe that all students should be given the opportunity to learn with their peers and establishing a program with immersion enables all students to benefit. While a general special education certification will be beneficial, teachers will still consult with the special education staff person(s) to hold Admission, Review, and Dismissal Meetings, create individual education plans (IEP), and hold problem solving meetings. When necessary, students will meet for individual instruction with the Special Education Coordinator.

ESL

Once again, the type of hand-on, interactive curriculum that we offer in all subject areas provides the perfect arena for the pro-social needs of an ESL student.

Upon admittance, all families will be requested to fill out a home language survey. The ESL coordinator will give a formal Reading Proficiency Test (RPTE) to any child who returns a form stating that their home language is not English.

Informal observation will be turned in to the ESL coordinator by all of the child's teachers. Finally, a meeting will be held to discuss how the child's needs can best be met within their classroom environment. Additional meetings will be held at conferences to assess progress and reassess goals.

Math

The math curriculum is designed to develop mathematical thinking, concepts and factual knowledge. The major strands of mathematics (numeracy, operations, logic/probability, problem-solving, etc.) will be addressed at all levels. Instruction at all levels will include concrete and abstract applications as appropriate as well as authentic, practical daily uses.

After close examination of its quality and comprehensiveness, we have chosen the Math Learning Center's "Bridges to Mathematics" Program for beginning mathematics in grades K – 3rd. We will describe the many ways that the Bridges to Mathematics program will improve student performance and understanding, but will also improve the teaching and learning of mathematics.

Teaching toward all types of academic diversity is essential for mathematical understanding amongst students, regardless of ethnic background or learning ability. Bridges in Mathematics builds on the philosophy of differentiation by providing ways to organize the TEKS throughout the curriculum so that students have continuous opportunities to make sense of ideas while retaining their natural creativity and curiosity.

In the Bridges in Mathematics program, students will use concrete models that make basic math skills less abstract and more accessible. All components allow for discussions, problem solving, and short written assignments. The program's goal is to surround children with a language-enriched, activity-centered learning environment. It is based on our philosophy that children learn best when they are actively involved in hands-on experiences with a variety of materials. Each student is respected and valued for the diversity they bring to the learning process, and children are encouraged to learn from each other, as well as the teacher. In addition, Bridges in Mathematics is designed to help children develop number and operation sense and provide challenges for children to tackle in their own ways, drawing on their own mathematical understandings and knowledge.

Beginning in grades 4 and 5 the Math Learning Center provides a "Visual Mathematics/Math Alive!" Series. This program relies on student-driven exploration. Models and manipulatives provide the context for exploring complex problems involving important mathematical relationships. All classrooms will have available for the children Cuisenaire rods, place value blocks, counters, time telling devices, fraction pies and blocks and other developmentally appropriate, hands on manipulatives. As students learn about these topics, they will be encouraged to use these tools to make sense of new concepts. Teachers will observe students use of the manipulatives to be able to determine when he/she is ready to begin using more abstract concepts in his/her mathematical thinking.

Group discussions and projects create an environment where each student's ideas are valued and respected. In this atmosphere students grow in their ability to construct mathematical understanding and to communicate reasoning. All TEKS objectives are met or exceeded in this program.

As support and reinforcement for the Math Learning Center Curriculum, the Austin Discovery School has chosen to use Cognitively Guided Instruction (CGI). CGI is a math curriculum that focuses on problem solving, number sense and place value. Students are encouraged problem solve creatively, many times developing multiple strategies to solve these problems. During class meetings, students share their strategies with their peers and determine the most efficient strategy for solving their problem. CGI can easily incorporate the TEKS at all grade levels. It supports students' use of Deborah Meier's five "habits of mind" (evidence, point of view, connection, supposition, and relevance) to learn mathematics (Deborah Meier, *The Power of Their Ideas*). Students will attend a discussion groups pertaining to a specific math problem. In the group, as students verbalize their conceptions, others can benefit from the explanation from their peers. Teachers or other students can clear up misconceptions and students can see first hand how to become efficient problem solvers.

Language Arts

Language is central to students' intellectual, social, and emotional growth, and must be seen as a key element of the curriculum and a crucial tool for learning in all areas. Whether students are studying literature or history, or learning science, they need fundamental language skills to understand information and express their ideas.

When students learn to use language in the elementary grades, they do more than master the basic skills. They learn to express feelings and opinions, and, as they mature, to support their own opinions with sound arguments and research. They become aware of the many purposes for which language is used and learn to use the language and forms appropriate for different formal and informal situations – for example, the formal language of debate, the figurative language of poetry, the technical language and formal structures used in report writing. In sum, they experience the expressive and communicative power of language and come to appreciate language as both a source of pleasure and an important medium for recording and communicating ideas and information.

The curriculum we have chosen to use for Language Arts program is the Literacy Learning Network (LLN) developed by R.C. Owens. It is designed to give students the opportunities for the authentic use of oral and written expression. The program's principles are drawn from research and understanding about how learning occurs for adults and for children. The program focuses on the use of students writing as an important factor in the process of learning to read. When children have interests and see the need to communicate them, then it becomes essential for them to learn to write. Dually, as they want to find out more about the world around them, books then become instruments for learning. As we utilize the Literacy Learning Network program, our students will not only be learning to read and to write effectively, but also they will learn more about themselves as individuals. Another reason we have chosen LLN is because it challenges students to meet or exceed the state mandated curriculum outlined in the TEKS.

Reading Approach

Our approach to reading will focus on developing the skills that will enable students to become effective readers. An effective reader is one who not only grasps the essential ideas communicated in a piece of writing, but who is able to use and apply these ideas later in new contexts. Students must, therefore, develop the skills needed to process and analyze information and to think creatively and critically. They must also develop a rich and varied vocabulary, become skilled at using the conventions of written language in their reading, and read a wide variety of materials that illustrate the many uses of writing. Reading a wide range of materials in all areas of the curriculum will also help students discover what interests them most and will enable them to develop their interests and abilities in ways that are suited to their needs.

Important as they are, reading for information and reading for learning are not the only activities that should be emphasized as students develop their reading skills. A well-balanced reading program will provide students with many opportunities to read for pleasure, for self-discovery, and for self-enrichment. Such reading activities are particularly important in the elementary grades, when attitudes to and habits of reading are first formed. Reading experiences that invite students to discover new worlds and new experiences and to develop their own imaginative powers will go a long way towards convincing them that literature and other reading materials can be a rich source of pleasure and knowledge. Such experiences will also lead to a love of reading, which is among the most valuable resources students can take with them into adult life.

Writing Approach

Our writing approach is a complex process that involves a range of skills and tasks. Although writing is often used to clarify and express personal thoughts and feelings, it is used primarily to communicate with others. Students will be encouraged to first make approximations in their writing in order to get their thoughts and ideas down on paper. As their writing develops, students need to become disciplined thinkers in order to communicate their ideas clearly and effectively. They need to learn to select and organize their ideas, keeping in mind the purpose for which they are writing and the audience they are addressing. They also need to learn to use standard written forms and other conventions of language.

Writing competence develops along with skills in other areas of language, especially reading. As students read a variety of written texts, they increase and gain command over their vocabulary, and learn to vary their sentence structure, organizational approach, and voice. To become good writers who are able to communicate ideas with ease and clarity, students need frequent opportunities to write for various purposes and audiences, and to master the skills involved in the various tasks of the writing process. These tasks are outlined below.

Students in Grades K to 5 will:

- through discussion and brainstorming, generate ideas for writing;**
- select a topic and determine the purpose for writing and the audience to be addressed;**
- draw up a writing plan (e.g., outline, diagram, story map);**
- write an initial draft;**

- decide whether the piece of writing is promising enough to be developed further and revised for "publishing" through the subsequent steps in the writing process;
- discuss and revise the first draft to clarify ideas and improve their organization;
- edit to improve writing style and to correct errors in grammar, spelling, and punctuation;
- use their knowledge of the visual elements of published texts to enhance their work (e.g., margins, headings, graphics, photographs.)

Summary of Language Arts Approach

We believe that the Literacy Learning Network will encourage the development of habits of thinking and reasoning by providing experiments in reading response groups, writing conferences, and self-evaluation of student work. Readings of all genres will be included at all instructional levels to support the students' developing awareness of where various types of information can be found. Vocabulary development, phonemic awareness, spelling and grammar will be taught as tools for expression and will be seen by students and teachers as integral to effective communication. The language arts curriculum will develop the student's knowledge of the rules, patterns and structures of the English language thereby expanding the student's personal power and their ability to use that power.

Science

The curriculum we have chosen that will best represent this hands-on approach is the Inquiry-Based Learning (IBL) Program developed by Duke University. Inquiry-Based Learning is a way of acquiring knowledge through the process of inquiry. In IBL, students either ask their own questions or are posed a question by the teacher. Regardless of the source of the question, IBL requires that students play a major role in answering the question. This can occur through designing and executing controlled experiments, making measurements and observations, or building and testing models.

This science curriculum emphasizes scientific thinking, problem-solving, and functional knowledge of scientific phenomena while inspiring a sense of wonder and excitement for the world around us. Experiences with hands-on experiments, field trips, career scientists and applied learning are basic approaches in this multi-sensory instruction. Environmental education will be emphasized. Organic gardening will give students the opportunity to become accredited as junior gardeners. Teachers will be asked to use this curriculum as models and spring boards, not just daily lesson plans. Teachers will first utilize the objectives from their grade appropriate TEKS to determine content and then look to the model of IBL to help create an effective plan for learning the concept.

IBL has several other key features that helped us to select it:

Science is taught as a process as well as a body of content.

We believe science is a systematic process of inquiry about natural phenomena. It is through this systematic process of inquiry that the content of scientific knowledge is derived. When science is taught as a process of inquiry, students

learn how to be scientists. When students use inquiry to discover content, they not only learn a great variety of facts and concepts, but they also learn how these are related to each other, and how it is that we human beings come to understand our world and add to the great body of information we call knowledge.

Inquiry-based methods are all about asking questions, so students are encouraged to ask the questions that will help them find out how the world works. Asking good questions—questions that both can be answered and will produce meaningful answers—takes practice. An inquiry-based science class gives students this practice, and allows them to experience the rewards that come from finding the answers to good, challenging questions.

Instruction minimizes or eliminates lecture and textbook methods.

Traditional methods of instruction (such lecturing and textbooks) view students as empty vessels into which the teacher can pour information that the students will immediately understand, remember, and be able to apply to new situations. Studies show that this passive model of student learning simply does not work for the vast majority of students. Instead, students need active, hands-on and minds-on experiences from which they can construct their own knowledge. Children are full of energy, both physically and intellectually, and they are eager to apply that energy to understanding the world around them.

Inquiry-Based methods provide concrete, active learning experiences; they also give students the opportunity to develop the initiative, problem solving, decision-making, and research skills needed to become life-long learners. When students are provided with appropriate experiences, they can use these skills and habits of mind to construct their own knowledge bases.

Instructional methods take into consideration the different developmental stages of students.

Inquiry-Based methods are inherently flexible. Students tackle the questions or the parts of the questions they are capable of formulating themselves, and answer them using the tools that are accessible to them. In science, there are generally multiple approaches to the solution of a problem. When students are allowed to use their natural inventiveness, they draw upon their own academic strengths to solve problems, and like scientists, may come up with several solution paths.

Inquiry science teaching can be integrated with math, social studies, and/or language arts curricula.

Science does not happen in isolation; rather, the cultural environment in which it is practiced heavily influences it. Most scientific research addresses, either directly or indirectly, a problem embedded in a social context, and students can encounter these problems through their classes in social studies and/or language arts. In addition, scientific research draws upon tools from other disciplines, most notably mathematics.

Inquiry-based methods can easily be applied to the questions that arise in the other core subject areas students encounter each day. In many cases, the science teacher can anticipate and plan for the questions that will naturally arise. Likewise, any recently acquired mathematical tools can be put to good use in the measurement and data analysis techniques that accompany scientific inquiry.

Inquiry contributes to the ultimate goal of enabling students to become good stewards of their own bodies and of the planet they live on.

A good science education should include those concepts and ideas that will allow students to make informed choices about their own present and future lifestyles, choices that will in part determine the short- and long-term health of themselves and the earth. A strong science education will convey not only the content base needed to make such informed decisions, but will also convey to students that they have the right, capacity, and responsibility to make them.

Making good choices is a sign of maturity, and open-ended inquiry gives students a great deal of practice in making non-trivial choices and learning from the consequences of those choices. Furthermore, scientific inquiry involves multiple iterations of observation, prediction, and conclusion. All of these elements contribute to the ability to make informed and conscientious choices throughout life.

Social Studies / History

Austin Discovery School will adopt our social studies curriculum, Social Studies/History Alive!, from the Teachers Curriculum Institute (TCI). It develops the understandings that history, and social science are about real people in real places. The history of sciences, math and technology as well as peoples and cultures will be taught through integrated units of study. Research, presentations, and dramatizations will play a large part in this curriculum. Students will experience the benefits of a democratic society and learn to take pride in their country while exploring their status as citizens of the world.

The Social Studies/History Alive! approach consists of a series of instructional practices that allows students with multiple intelligences to “experience” history. Teachers at the Teachers Curriculum Institute developed this approach by carefully and thoughtfully combined the following three educational theories:

1. **Students have multiple intelligences.**
Howard Gardner’s findings that human cognition includes a far wider and more universal set of competencies than had previously been recognized offer the possibility of revolutionizing the instruction of history in our schools. Gardner has found that every student excels in two or three of the multiple intelligences. According to the theory of multiple intelligences, every student is intelligent—just not in the same way.
2. **Cooperative interaction increases learning and improves social skills.**
The second theoretical premise behind this approach is based on Elizabeth Cohen’s findings that cooperative group work leads to increased student interaction and, ultimately, to increased learning gains. Teaching history in an interactive and engaging way and necessitates creating a cooperative, tolerant classroom. In this environment, students will learn to share ideas, to work together cooperatively, to tolerate differences, to disagree honestly, and to take risks—and all students will feel valued and respected.
3. **All students can learn.**
The third theoretical premise behind our approach is the idea of the spiral curriculum. Championed by educational theorist Jerome Bruner, the spiral curriculum is the belief that all students can learn if a teacher shows them how

to think and discover knowledge for themselves. Students learn progressively more difficult concepts through a process of step-by-step discovery.

The Social Studies/History Alive! curriculum has eight teaching strategies that allow students with diverse learning styles to “experience” history.

1. Visual Discovery

This strategy is utilized at all stages of the social studies curriculum and turns what is usually a passive, teacher-centered activity—lecturing—into a dynamic, participative experience for students. Students view, touch, interpret, and act out historic images projected as a slide show. As the teacher asks a series of inquiry questions, younger students can verbally respond or create pictures to visually represent their understanding. Older students in grades 3 –5 can record the information in a unique note taking style.

2. Social Studies Skill Builders

Students in grades 4th and 5th sit in pairs to complete fast-paced, skill-oriented tasks, such as mapping geographic features, analyzing political cartoons, and graphing economic trends, while receiving immediate teacher feedback. Rich historical resources provided with the curriculum fuel this approach.

3. Experiential Exercise

This strategy brings to life key historical concepts so that students physically and emotionally experience them. Teachers re-create moments in history, such as the horrors of fighting trench warfare and the monotony of life on the assembly line, so that students can more meaningfully understand the drama of the past. Students in all grade levels can participate in these exercises.

4. Writing for Understanding

This strategy enables students in grade 2 – 5 to write forcefully about experiences they have had in class by challenging them to write for a purpose, such as writing poetry about the experiences of Chinese immigrants on Angel Island and editorializing on the Crusades. The result is richer writing.

5. Reading for Understanding

This strategy captivates student interest in social studies while teaching a host of expository reading skills that students can use for the rest of their lives. Students in grades 2 – 5 learn how to connect what they read to “real-life experiences” they have in class so that deeper understanding follows. Emerging readers receive carefully structured support at each of the four stages of the expository reading process: preview, read, take notes, and review.

6. Response Groups

This approach creates rich class discussions involving all students on such controversial topics as the Boston Massacre and Japanese-American Internment. Students sit in small groups to view slides depicting historical events and to discuss critical-thinking questions related to each side. They report their findings to the entire class.

7. Problem Solving Group work

Students with a wide variety of learning styles sit in small groups to work on high-level, problem solving group work projects such as creating a mini-drama about life in the Great Depression and preparing a panel discussion on the democratic ideal. This method of cooperative learning effectively involves all students.

8. Interactive Student Notebook

This strategy challenges students in grades 4 and 5 to record information about history in engaging ways. As students learn new ideas, they use several types of writing and innovative graphic techniques to record them. This processing encourages students to use their critical-thinking skills to organize information. As a result, they become more creative and independent thinkers.

Art and Music

The Austin Discovery School Art and Music curriculum will provide student experiences in self-expression, creativity, individuality, and group dynamics and will instill an appreciation for art, music, and drama from diverse cultures. Like our core academic subjects, Austin Discovery School would like to give students the opportunity to make connections between drama, movement, art and music beyond the requirements outlined in the TEKS. At times, students will use drama to demonstrate important role models in history and science. Written language and reading will carry over through improvisation of scripts and produced theater pieces. Students will have the opportunity to participate in musical production (original pieces) and set production (art).

Wellness and Physical Education

The Austin Discovery School Wellness and Physical Education curriculum is designed to provide an atmosphere that encourages a healthy lifestyle as well as the enjoyment of physical activity. The program emphasizes individual choices regarding nutrition, exercise, and the benefits of healthy decision-making. We will aim to provide a unique physical education experience with opportunities for students to take classes in yoga, tai chi, dance and movement as well group sports and running. In keeping with our philosophy of encouraging positive group interaction, cooperative games will be encouraged over competitive games. All curriculum will meet or surpass TEKS requirements.

Community Service

The Community Service curriculum emphasizes personal, social, and civic responsibility. Opportunities to apply knowledge and skills in authentic, problem-solving settings will be provided. Each week, students learn how to work with adults productively, assume responsibility for tasks both menial and challenging and report back to their school community about their placement and its focus. In this way, students learn about the larger community and have an opportunity to see many of the ideas they debated in their classes applied to real situations. Areas of service will be determined collaboratively between students and teachers early in the year and integrated into units of study. To emphasize family involvement in our community, opportunities will be provided for families to participate in school community service projects over scheduled weekends or during intersession breaks.

Sequential Grade-specific Curriculum Programs

Students will be the primary players in their instructional setting. Teachers will serve first as keen observers, noticing strengths and approximations, identifying teaching points, and designing instructional activities which will result in the mastery of the TEKS objectives as well as developing each student's personal power and responsibility for learning.

Over time, staff members will define best practices and refine curriculum and assessment based on group collaboration during staff development sessions. Student evaluations, performance, and parent feedback will specifically influence Austin Discovery School future educational planning.

Grade-specific aspects of the curriculum programs are discussed below.

Grades K-1

These grades will allow each student the time necessary to develop and demonstrate mastery of the foundation curriculum. The curricular and instructional focus for kindergarten and first grades will be on emerging reading and writing skills and concept and social development. Through teacher and peer presentations, students will acquire background knowledge in the sciences, social studies and literature. The purpose of these grades is to introduce and develop language in all its forms: reading, writing, spelling, listening, and speaking. A second focus is problem solving in many different settings. The development of math concepts and reasoning, scientific thinking, and inter/intra-personal conflict will be central to this curriculum.

Evaluation of authentic and performance assessment collected in the student portfolio will be the basis for judging student mastery of the content, competencies, and personal development criteria. Teacher-made rubrics based on appropriate TEKS objectives will be used for this evaluation. Formal assessments, rubrics, and observations will be reviewed as well.

Grades 2 - 3

At this level, students will begin to apply their reading, writing, speaking, and problem-solving skills to conduct small group and individual research, experiments, and performance tasks.

Teachers will be able to work in small groups of three to six children for integrated instruction in math and language arts. These groups will be formed according to interest, ability, or learning style and based on the teacher's discretion. These groups will be fluid and allow for students to receive individualized instruction. In addition, teachers will have the opportunity to informally assess each student's progress daily.

Students in the second and third grades will be expected and permitted to work more independently. While one teacher meets with small groups, a second teacher will be available to assist the remaining students with their scheduled curriculum. As an example, students working independently may have an hour and a half to work independently on writing, handwriting practice, spelling practice, and reading. The teacher monitoring these students would make sure that each child had a plan of action, the appropriate materials and an awareness of the time frame and knowledge of the expectation within that time frame. For instance, the child may choose the order in which he/she would want to complete their work, and the teacher would take responsibility for making sure each student divided their time appropriately.

Integration of the TEKS will connect instruction in many areas of the curriculum whenever possible. Science concepts about weather may connect math concepts involving graphing the temperature or rainfall totals for a specified time. World history studies may allow for students to read folklore from India, which may in turn inspire students to write their own tales. Teachers and staff will use the TEKS to develop a curriculum that is organic as possible, taking into high regard the students own interests and ideas.

Grades 4 – 5

At this level, teacher modeling and classroom demonstrations will be used to expose students to a variety of presentation techniques they can use to demonstrate their own mastery of content and competencies. For example, a teacher might present slides of artifacts found by early American explorers. Students then could be asked to present information on a different topic of their choice to the class in a similar format (e.g., drawings, pictures, poster).

Integration of the TEKS aligned disciplines is central to this curriculum design. The sciences will be taught in and through geography, history, and literature. Pre-algebra concepts will be taught using manipulatives and concrete demonstrations. Instructional units of study will include a wide variety of tasks that stretch students' thinking and present opportunities for creativity, practice in planning and organizing, and authentic application of knowledge.

As students demonstrate mastery of the TEKS necessary to function in the fourth and fifth grade, the teacher will confer with the student to review the student's portfolio, formal and informal assessments, and social/personal development. The results of their discussion will be presented to the parent in a parent/student/teacher conference in order to develop student learning goals.

- b) If the proposed school will serve any high school grade level (Grades 9-12), describe how the program will prepare all students to meet state graduation requirements, including students with disabilities and those requiring ESL services.

Austin Discovery School does not currently offer a program at this level. The instructional level for this level would be developed under the advisement of certified teachers with knowledge of the core discipline area and submitted to TEA as requested if such levels were to be amended into the charter in a future year.

- c) Describe teaching methods to be used and state the reasons for choosing them, telling how the methods enhance student learning. Include information about materials, strategies, techniques, and procedures to be used to meet the needs of the student population, including students with disabilities and those requiring bilingual/ESL services.

The Austin Discovery School's teaching methods, materials, strategies/techniques/procedures, and assessment tools are summarized in Figure 2 below. These methods are aligned with our teaching philosophy as explained further in section 3 a) above.

Figure 2. Summary of Curriculum Tools and Teaching Methods

<u>Subject Area</u>	<u>Curriculum Tools and Teaching Method</u>	<u>Materials</u>	<u>Strategies/Techniques</u>	<u>Assessment Tools</u>
All Areas	<ul style="list-style-type: none"> • Multiple Intelligences 	<ul style="list-style-type: none"> • hands-on 	<ul style="list-style-type: none"> • differentiated instruction • hands-on 	<ul style="list-style-type: none"> • performance and process assessment
Math	<ul style="list-style-type: none"> • Bridges to Mathematics and Math Alive by the Math Learning Center • CGI 	<ul style="list-style-type: none"> • manipulatives • place value • blocks • cuisenaire rods • counters • fraction pieces 	<ul style="list-style-type: none"> • group discussion • projects • use of concrete objects to gain understanding • student-driven exploration 	<ul style="list-style-type: none"> • assessment of projects • pre-TAKS test assessments • oral interviews • student reflection
Language Arts	<ul style="list-style-type: none"> • Literacy Learning Network 	<ul style="list-style-type: none"> • guided and independent reading materials • reading materials based on kids' interest 	<ul style="list-style-type: none"> • discussion • brainstorming • reflection 	<ul style="list-style-type: none"> • DRA • DWA • TPRI • Running records • TAKS pretests paper
Social Studies / History	<ul style="list-style-type: none"> • Social Studies/History Alive! by Teacher's Curriculum Institute • Multi-sensory • Cooperative 	<ul style="list-style-type: none"> • graphic • organizers • visual prompts • interactive • student notebooks 	<ul style="list-style-type: none"> • reflection • cooperative interactions • response groups 	<ul style="list-style-type: none"> • assessment of projects
Science	<ul style="list-style-type: none"> • inquiry-based learning • Junior Gardener • Multi-sensory 	<ul style="list-style-type: none"> • lab materials • models 	<ul style="list-style-type: none"> • problem-solving • hands-on experiments • field trips 	<ul style="list-style-type: none"> • assessment of projects • pre-TAKS test assessments • written papers • oral reports

In working with our special education students or ESL students, a specialist in these areas will come to the classroom to work with the individual students at times specified in their IEPs or as determined in their initial Admission, Review, and Dismissal (ARD) meeting. Our goal will be to provide the least restrictive environment for these students and to include them in classroom activities as often as possible.

Ways to Enhance Student Learning

In addition to the curriculum and methods described and listed above, the Austin Discovery School will use several other teaching methods to enhance student learning, including Multiple Intelligences, collaborative cooperative classrooms, differentiated instruction, and the five habits of mind.

Multiple Intelligences

Austin Discovery School believes that active learning constructs the most meaningful knowledge for children. Students need to be able to connect what they are learning in the classroom back to the “real world”. In order for children to take the knowledge and make it their own, it needs to be taught to them in a way that will be comprehensible to them. It is with this notion in mind that we have chosen to implement Howard Gardner’s Theory of Multiple Intelligences to help accommodate each learner. Multiple intelligence theory allows for use of the variable intelligences to enhance differences and include multiple subjects in all intelligences. With Howard Gardner’s theory in mind we have made specific curriculum choices in order to incorporate multiple intelligences into the classroom. For instance, the Social Studies/History Alive Social Studies program is designed to offer instruction in each of the nine intelligences. Where curriculum packages such as this one are not always available, all teachers will utilize the TEKS to determine curriculum content and multiple intelligences to create their plans and activities.

Collaborative Cooperative Classroom

We believe children of all ages learn best when they work in a collaborative cooperative classroom. Students are able to learn much more through discovery with their peers than always working independently. Alfie Kohn (in *The Schools Our Children Deserve*) states that children are “social beings and should be treated as such. Instead of separating and isolating children (always in independent desks), we should maximize this time of social learning through peer interaction, group activities and connecting subjects (math, writing, social studies all in one activity)”. This allows children not only to connect with each other, but again to connect their learning to the world around them.

Differentiated Instruction

Differentiated instruction allows teachers to differentiate based on a number of variables instead of always grouping by ability. Through differentiated instruction, teachers can group students to work together so that they may use one another as sounding boards, aids, or peer instructors. When teachers can group students in a variety of ways based on similar ability, mixed ability, learning style, or interest, students never feel pigeon-holed into one group. They may get input from peers with different ideas and opinions. Students also begin to see that learning occurs in different ways for different people when it is happening all around them in the classroom. Opportunities for students to share their learning processes and products with the class will also be valued. As students share their learning experiences with other peers and the adults around them, it also allows them the opportunity to make mistakes which provides them the time and room to incorporate lifelong understanding.

The Five Habits of Mind

Deborah Meier and her colleagues, who founded the highly regarded Central Park East schools in New York City, have anchored their teaching in what they call five “habits of the mind” which are ways to approach a new learning situation. We plan to use this method to help students develop critical and independent thinking skills for any topic, study or discipline. The habits include:

First, evidence “How do we know what we know?”

Second, point of view “Whose perspective does this represent?”

Third, connections “How is this related to that?”

Fourth, supposition “How might things have been otherwise?”

Fifth, relevance “Why is this important?”

When students can develop these five “habits of mind” in any given area of study, they are not simply learning facts or formulas, but teaching themselves how knowledge is constructed, and therefore, how to proceed in constructing knowledge for themselves where the teacher(s) are their facilitators of knowledge.

- d) State the proposed teacher-to-student ratio and the rationale for maintaining this ratio.

The Austin Discovery School will have a ratio of no more than a 16:1 student-to-teacher ratio. All classrooms throughout K-5 will be multi-aged. There will be 32 students per classroom who will be assigned 2 highly qualified teachers. The teachers will work together collaboratively to form the curriculum, assess students, and group students based on ability, learning style, and interest.

We believe that multi-age classrooms provide time for children to develop their knowledge. With two qualified teachers available, teachers can assign independent work and simultaneously work with groups with students for more individualized differentiated instruction. We have also taken into consideration that 32 children and two adults need ample space in which to learn.

At scheduled times throughout the day, a paraprofessional teaching assistant will be available in the classroom which will further reduce the ratio down to 11:1 student-to-teacher ratio.

- e) Describe any unique curricular experiences to be offered by the charter school.

The Austin Discovery School curriculum is designed to provide unique avenues for the educational process. Some of the components of this include: a child-centered approach, an extensive library with teaching resources as well as books for the students, learning gardens, outdoor classrooms, an inquiry based science program and a math curriculum that focuses on hands-on learning and critical thinking skills.

Our most significant curricular innovation is our child-centered approach to learning whereby the children’s learning experience is honored. We want students to be inspired to explore their world and internally motivated to seek the knowledge necessary to answer relevant questions, connecting their learning experience to the world around them.

An extensive library is essential to support the hands-on teaching methods that are a fundamental part of the teaching methods. Within our first three years of operation our library will be one of our main fund-raising agendas. Teachers will have

available to them a teacher's reading resource library with appropriate reading materials for every level of instruction. Separate from this will be the student library where classes will visit frequently to check out books and do class related research. Children who have many books available to them and who are continually surrounded by reading materials will be able to find books that are interesting to them.

Austin Discovery School will supplement the Junior Gardener curriculum along with the TEKS aligned science program. This program specifically teaches children the beginnings of horticulture, agriculture, and botany utilizing real gardens and hands on activities to teach these concepts. As a result, we will have common vegetable gardens that will be built, planted, maintained and harvested by all students. The long-term goal for the vegetable gardens is to incorporate the gardens into a lunch/snack program. Growing and harvesting vegetables teaches the basics of nutrition. The students are more likely to try foods they grow themselves.

Various other gardens will be used for specific projects for individual classes to align with their classroom curricula. For example, a class studying Asia could grow bok choy, lemon grass, carrots and other produce to use for making a traditional meal of the region. A class studying ecological systems can make a water garden in a barrel with above and below water level plants and fish to represent a system.

The gardens will be located in various areas of the grounds so the campus will become a school inside of a garden. Sustainable animal habitats such as a butterfly garden will also be incorporated into the program. Our extensive grounds of 200 wooded acres are the perfect environment for this hands on learning opportunity.

The outdoor classrooms will be utilized by teachers for many aspects of the curriculum. When appropriate, the students will participate in the construction and landscaping of the outdoor classrooms. An outdoor classroom brings a fresh perspective in a new environment. The lack of walls and a ceiling increases the physical space. The multi-sensory aspect of the curriculum can be incorporated by having a math class study graphing on a large scale or an English/reading class put movement to their readings/stories.

Scientific inquiries will be explored through experiments rather than textbook readings. Students will be encouraged to hypothesize and use objects in their immediate environment to design and conduct experiments to realize these hypotheses.

Our math program will emphasize critical thinking and problem solving skills over rote memorization of formulas and facts. It is essential that students develop a deep understanding of math concepts experientially in order to integrate and apply these skills.

These unique features of the Austin Discovery School project based curriculum—the child-centered approach, the libraries, learning gardens, outdoor classrooms, hands-on science and mathematic programs—will take the students educational experience far beyond reading and worksheets.

- f) If the charter school will offer a gifted and talented program, describe it.

At least one teacher per classroom will be endorsed to teach a gifted and talented classroom by our second year of operation. We believe that all students can benefit from the instructional techniques implemented in a gifted and talented program. All

gifted and talented students will then be able to be served through inclusion. As we assess the needs of our student population, the staff will determine how we can strengthen the program to meet their needs in the most appropriate way.

- g) Describe the programs offered to support other student activities (athletics, clubs, and organizations).

Austin Discovery School plans to offer a variety of other activities to enrich the school experience for students. Grants, like the 21st Century Grant, will be applied for to fund some after school programs (clubs, etc.) that will be free of charge to the students. Other offerings, like after school childcare programs, will be charged for at rates competitive to other after school programs. Students in the after school childcare will also be given the opportunity to choose from after school clubs or activities.

We plan to offer the following programs at Austin Discovery School upon opening:

a. After-school care

Our after-school care will be either run by paid after-school staff or contracted out. It will be operational for 16 hours per week: Monday thru Thursday from 3:30 until 6:00 pm and Fridays from 12:15 until 6:00 pm. Discounts will be offered for students who qualify for low-income lunch assistance programs.

b. After-school lessons

We will allow our facility to be used by parents and other groups that want to offer appropriate after-school lessons for which the students can pay. We have parents currently interested in offering classes in drama, puppeteering, martial arts, sign language and gardening.

c. Clubs and Associations

We will encourage students to form clubs and associations that will help allow them the experience of working cooperatively and of organizing themselves (with adult coordination, as needed). We will encourage parents, teachers, and community members to support the students' desires and interests. The skills and interests of older students can help to guide groups of younger students. As an example, older students may be involved in mentoring younger students, older students may want to form a student council, or may want to teach an activity they have already mastered like knitting.

We plan to offer the following programs in the future:

a. 21st Century Learning Center Program

We will apply for a 21st Century Community Learning Center Grant to provide students with a variety of services that will extend student classroom learning and provide additional tutorial help, when needed. We hope to offer programs that offer kids a chance to work together on community service projects, improve group relations, expand their knowledge of fine arts (art, music, drama) and provide the training, inspiration and connection that all students need to be actively involved members of our school community. We hope to provide a safe, fun place for students to be involved with after school to help to improve their body, mind and sense of community.

b. Tutoring programs

Tutoring programs will also be available free of charge to the students though the University of Texas education students. Older students taking the TAKS will be given first priority in this program.

c. Community Service Projects

Older students in grades 3 and up may choose to work in a community service program after school. Examples of community service activities may include recycling, reading to adults who currently reside in a nursing home, cultivating a community garden, or cleaning up roadsides in the “Adopt a Highway” program.

- h) Describe any plans to partner with other public or private agencies for the provision of student activities.

Austin Discovery School does not currently have specific plans to partner with any public or private organization or agency.

- i) Describe the planned academic assessment program, including the process to be used to determine baseline achievement levels of students and the methods of measurement to be used.

Performance assessment is essential to the learning experience for the student. Authentic assessment systems are based on TEKS standards, they are integrated into daily classroom practice, and they show students what they will need to do by providing concrete expectations (rubrics) to describe the kind of work that will be expected of them, and they give feedback on their work. Students can use self-assessment to evaluate their own work based on the rubrics given to them.

Other specific formal and informal assessment tools will be described below in the areas of Reading, Writing, Mathematics, Social Studies and Science.

Reading

Informal reading assessment will be conducted throughout the school day whenever a teacher observes a student’s reading interests, reading level (i.e., what books they select to read) and reading comprehension.

More formal reading assessment will be conducted in grades K-5 through the use of the Developmental Reading Assessment (DRA). Teachers will be able to utilize their teaching assistants to conduct classroom curriculum while they meet with their students individually to hear them read. The DRA allows students to read never-before-seen material while the teacher takes a running record of their reading. The student is then assessed on their accuracy, comprehension, vocabulary, and agility. The DRA will be conducted three times a year, two weeks prior to parent/student and teacher conferences to keep parents informed of their child’s reading progress. This type of assessment is critical because it provides an actual snapshot of the child’s developmental reading level and their learning process. When parents are provided with this information, it enables them to become active participants and mentors to their children as they learn to read.

After each student has been assessed, the teacher will determine subsequent goals for learning. These goals will be discussed at the conference and each party (student, parent, and teacher) will discuss his/her actions to be taken in order for the student to obtain these goals by their next conference. All assessments will be not only discussed with parents, but also kept on hand in each student's portfolio to provide comprehensive information on reading development for that child's subsequent teacher. With this assessment, we can assure that each student will meet their conference reading goals by the end of each academic year.

The Writing Process

Informal writing assessment will be conducted throughout the school day based on review of students on-going written works. Teachers and students reflect back on the student's individual teaching points as they are exhibited in their daily writing to determine when they have met these goals.

Austin Discovery School will also use the Developing Writer's Assessment (DWA) alongside the Developmental Reading Assessments. The DWA is an analytic writing assessment designed to help students develop as competent writers. Close, guided analysis of student writing will highlight the strengths and needs of each writer. Similar to the approach of the DRA, teachers will use these observations to make effective instructional decisions.

Beginning as early as kindergarten, when appropriate, writing conferences will be held with students to aid them in their process and to determine goals and deadlines along the way. Students will be encouraged to choose self-selected topics to promote interest, choice, and empowerment as well as personal responsibility for one's own work. Teachers will conduct both mini-lessons and whole class lessons to address grammatical and spelling misconceptions. For example, in grades 2-3, if a teacher notices that many of his/her students are not writing commas in a series, he/she might take those specific students aside for a week's worth of group instruction in this area. Writing conference will be held for all grade levels and progress will be recorded by teachers and kept on hand in the student portfolios.

In grades K-2, teachers will individually assess each student's phonemic awareness using TPRI. Students who are at these early stages of literacy can best benefit from an assessment such as this to target the specific areas of their phonemic development. Teachers will conduct these twice a year, once in September and again in April prior to conferences to show progress and to determine further areas for development. These assessments will also be kept in individual student portfolios.

Mathematics

Students in grade K – 5 will be assessed in math using conventional testing formats, individual interviews, formal and informal observations and written work in class and from home. The individual performance assessment will provide teachers with the opportunity to see how a student arrives at an answer rather than if the child arrived at the correct or incorrect answer. The teacher can then address any specific misconceptions the student has so these misconceptions do not become habits.

Our performance / process assessment will consist of two components:

A task, open-ended problem, project, or investigation that is presented to students.

Observations of students as they work/perform and/or an examination of products produced.

We will present students with problem situations, explorations, and tasks as methods of promoting reflective thought and to engage students in "doing" mathematics. These experiences will provide an opportunity for the assessment of conceptual understanding, problem-solving strategies, and procedural knowledge.

Performance assessments will be separate from instruction. The tasks will be a learning experience for students as well as an opportunity for the teacher to assess. Student assessments will be conducted a minimum of three times per year and will be kept in the individual student's portfolio. Teachers will construct goals for each student based on their assessment and goals will be determined and carried out after they have been discussed at parent/student teacher conferences.

A supportive learning environment will provide time for guided reflection and class discussion in order for students to analyze their own thinking. As the shift from teacher-centered to student-centered classrooms takes place, teachers will help students become more active participants in their assessment. Only then will students learn to reflect on their work and their learning, to make critical self-judgments against performance standards, to constructively critique the work of their peers and productively use the critiques of others, and to become mathematically powerful independent learners.

Beginning in grade 2 and continuing on, students will also be provided with pre-TAKS materials in order to familiarize them with this testing format. Teachers will use the information gathered to address areas of instruction that may need re-teaching at this time.

Social Studies

Assessments given alongside the Social Studies/History Alive! program will utilize all of the following formats: traditional tests, multiple intelligence tests, internet tutorials, unit projects, and culmination projects. All of the following will help prepare students to both take standardized tests and to help them meaningfully apply what they have learned. Any subsequent curriculum materials or units used in order to comply with the Texas Essential Knowledge and Skills will also be assessed in this same format. All student assessments and group work will be culminated in their portfolios and will be reviewed at conferences.

Science

The inherent flexibility of inquiry-based teaching allows students to demonstrate their achievements in a variety of ways. Scientists use a variety of methods to communicate their findings, and students can do likewise. Written papers, oral reports, colorful diagrams, graphs, and tables can all be used by students to show what they have learned. Since much of the learning is about the process of inquiry, students can and should also be assessed on their growing abilities to formulate hypotheses, design experiments, and analyze their results. The more holistic assessment methods necessitated by these skills provide a better picture of overall intellectual growth than would the snapshot that is the result of a multiple-choice test.

Just as students vary in their cognitive development, they also vary in their learning styles, academic and artistic strengths, and interests. Some may have strong verbal

skills and can demonstrate what they know through essays; others are artistically inclined and can draw detailed diagrams to illustrate concepts. Some may be able to compare and contrast information using graphs, while still others can use simple props to act out scientific ideas. In the same way that science instruction needs to be flexible enough to accommodate the cognitive differences among students, assessment methods also need to be flexible and varied enough to allow students to use their own strengths to show what they have learned.

Austin Discovery School will use the assessment tools provided by Duke University's Center for Inquiry-Based Learning. This system takes into account the multiple intelligences or varying learning styles of the individual students. Just as students vary in their cognitive development, they also vary in their learning styles, academic and artistic strengths, and interests. Some may have strong verbal skills and can demonstrate what they know through essays; others are artistically inclined and can draw detailed diagrams to illustrate concepts. Some may be able to compare and contrast information using graphs, while still others can use simple props to act out scientific ideas. In the same way that science instruction needs to be flexible enough to accommodate the cognitive differences among students, assessment methods also need to be flexible and varied enough to allow students to use their own strengths to show what they have learned.

- j) Describe the connection between the TEKS, classroom instruction, and assessing student progress.

In planning for the academic school year, teachers must first take into account the appropriate TEKS for their classroom. After consulting the TEKS, teachers can then begin to consider their classroom instruction. Many of the innovative curriculum plans we have adopted already such as the Social Studies/History Alive Curriculum for grades K-5 and the Math Learning Center's Bridges to Mathematics and Math Alive programs are already TEKS aligned. Teachers will use these resources that are readily available to them and then augment their own curriculum in all other areas accounting for not only the TEKS but also multiple intelligences and inquiry-based learning.

The curriculum will be TEKS aligned and assessments will allow for a more comprehensive and less stressful environment than recall and memorization testing techniques traditionally used alongside textbook materials. Teachers will assess students using authentic, process, and naturalistic assessments as well as TEKS aligned rubrics. Assessments will occur first at the introduction of the course of study, occasionally, when appropriate, at a midpoint of study, and always at the culmination of a study. All assessments will be kept on hand in each student's portfolio. Teachers will take time to note the progress of his/her students and will be able to report back to the student and their parents about progressions and the attainment of their TEKS aligned goals throughout the semester. After the assessments are complete, teachers can then plan to readdress TEKS points that may have not been met accordingly.

- k) Describe plans for program evaluation and how results will be used to improve instructional programs for all students.

Program evaluations at the Austin Discovery School will occur informally on a weekly basis as teachers meet each Friday afternoon for ongoing staff development. This staff development will be conducted both vertically and horizontally (grade level

based and subject level based). Any issue that arises can be immediately addressed among administrators and staff. If necessary, issues can be taken to the governance council and addressed monthly.

During the last month of the academic school year, teachers, students, and parents will turn in evaluations to help determine the success of the various programs. Because we want all members of our community to become critical and independent thinkers as well as students, the governance council will take the responsibility to design the evaluation, and everyone will be permitted and encouraged to evaluate how they perceive our programs are working in the classroom. These program evaluations will look at all subject areas across all grade levels. Teachers and administrators as a team will use the evaluations to determine how program areas are working and what areas need improvement. Then, based on this collaboration, we will make changes to the program which will improve our instructional programs for the following academic school year.

3. Student Goals (Scored by External Review Panel)

- a) Other than the indicators of the state accountability rating system, discuss student goals.

Austin Discovery School's goals for each student include:

Each student will help to create their own academic goals and deadlines for achieving these goals.

Students will play a critical role in the learning process. Students, teachers, and parents will be cooperatively involved with setting and maintaining these academic goals and evaluating student progress. This makes the educational process empowering because students and parents are active participants in the learning process. Students are more likely to be committed to reaching their academic goals.

Each student will be challenged at their own skill level.

Each student will work in core subjects at their own individual pace, mastering the building blocks of each subject before going on to a higher level. We believe every student has the ability to succeed if given the proper tools at the right time for their learning.

Each student will demonstrate mastery of acquired knowledge by integrating this knowledge in a new way.

Students will be working in collaboration with both peers and teachers. It is important for students to actively work on collaborative projects so they have the chance to be challenged as well as mentoring to someone in their multi-age peer group. By working collaboratively with peers and teachers, the student will be integrating their knowledge (acquired through individualized instruction as well as small group) by applying and using what they are learning as they solve problems and share what they know. This provides opportunities for developing social skills as well as academic skills because it requires students to work with each other and challenges students to think which supports brain development.

- b) Describe methods used to measure success toward each goal.

To measure the success of our three student goals, we will have to use multiple assessment tools to create a whole picture of how each student is achieving success.

The question “How will we know we are succeeding?” will be answered by looking at the student’s work as the concrete representation of progress toward the school standards (TEKS objectives). As a result, student work is the focus of the school: student writing, artwork, and other projects are displayed prominently throughout the school to demonstrate this commitment to placing their learning at the center of the school’s mission. Student work is also the subject of teacher and student discussion and analysis. Students have frequent opportunities to engage in serious conversations about their work, and to share, reflect upon, and receive feedback on their progress. As teachers look at the work of their own students, they learn much more about what is working as they hoped and what is not than they could from only standardized multiple-choice tests. As they look at the work of other teacher’s students, they have a window into the curriculum and teaching strategies used in other classrooms.

We will be using several assessment tools such as authentic assessment, process assessment, naturalistic assessment, as well as TEKS aligned rubrics.

Authentic assessment engages students in applying knowledge and skills in the same way they are used in the “real world” outside school. It is performance based assessment that requires a student to go beyond basic recall and demonstrate significant, worthwhile knowledge and understanding through a product, performance, or exhibition. The assessment comprises an authentic task and a scoring rubric that are tied to specific outcomes and are made clear to students up front.

Process assessment refers to assessing a student’s skills in progressing through a series of actions or operations. Process skills that teachers seek to assess relate to thinking abilities, applications of procedural knowledge, and interactions with others. Some examples of process skills are critical thinking, creative thinking, problem solving, decision making, goal setting, cooperation, relating to others, leadership and management.

Naturalistic assessment refers to evaluation rooted in the natural setting of the classroom. It involves observation of student performances and behavior in an informal context. Naturalistic observation is done as students go about their daily work.

A **rubric** is used as a scoring tool which consist of fixed scales related to a list of criteria describing performance. Each scale is composed of anchors that describe the various levels of performance complexity. Assigned weights, which give the relative value of each criterion, are used in the process of sumaring scores to ascertain whether the standard has been met. Rubrics promote learning by offering clear performance targets to the students for agreed upon standards. Rubrics are presented to students along with the performance task. The rubrics will be used for core academic subjects which will be vertically aligned to the TEKS for each grade level. This also allows parents to see their student’s assessment on a constant continuum through the various grade levels. The rubric will allow teachers to collect students works, apply student observations using naturalistic assessment, and add their analysis of the findings.

There is evidence that more authentic assessment and teaching can change student outcomes. For example, in a study of more than 2,000 students in 23 restructured schools, most of them in urban areas. Newmann, Marks, and Gamoran (1995) found much higher levels of achievement on complex performance tasks for students who experienced what these researchers termed “authentic pedagogy” instruction focused on active learning in real world contexts calling for higher order thinking, consideration of alternatives, extended writing, and an audience for student work. An analysis of national data found that students in restructured schools where “authentic instruction” was widespread experienced greater achievement gains on conventional tests (Lee, Smith, and Croninger 1995).

By using these instruments for assessment tools, we will gain the knowledge we need to make corrections to our academic curriculum because each goal will be measured so we will have concrete insights into what has been working well and where we need to refine our goals to make improvements.

We will measure our success by using the standard assessment tools such as TAKS, RPTE, or SDAA. Our goal is to have our charter school deemed exemplary by achieving 90% TAKS success rate by the end of our third year. Student performance on state instruments will equal or surpass state requirements as defined on the AEIS report.