

Discovery Charter School of Sustainability

Questions as derived from panel review

Mission and Vision

1. Which mission statement is the mission statement?

- The mission statement that is in the body of the document is the accurate mission statement.

2. How do you define:

a. “Academic Excellence”

- Achieving a certain level of proficiency and mastery in relation to our objectives and benchmarks in the core subject matter, integrated work, and projects.

b. “Dynamic Thinking”

- It’s the social and emotional aspect of our curriculum: the C5-curious, creative, collaborative, critical and caring.
- That’s also combined with Education for Sustainability (EfS). EfS has an integral component of system’s thinking which combines the C5. It is a holistic view that helps children understand nesting; systems within systems.

c. “Sustainable Practices”

- The general definition, which was published in 1987 by the United Nations Commission: meeting the needs of the present without compromising future generations to meet their needs. Sustainable practices will allow us to move toward that ideal.

i. What are the principles of “fostering a more sustainable world”?

- Social equity, environment, and economy and those themes need to be integrated. The principles will be incorporated through the academic curriculum and institutional practices.

ii. What are the “many balances that a sustainable world demands”?

- Need to think about systems and how things interact with each other.
- Understanding the natural world and your place in the world.
- Cost-benefit analysis – what do you give up in order to gain and how can you balance all the choices that you have to make in order to live sustainably?

iii. What are “the tools” they need to appreciate and achieve the many balances that a sustainable world demands”?

- The ability to think independently, that’s part of dynamic thinking. Trying to provide students with skills and opportunities.
- The relationships, community, and connections between people under the rubric of the three principles of social equity, economics, and the environment.

3. Describe the vision of the school.

- Students to acquire knowledge and modes of inquiry so that they can connect with the world around them.
- Students being prepared for a wide range of opportunities when they leave our school.
- Students being well rounded in EfS.

4. What are the founding group’s goals?

- The goals are academic excellence and community connection.

Statement of Need

- 1. Describe the students this charter school intends to serve. What are the characteristics of the students you expect to apply to Discovery Charter School of Sustainability (DCSS)? What do you think they need to become successful? Science?**
 - We'll be serving students throughout Franklin county, including K-6. The county is very diverse and includes urban and rural communities and both low and high income populations. There's a growing minority population of Franklin county, including children with special needs.
 - In order to be successful, both the parents and students need to want to be there.
 - This curriculum will keep them motivated and working hard.
 - The school will be a safe environment.
 - On a federal level there is a focus on science. Also we realize that not all students excel in the sciences. We want to bring science back in balance with reading, mathematics, and social studies. Want to make science exciting.
 - The inquiry process at the school will help students develop higher order thinking skills.
- 2. In the application you state that Greenfield has been under-performing since 2005 and Gill-Montague since 2007. What do you mean?**
 - In the application we are referring to AYP. The school will have standards that go beyond that.
 - The districts are taking good steps to become better, but the graduation rates in some of these districts are very low.
- 3. How have you determined the need for a new regional elementary school in Franklin county?**
 - a. What's the need for a school that focuses on the emerging green economy?**
 - b. Have folks indicated where they want this school to be located?**
 - There are some underperforming schools in the county and families want to send their children to schools in the higher performing districts that offer school choice.
 - Choices are limited for many families in the county. School choice is limited, there are fewer slots than there are applicants. Choice is very complicated in the county.
 - Need for an alternative school.
 - The founding group sees climate change as one of the biggest issues around the world. We believe that children really need to understand that. We believe kids should be asking questions and researching answers.
 - We have spent a lot of time regarding the school's potential location. We are planning to be centrally located.
- 4. How do you respond to critics who say that it doesn't make sense to open a new elementary school in a large region where populations are shrinking and elementary schools are closing?**
 - There is only one population that is shrinking statistically and that is Montague by 1.4%. All the other towns have increased their population.
 - Wondering where the statistic is coming from, is it school-age enrollment?
 - We have a large, home school base in that area because parents are looking for another choice.
 - People will throng to an educational option like this charter school.

Educational Philosophy, Curriculum and Instruction

1. What is Education for Sustainability (EfS)?

- The integration in all academic areas of economy, equity, and environment. This is done through place-based education, community partnerships, attention to developmentally appropriate education and systems thinking.

2. How will EfS standards, the 5Cs, and the Massachusetts curriculum frameworks (MCF) work together? What are the priorities? How will they be integrated and aligned?

a. Please describe how English language arts and mathematics will be taught at the school.

- On page 15 and 16 we have started to outline our benchmarks.
- It's a matter of coming up with a project using EfS, aligning the MCF that support it, and clarifying the dynamic thinking skills that you would need to develop academic excellence.
- There will be more direct instruction in K/1 for English language arts and mathematics. The themes will be integrated still. It comes down to the methodology of the teachers.

3. How and when will the curriculum be developed?

- The planning year will be devoted to developing the curriculum and getting facilities. The board will begin that process and before school opens the school leader will lead that up.
- There is also three weeks before the school for professional development and training about the curriculum. Also teachers will have at least two hours of prep-time a day.
- The curriculum will be designed by each grade grouping. It will have themes to carry teachers and students through the years. Teachers should be developing their own curriculum and teachers shouldn't be using a canned curriculum. Teachers should develop an outline for the year, and lesson plans after the school opens.

4. Please briefly explain your instructional methods.

a. Place-based (examples)

b. constructionivist/metacognitive methods

- An example of place-based learning – a school in Gil used the Connecticut River to teach about language arts and history. This issue for our school is to be developmentally appropriate. Younger students can focus on community level versus older students looking at global issues in addition to the community issues.
- The plan is to have place-based learning integrated everyday all year long.

5. What “rich body of research” are you referring to that “supports (the) belief the Discovery students’ attention to the social, environmental, and economic systems that underlie individual encounters with the world will foster and expanded the spectrum of understanding and choice throughout students’ lives?”

- The US Partnership website offers a rich body of research. The Cloud Institute offers research.

6. How will this school improve student achievement?

- This school will offer different methods of learning which will help students achieve. It will help those students that respond more to hands-on activity, etc. We will use a variety of brain-based learning techniques. They will develop confidence and then succeed.
- The culture of the school will be about student's achieving.

7. How are Individual Learning Agreements created and tracked?

- The Individual Learning Agreements will include annual learning goals. The plans will be devised based on the curriculum. At first, students will have similar learning goals. As we get to know the students we will accommodate more specific learning goals. The teacher and school leader will track these goals.

8. In the application you talk about “learners at different ages work at a variety of tasks and levels, with whatever materials and supports are needed to ensure success.”

a. What materials and supports are you talking about?

b. What would that look like in the classroom?

- We will use different instructional methods and different types of media. Also group size will change to meet the student’s needs.
- The material will be place-based.

9. How will you evaluate whether the curriculum is effective and successfully implemented?

- The students, teachers, and the community will be focused on ongoing assessments.
- Through weekly professional learning community meetings, teachers and administrators will focus on evaluating the curriculum.

10. How are teachers supported at this school? (rotating coaching?)

- There will be professional development and teachers will be supported by the leadership team. The system itself will be one of support.
- There will be coaching for new teachers. The goal is to develop a rotating coaching system. At first, the educational leader will have primary responsibilities to observe and coach, then the school will develop an educational team to develop coaches.

Have you seen that model?

- The model is Kansas Coaching. That’s instructional coaching instead of content.

11. How will professional development be determined? When will it take place?

- The educational team as a whole will tackle that. Also it’s likely that most of the teachers will not know EfS, so we can assume that they need to be trained for that.
- We will also have coaches who will help determine the professional development needs.
- We are trying to insure prep-time for teachers to schedule coaching.

Assessment, Promotion, and Graduation Standards

1. Please describe the performance, promotion, and graduation standards.

a. Walk us through the chart.

b. 75 or 70% is passing? (Is this for all gateway benchmarks or in each core course?)

c. What are the “core academic courses”?

d. Are all benchmarks equal?

e. What kinds of benchmarks can you envision for literacy?

f. What happens if a child is proficient or excellent in 3 courses, and is emerging in one. Are they retained?

g. How will the portfolio relate the performance, promotion, and graduation?

h. Will “dynamic thinking” and the development of “sustainable practices” be part of promotion and graduation standards? How are non-academic goals assessed?

i. How do these fit with Individual Learning Agreements?

- It is 70 percent of the benchmarks per core course.
- We envision standards, based on rubrics, using targeted objectives.
- The core subjects include ELA, mathematics, science, technology, and history. We are integrating them as well, and hope to show students how they are connected.
- The benchmarks are weighted, but they are equal. Dynamic thinking is central to our mission. It's central to students learning.
- The benchmarks for literacy would include comparing and contrasting different genres, reading for information, phonemic awareness, fluency, and comprehension skills.
- If a child is proficient or excellent in 3 courses – more than 70% and one course, history, they are coming up with apprentice. The teacher will know that during the year, there will be a system in place to address where the student needs to be. It won't show up at the end of the year.
- The portfolios will be one of the methods used to assess the performance against the benchmarks. Including place-based learning and other things. We may not use portfolios the first year.
- As a team we are going to develop an integrated curriculum that addresses the standards of MCF. The dynamic thinking and the development of sustainable practices will be reflected in the report cards. A rubric will be used for non-academic goals, so students can self-reflect.
- Part of the portfolios and the individual learning agreement could include the mastery of non-academic goals.

2. What is the Dynamic Assessment System (DAS)?

- a. How is this system connected to the curriculum?**
 - b. Who will develop the two-part internal assessment test?**
 - c. How will the interim school wide grade-level benchmark assessments work?**
 - d. Why choose Fountas and Pinnell Literacy Assessment?**
 - e. What does “a battery of diagnostic measures” in numeracy mean?**
 - f. When do parents/students get report cards? Will there be grades?**
 - g. How will parents, students, and teachers communicate?**
- We are making conscious use of dynamic thinking and linking that to dynamic assessment. We will continually modify the curriculum or how it's taught, so we can deal with students' needs. We are going to tweak the curriculum and/or instruction. It's a feedback loop.
 - The baseline information will be used.
 - The two-part internal assessment test will be developed by the educational leader and the curriculum team. Every K/1 will have the same internal assessment. We may use some standardized assessments also.
 - Each teacher will keep track of their own students' grades.
 - The interim assessments will be quizzes, etc.
 - The communications leader will help forge these relationships with parents. We will work with the parents to communicate in ways that best meet their needs. The teachers will communicate through twice yearly report cards, twice yearly conferences, and newsletters.
 - As a data management question, we will have a data team that will look at data management and information and communication issues.

- There will be weekly staff meetings to discuss data. We imagine the staff meetings will happen after school. Also we will discuss data at professional learning community meetings.
- A battery of diagnostic measures includes some basic assessment tools either internally developed or benchmarks connected to materials.
- Fountas and Pinnell is highly regarded and effective for teaching reading. It's more of a program than it is an assessment system. If we decide to use pre-developed curriculum the good ones come with some good assessment material.

School Characteristics/Enrollment Plan

1. Please clarify the enrollment plan.

- a. What grade levels will you admit students?**
- b. Will you fill empty seats?**
- c. What size are the classes?**
- d. How many teachers do you plan to have in each room?**

- The first year, K-3; after that we will allow kindergarteners in and add a grade each year and we will also backfill empty seats, except 6th grade.
- Class sizes – we hope to have 5 K/1 with 15 kids or 4 K/1 with 19 kids. Still trying to figure out the budget.
- Each K/1 class will have one teacher. Each 2/3 and 4/5/6 class will have one teacher at a time with humanities and STEM teachers rotating between two classes.

2. Have you looked at any models that loop grades 4, 5, & 6? Is there any research that looks at looping these grades? How many teachers will you have for a class with 4th, 5th, and 6th graders? If I'm the math teacher, will I actually have 4th, 5th, and 6th graders in my class at one time? Will I be teaching all 4 classes of 19 students?

- There are a number of examples of schools looping 4th, 5th, & 6th grades.
- Teachers will have specialty areas. They will each have 4 classes which will have flexible grouping. Groupings may change each day and throughout the day.
- Students will be grouped by ability for some classes and will be heterogeneous for others.
- 6th graders will be able to create their own groups depending on their interests.
- We are not married to this particular looping structure; it depends on what we determine during the planning year.

3. Please describe a teacher's day.

- a. How will two hours of prep-time work? Who's covering?**
- b. When is there time to plan interdisciplinary projects?**
- c. How often will math be taught?**
- d. When are the weekly staff meetings?**

- Teachers typical day – example - grades 2/3: Homeroom at 8:30 a.m.; 9:00 a.m. teaching humanities for 1 ½ hours and then go to the other looped classroom and teach the same lesson to a different group of kids. Then the teacher has lunch with students. Then the teacher has a 1 ½ hours of prep time.
- Kids in the grade 4/5/6 grouping may not get math every day, since it will be primarily project-based learning.
- Specialists and parent volunteers will be coming in while teachers will get the 1 ½ hours of preparation time.
- The professional learning communities will meet once a week and there will be weekly staff meetings. That will be used as planning time.

- Students are in class 8:30 a.m. to 3:00 p.m.
- This planning is at the theoretical stage.
- 4. **You write in the application about intramural sports, art, science, and outdoor exploration as part of extended day programs or extracurricular activities. Please explain.**
 - Most schools in our communities have after-school programs.
 - Trying to decide if it will be after-school program or extended day.
- 5. **How will this school support student's success?**
 - Tutoring can occur before and after school.
 - Specialists will come into the class to help and work with smaller groups.
- 6. **Where are you in the process of developing community partnerships in the region? How will they support the school's educational program?**
 - We may partner with local area farms, Sustainable Energy Association, etc.
 - Partners will work with the staff and children. Hopefully students will go to them, if not those partners will come to the school.
 - Partners will provide professional development, material resources, or will work directly with students.
 - For example, farms can work with children to teach about organic agriculture, the economics of farming in the valley, how to plant seeds of fruits and vegetables, etc.
 - The community partnerships will be managed by the community leader. There would be a lot of groups who want to work with the school.
- 7. **Please explain the student behavior philosophy and outline the disciplinary system.**
 - a. **Which of the three leaders deals with disciplinary issues?**
 - Students are building the culture of the school with the adults, like creating the classroom rules in the beginning of the year.
 - While there are many reasons we may have disciplinary issues, because this is a school of choice, it might not be a big issue.
 - Educational leader and the community leader both can deal with disciplinary issues.
 - There will need to be conversations with the students, a real dialogue about whatever didn't work in the classrooms, and how that impacted others in the community, and what the consequences will be. Either the consequences will already be outlined, or the students will help design the consequences.
 - The more students' social/emotional needs are met in school, the more interest there will be for learning. Students will be much more focused.
- 8. **How will the culture be communicated and developed for students?**
 - The culture will be emulated through how the teachers address the students.
 - There will be many things that will create the culture, the very environment, building, and signs, etc.
 - In direct ways, students will be included in developing classroom guidelines, and the way the staff members interact with each other. As an educator you're on stage every time you're in front of a child.

Special Student Populations and Services

1. **How did you determine that the special education administrator/teacher would become ESL certified?**
 - It's important that we have someone with ESL specialty on hand.

2. **How would you evaluate these programs to ensure that they are effective in serving the needs of the targeted populations?**
 - If we are talking about a student with an IEP, the IEP will be reviewed regularly and there will be data gathered about the interventions. Same requirements as the other students unless otherwise indicated in the IEP.
3. **Why will the educational leader, in conjunction with the Sustainability Circle, oversee and evaluate the special education administrator/teacher and related learning specialists and consultants?**
 - It will just be the educational leader.

Capacity

1. **Who is planning to be on the board of trustees?**
 - *Six people, of those present intend to be on the board of trustees.*
2. **Who is hoping to work at the school?**
 - *Three people want to work at the school.*
3. **Who is hoping to provide services to the school?**
 - *One person may want to serve as a consultant to the school.*
4. **Who in the founding group has classroom teaching experience in elementary schools?**
 - *A few founders have classroom experience.*
5. **Who here has financial expertise?**
 - *There are a couple of people with financial experience.*
6. **Are there any skill sets missing on the board of trustees and how do you plan to fill them?**
 - At this point we are missing the parents on the board.

Governance and Management

1. **How will the board of trustees know if the school is fulfilling its mission?**
 - The monthly reports from the three school leaders will inform the board.
 - The board will have to come up with some assessment devices.
 - It's going to have to evaluate the leadership team.
 - Important for the board to decide what they want to monitor and evaluate. There will also be the accountability plan.
2. **Please describe the staffing plan. No paraprofessionals?**
 - Year one we intend to have: 2 administrative professionals, 13.5 instructional teachers (included specialists, 9 core teachers, and 1 special education teacher, 1 special education administrator/ELL teacher.)
3. **Please describe and clarify how school leaders, faculty, and staff are evaluated.**
 - School leaders will have a 360 performance review.
 - Teachers will be evaluated by the educational leader.
 - Other staff will be evaluated by the team leader. They will evaluate twice a year and get feedback throughout the year.

Facilities and Transportation

- 1. Where are you in the process of the facility search? Where does “place-based” education fit with the criteria for finding a building?**
 - We have looked a several facilities. We don’t have one now. We are looking to be centrally located. Place-based education will allow any place to be fine. You just use the place in which you’re located.
- 2. Please describe how transportation services will be provided? The application does not include a plan.**
 - We can not describe the transportation yet. It depends where the school is going to be located. The options include using district transportation where the school is located, collaborating with Four Rivers in Greenfield, and/or private schools in the area. The office can also help families with car pooling plans.

Budget

- 1. Please walk us through the budget.**
 - a. Line #24, \$10,000 year one only? Fundraising, but no grants...**
 - It would be start up money for fundraising.
 - b. Line #8, contributions in kind, what is it?**
 - This is how we would calculate our volunteer time.
 - c. Line item #36 – Contracted services?**
 - Contracted services would be PT, OT, specialty services, psychologist, for year one \$3,000 alone for special education services. That’s for testing services only. It costs \$100.00 per special education student, that’s an estimate.
 - d. Line item #48 - zero dollars is budgeted for health services?**
 - Health and wellness will be woven in to the curriculum itself. We factored it into the teaching.
 - We have a couple people on the founding board who have extensive work as service providers.
 - e. Line item #49 – zero dollars is budgeted for transportation**
 - That’s a mistake.
 - f. Line item #64 - \$15,000, \$5,000 pre op and \$10,000 first year, zero after that for furniture and equipment, where did this figure come from?**
 - *No answer.*
 - g. Why two administrators in E1 when it’s a three leader system? Is there money for recruitment after year one? Professional development is \$2,000 for administration and board?**
 - The educational leader is under the instruction and professional category.

- We underestimated professional development for the administration and board. There is a lot more for the staff, we estimated \$28,000 in year one.

Action Plan

- 1. When do you plan to hire the Educational Leader, Business Organizational Leader, and Community Leader?**
 - We decided to have a project manager early on to get the school up and running during start-up. Not sure when we will hire the administrative team.