



INNOVATIONS IN SCHOOLS AND SCHOOLING

**Minnesota's charter law
is producing significant
innovations through both
new schools and schooling**

*The latest in a series of reports on the
changing face of public education*

October, 2007

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ABOUT THE CONCEPT OF AN ‘OPEN SECTOR’ IN EDUCATION

Much of the work being done by EducationEvolving is to help create and sustain an “Open Sector” in public education – in Minnesota and elsewhere in the country. By “Open Sector,” we mean a “space” in public education that is open to new entrants – new schools that are started from scratch by teachers, parents, community organizations and multi-school networks. The “Open Sector” is also open to new authorizers or sponsors – entities other than school districts that oversee schools. The “Open Sector” is open to new learning programs and to new ways of governing and managing schools. And, as part of a broadening definition of public education, the “Open Sector” is open to all students who choose to attend schools in that sector.

The “Open Sector” is based on the premise that we cannot get the degree of change and improvement we need in education by relying only on fixing the schools we now have. And, to get enough new schools that are fundamentally different, we need a combination of public policies and private actions that will allow new schools to



emerge and that will create an environment in which they can succeed. This kind of positive environment for creating and sustaining new schools can be established on a state-level through actions led by state policy makers. It can also be done – and is certainly needed – in major urban communities all across America.

Though chartered schools may be the most visible part of the “Open Sector” today, this concept of a positive environment for creating and sustaining successful new schools is not limited to charters. The “Open Sector” can also include schools operating within a district or state on some kind of contract other than a charter – as long as they are truly autonomous, accountable and open to all students who chose them.

There is also no prescribed or uniform learning program presumed by this vision for creating many more schools *new*. In fact, there’s an urgent need to better understand, respect and address the individual differences in students. It’s likely, however, that successful new schools in the “Open Sector” will be smaller and that they will make it possible for all students to take a more active role in their learning and to develop more direct and nurturing relationships with adults.

ABOUT THIS REPORT AND ITS AUTHORS

This publication is the latest in a series developed by EducationEvolving to assist policy leaders and influences expand their awareness and understanding of the challenges and opportunities now facing public education. This report tackles head-on the question often raised, “Is there any innovation going on in the chartered school sector of American public education. While this report focuses on Minnesota, it is also intended to serve as a model for similar analysis in other states. This report like all others, will be posted on EIE’s web site – www.educationevolving.org – where it can be regularly updated as new innovations appear and are brought to EIE’s attention. Comments and suggestions are welcome and should be sent to info@educationevolving.org.

The research and writing for this publication was done by EducationEvolving associate **Sarah Granofsky**, with guidance and assistance from EIE co-founder **Ted Kolderie**, who also contributed the report’s context-setting introduction. Final editing, formatting and production supervision was done by EIE’s coordinator, **Jon Schroeder**.

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NOTE TO READERS: *There's innovation going on every day in Minnesota K-12 education in districts, in all kinds of schools and in individual classrooms. This innovation is being led and done by superintendents, principals and teachers. Education/Evolving chose to focus this paper on Minnesota's chartered schools because this sector has – by virtue of its law – a special charge to innovate – with new forms of school, new approaches to assessment and new roles for teachers. The Legislature, the Department of Education and Minnesota's Office of Legislative Auditor are all currently curious about how well the chartered sector -- which means both the schools and the chartering law itself -- is performing. So, we recognize that what's reported here is only a sub-set of the innovation now going on in Minnesota public education. Perhaps one of the major district-related organizations – like the Minnesota School Boards Association or Minnesota Association of School Administrators – will commission a similar report on the innovation now taking place in the district sector of Minnesota's system of K-12 education.*

Part I: The Idea of 'Innovation'

One of the assertions made in favor of state chartering programs has been that this new sector of public education would operate as a research-and-development program.

In Minnesota, as in other states, the charter law does not specify a particular kind of school to be created. Those starting schools are free -- encouraged, even -- to try new and different kinds of schools. So there was a hope, and a real expectation, that some significant innovations would appear.

However, there has not been much effort to examine the chartered-school sector, in Minnesota or elsewhere, to see whether this is in fact happening. Researchers and journalists seemed much more interested in the total number of schools being created, the number and demographics of the students enrolled and, on average, how those students are scoring on standardized tests. It's also been noted that many chartered schools appear to

be fairly conventional, both in their operations and in the teaching and learning models they employ.

So the questions remain: "Is chartering functioning to any degree as an R&D program? If there are indeed innovations appearing, what are they? And, where are they?"

This EIE report is a first, admittedly quick and preliminary, effort to survey innovations appearing in the charter sector in Minnesota. Our intention is to make this a continuously updated inventory on EIE's Web site – so that researchers, journalists, charter leaders and others will use and expand on this initial effort to define and document innovations over time.

Defining 'innovation'

In recent years, we have seen a growing interest in innovation, perhaps related to the concern about the need for change in the American economy as rising countries elsewhere in

the world begin to do the older manufacturing tasks we used to do in America. Two well-known books that have helped fuel this interest are John Lienhard's *How Innovation Happens* and Clayton Christensen's *The Innovator's Dilemma*. Two distinct types of innovation appear in this discussion.

Sustaining innovation: Some new products, processes and practices are clearly what Harvard business professor Clayton Christensen calls 'sustaining innovation' – changes of a modest sort, incremental improvements in existing products, processes and business models. A good example might be the automatic transmission that replaced the 'stick shift' in automobiles. The steady flow of these incremental improvements forms what is often called "the excellence movement."

Disruptive innovation: Some innovations are, to take the term that made Christensen famous, 'disruptive'. These are dramatically, radically, different products, processes or business/organizational models. Over time, they can replace existing products, companies and even entire industries. The railroads disrupted and replaced canals for the transportation of commodities. The airplane has all but replaced the passenger train. The computer replaced the typewriter. PCs disrupted the main-frame and mini-computer business.

Chris Anderson's *The Long Tail* is a wonderful account of this process as it's now revolutionizing the entertainment industry – for example, the iPod disrupting the music business built on selling CDs. Often, when they first appear, these new products and processes are not 'higher in quality' than what they will eventually replace. They are simply different. They do what the earlier product or service did not do. The Sony portable radio could go to the beach; as the large cabinet-style radio in the living room could not. Over time, such new products and services tend to improve, producing the economy's major gains in productivity.

Of course, every innovation that occurs doesn't fit neatly into one of these two broad categories. So, it's best to think of a spectrum or continuum of innovation, with these two 'ideal types' at either end. And it may be helpful to think in terms of a cycling. An existing model is disrupted by something different. There are gradual improvements in the new model. Then what was once the

'new' model is disrupted and replaced by another something even newer and better than the last.

Somewhat related is the distinction between innovation as (a) something never before seen anywhere and (b) a model never before seen *here* -- in this community or in this state. Clearly the former is important, but also more rare. The second type, though in one sense a replication of something already invented elsewhere, is a valid kind of innovation for any particular setting.

Innovation in education – both with the institution and with “schooling”

When we think about innovation in education, we need to distinguish between the K-12 institution and what EIE prefers to call “schooling.” Both have historically existed in a stable, conventional form. Then in the 1980s states began to innovate with the institutional arrangements, laying the basis now for innovation with schooling.

Down to the 1980s, K-12 education was set up in essentially a public-utility arrangement, with boundaries defining 'districts' within which there was a single organization offering public education, to which the children living in the district were assigned. An elected board owned and ran all the schools; employing the administrators and the teachers, organized in a standard public-bureau model.

Minnesotans will recognize the 'institutional innovations' introduced in the 1980s: the post-secondary enrollment option in 1985, inter-district open enrollment in 1998, chartering in 1991. These institutional innovations radically changed the traditional givens of K-12, withdrawing the 'exclusive franchise' that was central to the public-utility arrangement; making it possible for students to go to school (geographically and organizationally) 'outside the district'. Chartering also made it possible for some entity other than the district board to offer public education *within* the district.

Other innovations may yet appear in the K-12 institution, particularly as technology further blurs the importance of “place.” But with these quite significant changes, whose effects are still rippling through the district sector, the focus has now shifted to

innovations in the organizational form of 'school' and in the learning activity -- with what students and teachers do -- ie: "Schooling."

The rest of this report identifies and describes a number of interesting and potentially important innovations that have appeared in Minnesota's chartered schools. They are grouped into the two broad categories mentioned earlier -- innovations in "school" and innovations in "schooling."

Innovative approaches to "school"

Here, too, it is good to begin with a clear understanding of the 'default model'; the traditional, conventional, standard school most of us remember . . . the model that continues to exist in most places and in the way schools are most often described in most research, in the media and in colloquial conversation.

Organizationally the school has no separate legal existence. It is the district that exists legally. A school is an operating unit of the district. The state finances districts, not schools. The term 'school board' properly should be 'the district board of education'. Individual district schools do not have boards of their own. They generally have principals -- an administrator named by the district board and superintendent. The principal is, at least in theory, both the manager of the school and its 'instructional leader', its lead teacher.

Most schools are also clearly recognizable buildings -- often surrounded by acres of parking lots and playgrounds or athletic fields -- to which both students and teachers come for a defined number of hours per day and days per year. In the Twin Cities area, high schools have grown quite large. Some suburban districts have one or more high schools with 3,000 or more students in the top three grades.

Meanwhile, the schools in the chartered sector have been innovating on a number of these dimensions -- changing a number of these traditional 'givens'. Their smaller size is just the most conspicuous example. In Minnesota there are other important innovations off the default model. Perhaps the most interesting has to do with the professional role of teachers in the school.

Innovative approaches to "schooling"

The arrangement for learning is different, as we all know (and remember), between elementary school and secondary school. This paper will focus on innovations in secondary school, since 'high school' -- described as "obsolete" by Bill Gates (and others) -- is widely regarded as the problem most urgently needing attention. One of the major choices now before national and state policy makers is also whether to extend the major strategies defined in the Federal "No Child Left Behind Law" to high schools and to more of the subject areas that traditionally define the high school experience.

With high school, too, there is a kind of 'default' model, which is visible in the standard 'picture' of school and classroom.

Down the hallway in the building are doors with little windows. Inside the door is a room with individual student desks; or possibly tables. Against one wall is a 'blackboard' (today probably green or white), in front of which the teacher sits or stands, facing 25 or 30 (or increasingly more) students.

The students are in a "class," taking a "course," to learn about a "subject," in a single "academic discipline." The class is perhaps 50 minutes long. The course is a semester or two long. There is usually a textbook for the course. The students move through the material as a group. It is what Ted Sizer has called 'batch processing'. The 'technology' is basically that of teacher-instruction.

The idea is to cover the subject. Students are tested on their mastery of the subject, most often how well they've memorized a common set of facts. The tests are given at the end of some period of learning -- a "unit" or at the end of a "course." Sometimes tests are a requirement for students moving to the next level of learning -- perhaps even as a condition of "graduation" from high school.

Again, innovation is occurring in Minnesota in this basic approach to learning -- the most interesting perhaps having to do with the role of the student and with the role of the rapidly-developing digital electronic technology.

What follows will illustrate and briefly explain a number of innovations now occurring under both headings.

Part II: Examples of Innovation

This EIE report catalogues and explains many of the innovations that have appeared in the chartered sector in Minnesota. There is no way that a comprehensive list could be compiled because every year new chartered schools open with new approaches to school and schooling. And the most innovative schools are consistently redesigning and rethinking their current status.

However, this report includes brief descriptions those innovations that have made a significant impact, those that have invented new ways of using old tools to produce today's desired results, and those that have been widely adopted in schools other than where the innovation first occurred. They have been identified through observation at school site visits and conversations with students, teachers, advisors, administrators, and staff, as well as dialogues with those who had a hand in the original design or evolution of chartering in Minnesota.

Innovative Approaches to “School”

A typical conventional school is physically imposing, teeming with a large student body, structured and run from the top down with the least amount of consideration given to individual student needs. It is one size fits all, segregated by class, by grade, and from the community, evaluated primarily on test scores, not well integrated with technology.

On the other hand, those opening chartered schools have the luxury of starting schools new. Given this freedom, many of them have begun to rethink these assumptions and have taken steps to actively invent new structures and new methods of schooling that more effectively address the major problem in conventional public education – a significant lack of student and teacher engagement and motivation.

School Innovation #1: Small Size – The School is Personal Again

The simplest of all innovations is that most chartered schools purposefully enroll fewer students than most conventional district schools and even most private schools. In contrast to district high

schools that often serve two or even three or four thousand students, Minnesota's chartered high schools rarely serve more than two hundred students, and in most cases far fewer.

At the high end, St Paul Conservatory for Performing Arts was chartered to serve about 75 students in a grade. But most Minnesota chartered high schools serve between 20 and 40 students per grade. Overall, the average Minnesota chartered schools has about 175 students, with just a handful serving more than 500 students. In fact, Minnesota's average-sized chartered school has about a hundred fewer students than the average chartered school nationally.

The benefits of small schools are well-researched and well-documented. But, small schools do face significant challenges including diseconomies of scale and the need to prioritize or be creative in offering the broad range of extra-curricular activities that has come to define traditional large district high schools.

To compensate for these realities, many charters have established creative partnerships with public libraries, park and recreation programs, arts organizations, local businesses, higher education institutions and even district public schools. In other cases, the charters have decided to focus on extra-curricular and other activities that can be organized at a smaller scale or lower cost.

Creating partnerships with districts around traditional extra-curricular activities remains a challenge for many charter high schools, however. And resistance to shifting responsibility for managing such activities to more neutral organizations or agencies in the community continues to face strong opposition.

School Innovation #2: Teacher-Run Schools – the Professional-Practice Model

One of the more promising innovations in how schools are organized is what, generically is called the Teacher Professional Practice (TPP) model. This model involves creation by teachers of independent professional organizations (partnerships, cooperatives, limited liability corporations, etc) that contract to provide their services to a school. TPPs have revolutionized the way educators and others are thinking about school management,

professional development, and the role of the teacher in the classroom and the school as a whole.

EdVisions Co-op was the first formalized teacher cooperative in Minnesota – starting with the Minnesota New Country School in Henderson. Fueled by two grants from the Bill and Melinda Gates Foundation, this model has spread to more than a dozen charters in Minnesota and to Wisconsin, California and several other states nationally.

Previously, teachers had only one option – to be an employee of a school district and, in Minnesota, with conditions of that employment defined in a contract negotiated for all teachers in that district. District employed teachers are placed in a school, in

"We use the teachers as owners model and that has made a world of difference because teachers don't come in here thinking it's an eight to four job and they have no responsibilities when they walk out the door. They truly own what goes on here. So at 5:30 at night half the staff is still here picking brains about what we're going to do tomorrow to make this a better place for the kids."

Dee Thomas
Lead teacher/advisor
Minnesota New Country School

a classroom, often with little consideration to how well the teachers will cooperate or how their strengths will complement each other. In many traditional schools the culture of teaching also isolates teachers in their own classroom and curriculum instead of encouraging collaboration and communication within and across disciplines and grades.

This differs greatly from other professionals who are allowed to choose their colleagues, the location, and the "professional practice" that will allow them to be most effective. In other professions, a request is made and the professional or group of professionals decides how best to accomplish the task at hand.

While we have not given the autonomy to teachers to practice their skill without the influence of district policies, we do expect them to return improved results each and every year in the form of student test scores, graduation rates, and other measures they have no control over achieving.

In district-managed schooling, teachers are also stripped of

their professional discretion by strict district policies but remain the first to blame when outcomes do not improve. Programs that encourage teachers to 'teach better' have often not succeeded because the teachers haven't been given the necessary autonomy that allows them to be truly effective teachers.

Imagine a doctor expected to treat an infection with the wrong medicine for a given patient, and being told 'just be a better doctor.' If we cannot justify these demands on doctors, why is it the status quo for teachers?

It doesn't have to be. And we are now seeing the emergence of teachers who demand the respect and responsibility that doctors, lawyers, architects, consultants, and others are given. Teacher professional practices, like the group of teachers that run Minnesota New Country School, give teachers the ability to control their professional environment.

The EdVisions cooperative is contracted with to run a school according to their own professional judgment, not as individual teachers being told what to do by a distant board of non-teachers, superintendent or even a building principal they have no say in hiring. They must educate their students up to state standards, like all public schools, but how they achieve this goal is up to the members of the professional practice.

The TPP model encourages teacher collaboration and mutual support to effectively address the needs of the students, parents, the teachers themselves, and the school. The teachers have the ability to hire only those who will mesh with the vision of the practice, as well as being free to place teachers according to their strengths, without having to consider districts politics of seniority or tenure. The result is increased involvement and outcomes.

Teachers in a professional practice also collaborate on the most important decisions that directly affect their school. And they may assume administrative roles or hire others to do that work. It is most important that in this new educational landscape, in which schools are opened with specific visions and such emphasis is put on test scores and academic outcomes, that the teachers, those with the best understanding of the school and how to increase positive outcomes, are the ones making decisions and controlling the learning environment.

Examples of teacher-run schools:

ArTech Charter School, 1719 Cannon Rd, Northfield MN, 507 663 8806
Avalon Charter School, 1745 University Ave, St Paul MN, 651 649 5495
El Colegio Charter School, 4137 Bloomington Ave S, Minneapolis MN, 612 728 5728
High School for Recording Arts, 550 Vandalia St, St Paul MN 651 287 0890

First teacher-run school:

MN New Country School, 210 Main St, Henderson MN 507 248 3353

For more on the TPP model go to

<http://www.educationevolving.org/teacherpartnerships/>

School Innovation #3: The Age3/Grade3 Model – Bridging the Divide Between Pre-school and K-12

The Age 3 to Grade 3 model, first introduced in the now-closed Mary McEvoy school in Minneapolis, is intended to improve literacy and other basic skills by providing a seamless transitions from pre-K through third grade. The goal is to help minimize the stress of new environments, new peers, and new teachers on the developing student and his or her family, as well as increase the effectiveness of each individual program.

One way to do this is through a kindergarten through grade three charter school that explicitly partners with pre-K providers that adhered to the same curriculum, assessments, teacher training and overall learning environment in the higher grades. It can also occur where the pre-school and elementary school are part of the same organization.

The Age3/Grade3 school model is an important innovation because of its implications for how we structure schools and how we view early childhood learning. Until now there has been a silent understanding that preschool, kindergarten, and first grade are all separate steps in early childhood education. We've also had an understanding that kindergarten is the official start of formal education and that age determines school readiness.

Preschool has also been considered a necessary luxury for those who have enough money to pay tuition or those who live in states where universal Pre-K is mandated. No such law exists in

Minnesota. Little attention is paid to the importance of these steps as a whole, even though there is an overwhelming amount of research on the importance of a quality preschool experience for all children.

The current conventional educational arrangement requires children to start their formal education in kindergarten but only suggests that the child has previously attended preschool or has been exposed to the kinds of tasks required in kindergarten. Once in kindergarten the new student must concentrate on the activities as well as navigate a new group of children with whom they have to get along with. They also have to learn to trust their teacher.

All of these tasks can serve to distract students from learning. So the major innovation of Age3/Grade3 schools is in how early childhood learning is designed. The Age3/Grade3 model dismisses the idea that students should be 'Ready for K' or even that formal education starts at kindergarten. Instead, this model begins with the assertion that students need a solid foundation from Pre-K all the way through third grade.

This assertion is based in research that shows that much of the progress made in quality Pre-K programs can be lost by third grade if student learning isn't closely monitored, assessed, and improved upon. Age3/Grade3 schools have clearly defined learning benchmarks and assess students consistently to ensure they are on par with personal developmental goals. This kind of attention to student learning in the early years makes later educational success more reliable.

Model first employed at:

Mary McEvoy School, Minneapolis

Being implemented a new charter that opened this fall:

Hiawatha Leadership Academy, Minneapolis

School Innovation #4: Mission/Data Driven Decision Making – More than Test Results

Now that schools have broken from the traditional mold, the decision making process requires an overhaul. As schools change, the way they are governed must also change. The tools

used to evaluate students in a conventional school are incapable of measuring the full effectiveness of an education that focuses on more than just facts and figures, and thus decisions that need to be made in an unconventional school cannot be made solely on the results of standardized test scores. New educational methods and explicit school missions require new ways of evaluating school effectiveness.

On its surface, this innovation may not seem to be much different from the top down decision making style of a conventional school. However, instead of considering only the performance of students as judged by standardized measures, chartered schools need to focus on how students are responding to

“What you teach about peace and ethics is important but it’s never going to do it. You have to model it. You have to be totally committed. It requires a paradigm shift and a total commitment on the part of all adults.”

Karen Rusthoven
Director
Community of Peace Academy

the mission statement as well as considering data that more accurately reflects holistic student performance. In schools like Community of Peace Academy and Southside Family School, decisions are made in accordance with the mission of the school as well as to address the collected student data.

The mission of these schools looks holistically at the student, considering not just what gains need to be made in academics, but in personal and social growth, as well. Community of Peace Academy uses a non-violent approach in all aspects of the school from conduct in the classrooms, to conversations in the teachers lounge, to conflict resolution on sports teams. Decisions made about curriculum, discipline, finances, hirings, firings and facilities are all made using the principles of the mission to guide the process as well as the final decision.

As a result, the mission infiltrates every aspect of the school from the daily schedule, to how teachers, staff, and students treat each other, school policies, attendance rules, classes offered, and classroom practices. In addition to the mission, data is collected and used to evaluate the effectiveness of the decisions.

Top down decisions made by fewer people may be easier. But mission/data driven decisions – though they require co-operation – force students, teachers, and staff to take responsibility for their involvement and their part of upholding the mission they endorse. This innovation provides a sense of clarity in a school, where all teachers are on the same page and all students understand what is expected of them and what they can expect from others.

Examples of chartered schools that use mission and data driven decision making:

Community of Peace Academy, 471 Magnolia Ave E, St Paul MN 651 776 5151
Southside Family School, 2123 Clinton Ave S, Minneapolis MN 612 872 8322

School Innovation #5: Student Involved School Governance – Democracy in Action

One common mission in chartered schools is the use of democratic values throughout the operation of the school to better prepare their students for civic engagement and life as a politically active adult. It is by no means an innovation never before seen anywhere. In fact, the theory of public education is rooted in the theory of democracy. But democratic principles have been absent from the school level practice of public education since the beginning.

This new use of democracy in the school has changed the power dynamics between teachers and students. Avalon School is a good example of a school where democratic values are at the core of the school’s design and practiced in a meaningful way.

Avalon students are asked to take part in the decision making process through regularly scheduled all-school meetings they refer to as ‘circle’ and ‘congress.’ During these meetings each student can voice their opinions on the subject up for debate and all students, teachers, and staff have equal say in the decision.

There are times when the teachers and staff must have the final say. But an important decision is never made without first being discussed with the students. These topics range from hiring of teachers, dress code, disciplinary action, length of school day and year, and classes offered.

In a conventional school there is seldom student participation

in decisions that the administration or school board makes. There are student councils, but even they have to defer to the administration for final approval of their decisions that usually only affect matters like the lunch menu or prom theme. Some administrations are open to the idea of students voicing their concerns in a public forum. But the students themselves, even if they get what they want, are not included in the final decision.

In schools that empower students, they quickly learn that the responsibility of helping to make decisions directly affects their quality of life at the school. As a result, teachers are not afraid that their students will make decisions that are unwise, will benefit an elite few, or punish others unfairly.

Schools that employ democratic student involvement also report much higher adherence to the rules and more self-policing by the students themselves. Students and teachers use the opportunity to express what they expect of themselves and of the other, as well as what they will and will not do. This kind of open communication allows both sets of stakeholders to be heard and holds each to a high standard of learning in their school.

The result is most evident when a rule has been broken and a student is disciplined. The students as well as the teachers convene to determine the punishment for that student based on how important the rule is and to what degree the student is at fault. Because the students had a say in making the rules and they understand their rationale, they can also be responsible for the correct enforcement and disciplinary action.

To try this in an environment where the students have been excluded from designing the rules could produce disastrous results. But at Avalon, because students and teachers understand and agree on what is right and wrong, there is less misbehaving and more time for learning. In addition, the students get a first hand look at the democratic process, and are ultimately better prepared for an active civic life, outside of school.

Examples of charters that use democratic governance:

Avalon Charter School, 1745 University Ave, St Paul MN, 651 649 5495
 MN New Country School, 210 Main St, Henderson MN, 507 248 3353

School Innovation #6: Academic Advisories – Connecting students with adults

Advisories – or groups of students that cross traditional grade or age lines and relate to the same teacher/advisory over multiple years – have replaced the class and the classroom in some chartered schools. In such schools students are no longer herded through hallways from class to class at the sound of a bell, but instead have a permanent area and community to be a part of for the duration of their time at school.

Physically, advisories are a collection of the student's own workstations and the advisor's desk, sometimes separated from other advisories by low walls, and sometimes completely open. They are found in a number of chartered schools in Minnesota

"(My advisor) is a very important person in my life. He's trying to guide me, to help me, teach me. He's a very smart man and I feel that he has a lot to teach people and I feel blessed to have him in my life helping me out. He took the time, he's real patient. He cares a lot, it's real cool to have someone care about me and want to help me."

Fatimah
Student

High School for Recording Arts

that use project-based learning including Minnesota New Country School, New Century Charter School, High School for Recording Arts, ArTech, and Avalon.

Of course, many traditional high schools also have groups of students group in what are also called "advisories." But in a traditional school an advisory might meet only twice a week for a few minutes. Students in chartered schools with advisories meet and work with their advisors all day every day.

In addition, the student stays with the same advisor and advisory for the length of their stay at the school, creating a strong support system, stable and personal environment from fellow advisees and the advisor. Since the main goal of an advisor is to help the student navigate the difficulties of homework, classes, projects, relationships, family, and other challenges of adolescence, it makes sense for that advisor to be as close to that student as possible.

In a traditional school, students have different teachers for

each subject and must seek out each individual teacher for help. Teachers in traditional high schools also have five or six sections of 30 or more students each to try to keep track of.

In contrast, advisories in several Minnesota chartered schools match one advisor with 20 or fewer students. These advisors also often double as seminar leaders (specific classes that are held in addition to the educational program).

It's not surprising that finding time to meet with an advisor who has few scheduled classes during the day is far easier than trying to connect with a teacher in a conventional school who is busy six of seven class periods a day. Similarly, the advisors have a much easier time keeping track of their students' progress, and have an opportunity to form a real relationship that looks holistically at the student instead of just their math, social studies, or science abilities.

In these innovative chartered schools, advisories are also physical spaces. One advisor tends an area of students working at their own work stations on projects or assignments alone or in small groups.

It's important to understand that these kinds of advisories are usually composed of students of all ages attending the school, exposing younger students to the experience of upper grades before they are overwhelmed by it. The open physical layout of these schools also creates a more interactive and inclusive setting for all students and advisors. The advisor can monitor progress, give advice, and observe behavior with a simple glance through the advisory.

Most advisories in these types of chartered schools provide computers for their students' use. The use of technology will be addressed further in this report, but here it is most important to note that the computers and technology has been physically well integrated into advisories, encouraging students to use and experiment with them in the normal course of their day. There is no such thing as a "computer lab" in these kinds of innovative chartered schools.

Examples of schools that group students into advisories:

Avalon School, 1745 Univ. Ave, St Paul MN, 651 649 5495
High School for Recording Arts, 550 Vandalia Ave, St Paul

MN651 287 0890
Northern Lights Community School, 305 Bridge St, Warba MN, 218-492-4400
River Heights Charter School, 60 East Marie Ave, West St Paul MN, 651 457 7427
Harbor City International School, 332 W Michigan St, Duluth MN, 218 722 7574
New Century Charter School, 45 W Highland Park Dr, Hutchinson MN, 320 234 3660
NorthWest Passages School, 11294 NW Robinson Dr, Coon Rapids MN, 763 862 9233

First seen at:

MN New Country School, 210 Main St, Henderson MN, 507 248 3353

School Innovation #7: The Hope Study – Measuring and Addressing Student Attitudes

The Hope Study is a new evaluation tool being used by a number of chartered schools in Minnesota that looks at student motivation, autonomy, belongingness, and competency from the students' point of view. These chartered schools are taking the results one step further and trying to make their schools more conducive to student interest, engagement, community, and hope.

In other words, many chartered schools are being designed with student motivation at the core, unlike many large traditional high schools that are teacher and teaching centered.

Chartered schools across the state have been involved in this study, showing a willingness to be evaluated on qualities that have previously been ignored, as well as the initiative to change. Standardized test scores and graduation rates are the only ways that the state of Minnesota currently evaluates all schools, ignoring important aspects of schools that directly affect the ability for students to perform on those tests.

When standardized test scores are low, too often the premise is that the problem lies in the performance of teachers and students. There is little, if any, attempt to address other factors that might be interfering with the ability, or motivation, of teachers to engage students and of students to work hard. A big complaint from schools with low test scores is often that their students 'don't care' about the state tests: performance is not the problem, the problem is student apathy. Never before would student

attitude have been considered in the achievement debate.

Chartered schools have shown a willingness to address these factors, and thus have reaped the benefits of a contented, engaged, active student body. The Hope Study is attempting to broaden the ways schools can be evaluated to help administrators, teachers, staff, and students create a more effective learning environment for their population of students.

Minnesota charters participating in The Hope Study:

MN New Country School, 210 Main St, Henderson MN, 507 248 3533

Community Of Peace Academy, 471 Magnolia Ave E, St Paul MN 651 776 5151

High School for Recording Arts, 550 Vandalia St, St Paul MN 651 287 0890

EdVisions Off Campus High School, PO Box 307, Henderson MN, 800 617 7857

Liberty High Charter School, 308 Northern Dr, Blaine MN, 763 786 4799

Jennings Experiential High School, 1919 University Ave #112, St Paul MN, 651 649 5403

School Innovation #8: Physical Structure – Frank Gherry meets a Conventional School Building

New educational models require rethinking the space that a school occupies as well as the spaces within that school in which students and teachers relate to each other and the curriculum. Because they are not usually housed in conventional school buildings, chartered schools have had to be more innovative and imaginative with the physical space that they do have.

In fact, many project-based schools have adopted an open layout where advisories are separated by low partitions and individual work spaces are placed right next to each other in a most space saving and learning-conducive arrangement.

These environments are very different from a conventional school building that is separated into classrooms, hallways, and lockers. Students in an open layout are responsible for their own workspace, not just a locker. Teachers and advisors sometimes have workspaces among their students, to be more accessible. Classrooms are rarely organized as individual desks placed in Rows. Instead students are seated at group-sized tables, clusters of desks, or technologically integrated workstations.

At first the sites and sounds of these innovative learning environments can be overwhelming because they differ greatly from the closed classrooms and loud, teeming hallways of the conventional school building. But, students in these unconventional schools are working, socializing, learning from each other, teaching each other, meeting with teachers, practicing their craft, working with technology, experimenting with new abilities all -- in the open space.

This contrasts starkly with the happenings in a conventional high school designed to arrange students by rank and file and to try to endow adults with complete control of the environment. In fact, significant financial and human resources in traditional high schools are devoted to maintaining order and protecting the safety of students – even teachers.

The more open, workplace-like environment in a number of innovative charters is certainly not for all students or teachers. But, many students thrive in this kind of sensory intensive environment where learning happens whenever and wherever the student decides.

The emergence and success of these spaces has not happened without considerable thought, including the involvement of architectural firms that specialize in very different schools that require new and different designs.

Fielding-Nair International, for example, is a Minneapolis-based firm that has had success across the globe designing and constructing new buildings for schools, including several chartered schools in Minnesota. Fielding-Nair has hosted delegations of educators from all over the world – including a group of Australians earlier this year – who have visited Minnesota chartered schools to observe their design first-hand,

These schools often include more windows for natural light, more color within the school, wide open spaces for student collaboration and socializing along with spaces that can be used for solitude and personal reflection or concentration, classrooms where students do not sit in straight rows in front of the teacher, and thorough integration of technology throughout the school all in an attempt to spread learning opportunities outside of traditional boundaries.

For more information on innovative school designs:

Fielding-Nair International-
<http://www.fieldingnair.com/home.aspx>

Examples of charter schools in Minnesota with innovative structural plans:

Avalon School, 1745 Univ Ave, St Paul MN, 651 649 5495
 ArTech, 1719 Cannon Rd, Northfield MN, 507 663 8806
 High School for Recording Arts, 550 Vandalia St, St Paul MN
 651 287 0890
 MN New Country School, 210 Main St, Henderson MN, 507 248
 3533

School Innovation #9: Individual Workspaces – Students as Owners of their Educational Space

Many of the innovative learning programs discussed later in this report require a different kind of personal space for students to be most effective when learning in new ways. This is not unlike the kind of personal environments that are present in today's modern workplace.

Instead of a locker and a desk, also used during the day by four or five other rotating students, students in these innovative charters have individual and usually larger than normal desks, sometimes with their own computer, and always with the responsibility of keeping it organized.

Conventional schools ask their students to remain organized and prepared for class while only providing them with a small locker that is usually in a busy, crowded, often intimidating place – a traditional school hallway. The traditional school locker is not a place to study, not a place that can be used for anything other than storage, and a few pictures of the latest crush.

Meanwhile students travel from class to class, having to pick up and move every period, always having to readjust to a new classroom and a new desk at which to be comfortable. Not incidentally, they also have to navigate a crush of bodies in what, for many students can be stressful – even intimidating.

Students are supposed to be the focus of education. And since they are the ones doing the 'work' of learning, they require the same kind of place to be organized, to learn, to think, and to create as teachers – or as workers in any traditional work place environment. The kind of workstations that have been created in

some of Minnesota's more innovative charter schools allow a student to have a consistent place where they can spread out, create a project, sit and read, be comfortable, and be surrounded by things that are familiar and that encourage them to work hard – places where they can learn.

Examples of chartered schools that use student work stations:

Avalon School, 1745 Uni. Ave, St Paul MN, 651 649 5495
 ArTech, 1719 Cannon Rd, Northfield MN, 507 663 8806
 High School for Recording Arts, 550 Vandalia St, St Paul MN
 651 287 0890
 MN New Country School, 210 Main St, Henderson MN, 507 248
 3533
 Northern Lights Community School, 305 Bridge St, Warba MN,
 218-492-4400
 Agriculture and Food Sciences Academy, 100 E Vadnais Blvd,
 Vadnais Heights MN 651 209 3910

School Innovation #10: Flexible Learning Schedules – Making Education Accessible to All

The time, as well as the place, of learning has to be considered when asking schools to produce more favorable results. In many chartered schools the 8:00 am to 3:00 pm, September through June conventional school day and year has been transformed into a flexible, accommodating schedule that bends to the best work hours of the student.

Particularly schools that serve students with unstable personal or home lives have adapted and allowed those students to come to school when they can, understanding that it is not always possible to be on time to an early class if you are living in a homeless shelter, or a friend's couch.

Students who need to hold a full or part time job, or who have to take care of siblings or their own children are not best served by a conventional school day. Some chartered schools have to opening early and remaining open past regular school hours sometimes from seven in the morning until seven in the evening. This gives students a safe, structured place to learn at times that are most convenient for the individual student.

Meanwhile teachers and advisors are at the school during the entire school day in order to provide support whenever the student needs it. Many schools encourage teachers to give their students cell or home phone numbers so they can be reached if a student

has a last minute question or needs extra help with an assignment or project.

In addition, some chartered schools have decided to modify the five day a week schedule, leaving Friday as a day for internships, project work, community service, travel, or other extra curricular activities that the student needs to complete. Some schools have even transitioned into year round academic programs.

It should be noted that this kind of flexible scheduling of school around students' lives is also a feature of many Area Learning Centers and other alternative schools created by districts. However, such schools require students to have previously demonstrated one or more risk factors to be eligible to attend. Charters have no such pre-conditions for enrollment. In fact, several former district alternative schools have converted to charter status to avoid enrolling students only have they have demonstrated some evidence of risk or failure in a traditional school environment.

Chartered schools with innovative schedules:

MN Internship Ctr- Dinkytown Career Site, 1313 5th St SE, Mpls MN, 612 280 2330
 MN Internship Ctr- English Lang Acad, 2872 26th Ave S, Mpls MN, 612 722 5416
 MN Internship Ctr- Performing Arts Site, 310 E 38th St, Mpls MN, 612 280 2330
 MN Internship Ctr- Urban Studies Site, 2507 Unity Ave N, Mpls MN, 612 280 2330
 MN Transitions School, 2872 26th Ave S, Minneapolis MN, 612 722 9013
 Hiawatha Leadership Academy, 4537 3rd Ave S, Minneapolis MN, 612 987 5688
 Jennings Experiential High Sch, 1919 University Ave #112, St Paul MN, 651 649 5403

School Innovation #11: Targeted Student Populations – More than 'At-Risk' Students

Focused attention on a particular population of underserved students is an innovation that has been used only sparingly in conventional district schooling.

Originally, alternative programs used targeted student populations to identify and serve students who were not succeeding in the conventional system. However, the scope was

generally limited to academically 'at-risk' students and ignored a growing segment of underperforming students- English language learners, immigrant children, special needs students, culturally diverse students, or even those students who could be challenged further.

The chartered sector has allowed this innovation to expand past its traditional risk-defined boundaries to help students who might not perform up to their full potential in the conventional classroom because of factors other than academics. Schools are now able to design the curriculum and learning model around a type of student in their community that needs special attention.

In particular, culturally specific schools have helped newly arrived families bridge cultural and linguistic differences so students can focus on academics instead of the push and pull of assimilating into a new culture, new language, and the requests of (often) traditional parents.

Cedar Riverside Community School is one example of an innovative chartered school that does this. It serves the specific needs of the Cedar Riverside community, predominantly new immigrants from Africa, through a specific Limited English Proficiency curriculum as well as the infusion of cultural values into everyday school life. This allows students to obtain a competitive education without compromising cultural values.

Similarly, Four Directions Charter School offer classes to interest American Indian students and that reflect the beliefs and culture of the tribes in and around Minnesota. These class offerings include the Ojibwe language, State and Local Tribal government process, as well as more conventional courses.

High School for Recording Arts could also be listed under this innovation because it has specifically used its curriculum to attract a number of urban students of color who are unexcited by conventional learning, but become fully engaged in HSRA's music business framework.

In addition to culturally or language specific programs, several very innovative chartered schools have been created that meet various special education needs of students. New Visions, MN North Star, and Fraser Academies all provide specific programs designed specifically for particular special needs, for

example students who are hearing impaired, developmentally disabled or autistic.

Sobriety High has also filled a niche for students who have substance abuse problems through the use of sobriety contracts as well as regular sessions with counselors specifically trained in substance abuse.

Students who attend these schools would not necessarily fail in a conventional classroom, but they have a better chance of attaining higher levels of achievement in a school that tailors specifically to their needs through special curriculum or school environment. By targeting a specific student population in need, chartered schools have cast a net designed to catch those students whose needs and desires stretch beyond the limits of a conventional public school. And they didn't have to "fail" first.

Chartered schools targeting a certain group of students:

High School for Recording Arts, 550 Vandalia St, St Paul MN 651 287 0890

Hmong Academy, 1515 Brewster St, St Paul MN, 651 209 8002
El Colegio, 4137 Bloomington Ave S, Minneapolis MN, 612 728 5728

Harvest Preparatory School, 1300 Olsen Memorial Hwy, Mpls MN, 651 778 2940

MN North Star Academy, 1669 N Arcade St, St Paul MN, 651 771 2000

Lighthouse Academy of Nations, 2600 26th Ave S, Minneapolis MN, 612 722 2555

Higher Ground Academy, 1381 Marshall Ave, St Paul MN, 651 645 1000

New Visions School, 1800 2nd St NE, Minneapolis MN, 612 706 5566

Four Directions Charter School, 1113 W Broadway, Minneapolis MN, 612 588 0183

Oh Day Aki, 1209 4th St SE, Minneapolis MN, 612 331 8862
MN Internship Center- English Lang Acad, 2872 26th Ave S, Mpls MN, 612 722 5416

MN Transitions School, 2872 26th Ave S, Minneapolis MN, 612 722 9013

Sobriety High School, 2055 White Bear Ave N, Maplewood MN, 651 773 8378

Innovative Approaches to "Schooling"

In and of themselves, changes to 'school' won't necessarily result in the radically different learning environments we need.

However, the innovations cited above help create a fertile environment for the kind of innovations that are appearing in Minnesota chartered schools – innovations in 'schooling.'

'Schooling' refers to what happens inside (and now often times outside) the school building, the kinds of learning opportunities that students have to choose from.

Conventional schooling is teacher centered, based on the belief that teachers physically deliver education to the students. Teachers teach facts and students are tested on how well they can recall what they have been taught. It is a passive act, something done *to* the students. And because conventional schooling assumes, even expects a passive student, motivation is not considered a significant priority in the learning activity.

A number of Minnesota's chartered schools have used their freedom, their charge to innovate, to experiment with new models of 'schooling.' Many of these schools are designed with student motivation, interest, and engagement at their core. These models turn conventional understanding of relationships on their head – relationships between teacher and student, knowledge and student, the community and the school, and among teachers and students.

Many of the following innovations in 'schooling' can be further dissected and examined to differentiate among variations on the various programs. This report is simply a first cut at identifying innovations in school and deals only with major categories of schooling that can be quickly identified.

Schooling Innovation #1: Project-Based Learning – Learning Process as well as Content

Arguably, the introduction of new schools centered entirely on project-based learning is one of the most significant innovations to result from chartering in Minnesota. Under this form of schooling, students work closely with advisors to create multi-disciplinary projects to earn credits and satisfy state academic standards and graduation requirements.

Of course, projects are not, in and of themselves, an innovation. They are commonly used in traditional courses as different as history and physics.

What's innovative is the fact that a number of Minnesota chartered schools now use interdisciplinary projects to teach students content in multiple subject areas they traditionally have learned one course and subject area at a time.

Projects in both settings serve similar purposes—to deepen understanding of a certain topic through the students' own interest, investigation, and presentation. However, in project-based schools the advisors work with the student, using their interest as a starting point and then incorporating the state's required academic standards.

Conventional use of projects presumes student interest in the subject in which the project assignment is based. Students get a say in what they create only after the topic is chosen and the project guidelines are set. But, in project-based schools, curriculum becomes highly personalized depending on the interests and abilities of each individual student.

Students are also given more flexibility in how long they take to finish a project, depending on the depth of the project and the student's speed of learning. And they are required to exhibit their competency and their learning during oral presentations that are

"As educators we're training students to use technologies that haven't been invented yet, new jobs that don't exist yet, and [project-based learning] seems like a more authentic way of helping students get to the point where they can handle that."

Pete LaFrance
Advisor
Avalon High School

given in front of a panel of teacher-advisors and sometimes parents and other students. These are crucial aspects of the project-based learning experience, all of which are usually absent from projects in traditional single-subject courses and curriculum.

Another difference is the freedom each student has to decide on the topic, the depth of understanding, amount of time spent and media and methodology to be used.

In its purest form, there is a rigorous process that students must go through to propose their project, outline expected outcomes, track time spent on it, show academic outcomes, meet goals, and exhibit mastery of the topic all to prove what they have learned and thus earned academic credit for the project.

Students and teachers in these schools often comment that the experience of the process of a project is more important than the facts learned. A student must learn how to budget his/her time, decide where/how to do research, decide how best to present findings, and determine how to overcome unforeseen obstacles, how to motivate themselves and how to ask for help.

These kinds of learning experiences are largely absent from conventional schooling because of the control that the teacher exerts over due dates, research methods, topic and scope. Project-based learning redefines the relationship between student and curriculum and the adult advisor. By allowing the student to interact directly with the material and to whatever depth they are interested, their education becomes active rather than passive.

Examples of project-based schools in Minnesota:

Avalon School, 1745 Univ. Ave, St Paul MN, 651 649 5495
ArTech Charter School, 1719 Cannon Rd, Northfield MN, 507 663 8806
High School for Recording Arts, 550 Vandalia St, St Paul MN 651 287 0890
Northern Lights Community School, 305 Bridge St, Warba MN, 218-492-4400
River Heights Charter School, 60 East Marie Ave, West St Paul MN, 651 457 7427
Harbor City International School, 332 W Michigan St, Duluth MN, 218 722 7574
New Century Charter School, 45 W Highland Park Dr, Hutchinson MN, 320 234 3660
NorthWest Passages School, 11294 NW Robinson Dr, Coon Rapids MN, 763 862 9233
EdVisions On-line High School, PO Box 307, Henderson MN, 800 617 7857
Kaleidoscope Charter School, 21755 129th Ave N, Rogers MN, 763 428 1890

Innovation first appeared at:

MN New Country School, 210 Main St, Henderson MN, 507 248 3533

Schooling Innovation #2: Experiential learning – Learning by Doing

Experiential learning pairs specific rigorous classroom courses with travel and other ‘real world’ experiences to enhance learning. This innovation, like project-based learning, must be the exclusive or main pedagogy to make it applicable to this inventory.

Until recently, experiential learning was learning that students could do outside of conventional school, on their own time, drawing their own conclusions, with little direction or guidance.

“For so many kids who struggle in school, they struggle because they can’t make the connection between the work they’re doing and real life, their life. But projects bring everything together at once and it’s what they’re interested in, and it has some kind of value, it has some relevance to their lives. Being real is so important. Having some sort of relevance to their lives, and they get that through a project, using multiple sources, instead of through a book.”

Darryl Young
Advisor
High School for Recording Arts

For example, students with jobs learn both in school and outside of school. But their learning outside of school is acknowledged as valid and important to their growth as a student and person. In fact, in a conventional school, jobs might be viewed negatively – as a distraction and competitor for time that students should be devoting to homework, traditional extra-curricular activities or adequate sleep.

Now, schools like Jennings Experiential High School and Voyageurs Expeditionary High School are proactively using experiential learning to expand the learning opportunities for their students – even going so far as to expand the boundaries of the classroom and school to Canada, Southern California, and West Africa.

Again, experiential learning by itself is not an innovation. It takes place all the time regardless of the nature of schools that students attend or whether they get “academic credit.”

But in a number of Minnesota chartered schools, experiential learning has been refined to complement academic goals and state

standards. And infrastructure and a support system has been created by the school to help make that critical connection.

For example, most experiential learning programs help students find internships or apprenticeships where they can explore the world outside of the classroom while earning credit for their understanding of what it is they are experiencing and learning.

Experiential learning is also about depth of understanding. Languages are not taught in a vacuum, but instead as a tool to Understand the culture, history, literature, and politics of a region or country. Most language classes travel to places where students can immerse themselves in the language, culture, and local customs, much like “study abroad” programs more traditionally available to college students.

With the help of teacher-advisors, students also use their travel experiences, internships, and apprenticeships to understand more about how to succeed with their interests, social skills, how to work in groups or by oneself, self motivation and regulation.

This kind of experiential learning is about acquiring knowledge and skills from doing. It’s also about learning on your own from the resources available to you. Experiential learning programs often use the surrounding community as their biggest asset, encouraging students to become familiar with community members who can offer opportunities for them to earn credit in something that truly interests them.

In short, experiential learning is relying on yourself- learning how to learn from your surroundings, the people, the history, and the environment in which you live.

Examples of experiential learning chartered schools in MN:

Jennings Experiential High Sch, 1919 University Ave #112, St Paul MN, 651 649 5403
Voyageurs Expeditionary High School, 9500 Ruppstrasse NE, Bemidji MN, 218 444 3130

Schooling Innovation #3: Personal Learning Plans – Customizing Student Learning

A personal learning plan is an innovation used to personalize education for each student regardless of his or her abilities or

special needs.

In conventional schooling, personal learning plans (PLPs), or individual educational plans (IEPs) have been used almost exclusively for special education students who struggle to succeed in the conventional classroom and who require curriculum specially crafted for their abilities. However, this ignores a fundamental truth in education: no two students learn in the same manner or at the same pace.

Many chartered schools are now recognizing the importance of personal learning plans for all students to ensure they are being pushed academically, regardless of abilities.

Motivation to learn must come from within the student, PLPs allow students and teachers to craft challenging yet reachable goals for each student to keep them engaged and motivated as well as to allow a teacher to better understand a student's strengths and weakness. Personal learning plans allow students within the same classroom to learn at whatever speed is most helpful for their own educational needs.

Personal learning plans are reviewed often with the student, parents, and teachers to ensure that the goals progress in difficulty and scope to match the progress the student is making.

Examples of chartered schools with personal learning plans:

Gen John Vessey Leadership Acad, 33 Wentworth Ave E, West St Paul MN, 651 776 8786
 New Visions Charter School, 1800 2nd St NE, Minneapolis MN, 612 706 5566
 Trio Wolf Creek Dist. Learning Ctr, 13750 Lake Blvd NE, Lindstrom MN, 651 213 2017
 MN New Country School, 210 Main St, Henderson MN, 507 248 3533
 Ascension Academy, 1704 Dupont Ave N, Minneapolis MN, 612 465 8121
 High School for Recording Arts, 550 Vandalia St, St Paul MN 651 287 0890
 City Academy, 958 Jessie St, St Paul MN, 651 298 4624

Schooling Innovation #4: Interdisciplinary Teaching and Learning – Dismantling Silo Education

Interdisciplinary classes incorporate more than one subject into a given class, linked together by an overarching theme or topic. The ultimate goal is to enrich the students' understanding

of the topic or theme by showing relevance to their life and make explicit connections between and among subjects.

In conventional high schools, subjects are taught independently from one another and with little relevance to students'

"(In traditional schools) you're really silo-tized. You have your silo of math, you have your silo of English, your silo of social studies and once in a while you might do an interdisciplinary project like English and social studies. But it's never across the full spectrum. We really tell kids that no matter what you do, you're looking at a full spectrum project, and we try to show them how all those different subjects weave into just about everything we do."

Dee Thomas
 Lead teacher/advisor
 Minnesota New Country School

lives. To increase engagement and outcomes, teachers in some Minnesota chartered schools have taken an interdisciplinary approach to teaching and learning.

As noted earlier in this report, we must remember the distinction between innovation never before seen anywhere and never before seen here. Interdisciplinary teaching is used quite often in higher education where students have the base knowledge that allows them to investigate further into a topic.

But some chartered schools are using interdisciplinary teaching as a way of helping students achieve that broad range of academic understanding. Teachers in chartered schools that use an interdisciplinary approach are encouraged to push their students to see the connections between the subject and their lives, as well as the connections between academic disciplines.

Some chartered schools have also taken advantage of interdisciplinary teaching to engage students in subjects that they previously did not understand or did not enjoy. The theme of the class is what captures the student's attention, usually something they are interested in, that has relevance, like 'popular music.' The teacher(s) then use the theme as a platform for other subjects. In this case, 20th century history could be applied to show the evolution of the music as well as its roots in racial discrimination and segregation.

Students are then able to explore different types of writing through an examination of lyrics, rhythm, and rhyme. The music business also provides a platform for a math class, acoustics of recording studios and concert halls requires one to explore science and physics. And popular culture is ripe with lessons in history, sociology and other traditional fields of study.

Not only are the students engaged, but they are working hard and learning from the list of state standards. Some schools even have semester long themes that students decide on based on collective interest and that teachers incorporate into their classes.

Project-based programs are explicitly interdisciplinary (using projects to cover a broad range of academic disciplines at once). But in more conventional programs it is also possible to be innovative.

More conventional programs often have teams of teachers who collaborate to make the lessons academically challenging while still maintaining students' attention. Not only does this benefit the students, but it fosters a sense of collegial competition and collaboration among teachers.

In addition, interdisciplinary teaching and teacher collaboration, allows teachers to see how their students are implementing skills in different settings. The test of understanding is if a student can apply skills they are learning across disciplines.

Interdisciplinary teaching forces students to show their competency in each subject across disciplines. It also provides opportunities for students to take on more difficult tasks and demonstrate progress in their subject learning.

Examples of non-project-based chartered schools that use an interdisciplinary program:

Watershed High School, 2344 Nicollet Ave S, Minneapolis MN, 612 871 4363
Eagle Ridge Academy, 7255 Flying Cloud Dr, Eden Prairie MN, 952 746 7760

Schooling Innovation #5: Iodestar – Making Classroom Technology Accessible

It's not always easy creating evaluations, or presentations, or materials for courses that do not fit conventional boundaries.

That's why Bob Bilyk, founding director of Cyber Village Academy created IodeStar.

Teachers can easily use IodeStar to build assessments for an entire class or a single student. These assessments can be multiple choice or free text, depending on the topic and can include text, images, audio and video as prompts or identifications.

The software also allows teachers to see individual student results immediately since the program automatically corrects the assessment based on answers that teachers give when creating it. Teachers are thus able to tailor lessons and assignments to the specific needs of each student without taking away from time for other tasks.

Most teachers rely on summative assessments given at the end of a unit or course for a student to prove their understanding of the topic. However, research has shown that formative assessment – regular assessment throughout the course to monitor progress – is a more effective way for teachers to catch student misunderstandings before they become insurmountable.

Formative assessment requires more tests to be written, administered, and graded by teachers. But, with IodeStar, teachers can quickly and easily create the test and receive the scores of their students. And because it is accessed through a browser, it can be created or administered anywhere at any time, making formative assessment a more attractive option for teachers.

Students can also use IodeStar for assignments, long-term projects, presentations, or just when they want to be creative. Presentations can be easily put together to show the results of a particular project.

Like their teachers, students can embed text, pictures, audio or video into the presentation much like they would cut and paste onto a poster board. Since their presentations are not restricted to one medium, students can create interactive and more thorough examples of their learning as well as becoming more comfortable with technology and the use of computers.

Again, because IodeStar is accessed by browser, students can work both at school, with the support of teachers and at home, at a library, or wherever Internet service is available. The tool was

created specifically to encourage and enable teachers to use technology in a way that could help them reach their students.

Since making it available to his own staff, the possibilities of lodeStar have been recognized by many others, and is now in use both within and outside of Minnesota and the United States.

For more information on lodeStar:

<http://www.lodestarlearning.com/>

First used at:

CyberVillage Academy, 1336 Energy Park Drive, St. Paul MN, 651 523 7170

Schooling Innovation #6: Looping – Creating Time for Relationships with Adults

Looping refers to a class of students remaining with the same teachers for more than one year. The scheduling of the conventional school year leaves little time between when a teacher must get to know his/her students and say goodbye to pass them on to another grade.

This lack of sufficient time also makes it difficult for a teacher to understand what would motivate each student to become engaged in class, or to get to know the student's parents who can be a teacher's best friend in raising achievement.

By giving teachers two or more years to work with the same students, looping makes it easier for relationships to be built between teachers and students and teachers and parents. These relationships enhance what goes on in the classroom by enabling engagement of each individual student.

The multi-year time frame also allows students a sufficient amount of time to adjust to the teachers' style. Since no two teachers teach alike, it is important that students be able to work differently within two different classrooms.

The conventional arrangement assumes that each student will automatically adjust to the teaching style of the various teachers he or she has throughout the day. But it takes time for students to learn what each teacher expects.

Looping, on the other hand, gives the student, as well as the teacher, enough time to grow together, to adjust to each other and to raise engagement and achievement.

In addition, looping allows teachers to see growth in achievement of individual students over a multi-year time period.

At the beginning of a conventional school year, the new teacher does not know how each of the students are going to handle the material at the new grade level. Often times students who were falling behind at the end of the previous year are thrown into an academic level that is too fast or too advanced. This leads to further slipping by the student.

Because students remain with the same teacher, the teacher will know which students need immediate catch up work, and which ones are progressing at the appropriate speed. Looping also requires that teachers work together as a team.

Since the students remain with the same teachers, it's also imperative that the teachers communicate about progress of each student, and how their lesson plans and activities are going to increase student engagement.

First seen at:

Community of Peace Academy, 471 Magnolia Ave E, St Paul MN 651 776 515

Schooling Innovation #7: Dual Language/ Language Immersion – A Global Education

Language immersion programs help students become fluent in a foreign language while also providing an environment in which non-English speaking parents can feel comfortable being a part of their child's education.

Previously, all day every day language immersion programs were available only in private schools. Conventional schools also have English Language Learner (ELL) programs for those students who speak a foreign language at home and learn English at school.

Some charter schools have addressed the need for schools that encourage English language acquisition while allowing the use of the first language (usually for older students who have well developed language use of the first language and are learning English for the first time), as well as the need for schools that provide language immersion for younger students to become fluent in two languages.

Language immersion programs have become increasingly important and popular in recent years because of increased emphasis on competition in the global market. However, most conventional public schools only offer foreign languages (for English speakers) in a once a day class setting, and only after middle school.

Chartered schools like El Colegio, Cesar Chavez Academy, Twin Cities German Immersion School, and Tarek Ibn Ziyad Academy have much more intensive bilingual programs so their students can become fluent in both languages while learning the skills they need.

Bilingual programs are also more helpful for parents who do not speak English but who want to be involved in their child's education. Being able to talk to a teacher, help with homework, attend parent nights, all in a common language, is an important consideration that is missing from most conventional programs.

Examples of dual language/language immersion charters:

El Colegio, 4137 Bloomington Ave S, Mpls MN, 612 728 5728
Academia Cesar Chavez, 1800 Ames Ave, St Paul MN, 651 778

2940

Twin Cities German Immersion School, 1399 Eustis St, St Paul MN, 651 492 7106

Yinghua Academy, 1355 Pierce Butler Route, St Paul MN, 651 379 4112

Tarek ibn Ziyad Academy, 4100 E 66th St, Inver Grove Heights MN, 651 457 7190

Schooling Innovation #8: Asset-Based Special Education – Working With, Not Against Special Needs

Under this innovative way of treating and educating students who are identified with special needs, the focus is on improving skill sets to lessen the dependence on outside help and increase the ability for the student to become an independent learner.

Conventional special education provides extra help, an aide, in areas where a student is expected to be able to complete some work while placing less emphasis on the areas that have been deemed too difficult. Instead of focusing on what the student can do to overcome their difficulties to become a more productive learner, they are ignored and the student remains dependent on other people.

On the other hand, innovative special education programs are using technology to train students to be in more control of their abilities and more aware of what they can do to overcome their deficits.

Sometimes the implementation of the innovation is more important than the innovation itself. Technology that helps people of all abilities hone particular ear, eye, or brain functions has been around for quite some time. But until now it has not been used to help students in the United States with special needs.

Professional athletes use some of this technology to enhance the specific functions that they need to perform at their highest potential. Some executives have also used it to develop very specialized brain functions.

The innovative special needs program uses this same technology to develop skills that will help the students compensate for their disabilities and learn to work with them instead of ignoring them.

Autistic, dyslexic, and speech delayed students all benefit from technology known as Hemispheric Specific Auditory Stimulation. This technology helps the individual develop their auditory pathway in order to process auditory information more effectively and efficiently. In turn, this gives the students a skill set they can use to function at a higher level.

EEG Neurofeedback technology is also being employed at New Visions charter school in Northeast Minneapolis. This technology can be used by anyone to make his or her brain function more efficiently through exercises that increase individual control over brain function.

New Visions provides the means for these special education students to specialize the skills they can use to work with whatever condition they have in order to learn more effectively. This is a radical change from the status quo of education that merely accepts the special education condition and ignores ways for students to become independent learners. Instead of being taught to cope with what condition they have and stay away from the tasks that give them difficulty, special education students are overcoming difficulties by focusing on their abilities.

Examples of innovative Special Education Programs:

New Visions Charter School, 1800 2nd St NE, Minneapolis MN, 612 706 5566

Schooling Innovation #9: Mixed Age Instruction – Challenging Age-based Divisions

Yet another way to personalize education is to focus on developmentally appropriate instruction instead of basing instruction on arbitrary birthdates. The fact that different students in the same grade can have varying degrees of understanding of the same subject makes this innovation abundantly important.

From pre-K to high school, mixed age instruction allows students to be in an appropriate level class regardless of their grade level and progress at a pace that suits them. Young students benefit from mixed age play, from observing older children and their learning habits, older students can benefit in the same way.

Mixed age instruction also benefits students that excel in one subject so they can move more quickly along the sequence, taking higher-level courses in some subjects while at the same time being able to take other classes at a slower pace to ensure their understanding.

In conventional schools, students take grade level classes regardless of their proficiency in the previous level, which can lead to students falling behind quickly as well as students not being able to move ahead to be challenged.

Conventional schools also organize students by age. This assumes equal ability, interest, and pace for all students at each level and tracking (a method despised by most) is seen as the only remedy for the differences in student abilities.

Some schools that organize their students into mixed age advisories ask their oldest students to include a younger student in their experience. At Avalon School a junior is paired with a senior who is completing their senior project (a 300 hour project and intense defense). The following year, the junior (who is now a senior) has had a first hand experience with the senior project and is more capable of completing a successful project.

Mixed age instruction, therefore, serves two distinct purposes—to allow students to move at an appropriate pace and

to create a built in mentoring system so students have the greatest chance of performing up to their potential without putting more stress on teachers.

Examples of chartered schools with mixed age instruction:

Avalon School, 1745 Univ. Ave, St Paul MN, 651 649 5495
High School for Recording Arts, 550 Vandalia St, St Paul MN 651 287 0890
MN New Country School, 210 Main St, Henderson MN 507 248 3353
Skills for Tomorrow, 547 Wheeler St N, St Paul MN, 651 647 6000
Eagle Ridge Academy, 7255 Flying Cloud Dr, Eden Prairie MN, 952 746 7760

Schooling Innovation #10: Specialty School – No Longer Traditional ‘VoTech’

This innovation is similar to the ‘targeted student population’ mentioned above. But, instead of designing the school to fit the needs of a particular group, the school advertises a specialty and attracts a subsection of students who are particularly interested in the field.

While it’s understood that state standards must be met, some chartered schools are accomplishing this goal while imposing their own specific learning objectives.

Most of the schools that employ this innovation do not concentrate on a subject like magnet schools do, but instead on a

“It was a good idea from the beginning to combine the recording arts, which are naturally attractive to this generation of students, to academic rigor.”

Keith Wideman
Adisor
High School for Recording Arts

career field. This allows the program to incorporate all core subjects into the curriculum but retain the emphasis on the specified field through specialized courses.

Conventional schools too often provide an education without tying it to anything in particular – like relevance to a student’s life – without any specific goals that students can work toward and without explicit reasons for needing to master the material. For

some students it is enough to know that they are supposed to learn traditional subject area content. But some students need a more enticing reason to study subjects like math, science and social studies.

Focused curriculum schools also use the theme to keep students focused on the importance of learning the range of subjects that they will need to succeed. Ubah Medical Academy and The Academy of BioScience are examples of how a focus can appeal to those students interested in these fields without compromising the quality of instruction.

For example, the curriculum at the Agriculture and Food Sciences Academy covers the core subjects in a way that integrates the agriculture business. And High School for Recording Arts introduces students to the intricacies of the music business while providing the academic base that they need to be successful.

More recently, ‘green schools,’ or environmentally conscious schools have been on the rise. Since environmental issues are becoming a top concern, many students’ interests have been peaked by the opportunity to explore this kind of education and career paths they might follow.

These students who are learning simultaneously about how to live an environmentally sound life and how to be well prepared for the competition of the global market will be invaluable in the years to come.

Examples of chartered with specially focused programs:

Academy of BioSciences, 4065 Central Ave NE, Columbia Heights MN, 763 571 5039
 Augsburg Fairview Acad of Health Careers, 730 Hennepin Ave, Mpls MN 612 333 1614
 Gen John Vessey Leadership Acad, 33 Wentworth Ave E, West St Paul MN, 651 776 8786
 Dunwoody Academy, 1300 Olsen Memorial Hwy, Minneapolis MN, 612 381 8265

Schooling Innovation #11: Well-Integrated Technology –

One specified learning objective that is widely practiced in chartered schools across Minnesota is advanced computer literacy for all students.

There’s little question that computer literacy will be a key component of success for these students later in life. Also, with the breadth of technological gadgets that students use in the rest of their lives (cell phones, iPods, gaming systems) schools should not be the only place where technology is not used.

Understanding and being able to use technology is more than word processing, text messaging, and instant messaging. Instead, computers and technology need to be well-integrated into the classroom and the school to teach students to use them appropriately and to their advantage.

At least some chartered schools are incorporating technology into the classroom so students can become comfortable with computers in multiple ways. Word processing is important. But, so is completing and understanding valid research, creating a presentation, investigating a question, reading data on a spreadsheet, and being safe.

Conventional schools usually have computers in classrooms. But because teachers may not be adequately trained to use them, the computers remain as another way to do routine tasks like complete worksheets.

Thus computer use as part of the general operating strategy of the school is minimal in many conventional schools. Some schools require a ‘computer class’ where students learn the basics of computer use, but rarely are those skills used in other subjects and classes – yet another example of educational silos.

At least some chartered schools are now finding new and innovative ways to incorporate computers, and advanced technology into their daily routine.

At High School for Recording Arts, the students learn how to use high-end technology to fully produce a music album including composing, recording, mixing, editing, finishing, cover art, and marketing and business operations.

Even if the student does not pursue a career in the music business, the technological skills he or she gained through the experience will be invaluable whatever vocation the student chooses. Like anything, exposure to technology is most important when learning how to use a tool. Some schools have

become wireless for the purposes of allowing technology to be used elsewhere than in the classrooms and computer labs.

CyberVillage Academy, a hybrid school, as well as many on-line schools are encouraging students to enhance their computer skills to interact with others virtually, to complete complex research with online and electronic sources, and to use technology appropriately.

Overall, instead of working against student interests in the newest technological advances, a number of Minnesota's chartered schools are embracing their interest and using it to encourage students to be engaged with their learning. Computers in the classroom will not help students become computer literate until they are fully integrated into the curriculum and the routine of teaching and learning.

Examples of charters with well-integrated technology:

New Century Charter School, 45 W Highland Park Dr,
Hutchinson MN, 320 234 3660

CyberVillage Academy, 1336 Energy Park Dr, St Paul MN, 651
523 7170

High School for Recording Arts, 550 Vandalia St, St Paul MN
651 287 0890

ABOUT THE AUTHORS

The principal researcher and writer for this report was EIE Associate **Sarah Granofsky**. Now based in Madison, WI, Sarah has done research and provided other support and assistance to EIE's work by monitoring education policy development and attending and reporting on legislative hearings and meetings with political and educational leaders.

She has also collaborated on projects with the Twin Cities Citizens League and Center for School Change at the University of Minnesota. And she played a major role in creating the Student Voices on Video section of EIE's recently expanded and redesigned Web site.

Sarah is a December, 2006 graduate of Carleton College with a BA degree in American Studies. During her college years, she had internships with the Center for Democracy and Citizenship at the University of Minnesota and the Mattapan Community Development Corporation in Boston. She also had teaching, tutoring and mentoring experience as a summer VISTA program volunteer and spent a year in various positions with the AmeriCorps National Civilian Community Corps in South Carolina, Tennessee, Florida and the U.S. Virgin Islands.

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Providing substantive guidance to the project, and authoring the report's introduction was EIE Co-founder **Ted Kolderie**. Ted has worked on system questions and with legislative policy in different areas of public life, including urban and metropolitan

affairs and public finance through the 1960s and '70s. He is most recognized nationally for his work on K-12 education policy and innovation, which he has focused on since the early 1980s.

Ted was instrumental in the design and passage of the nation's first charter school law in Minnesota in 1991, and has since worked on the design and improvement of charter legislation in about twenty states. He has written about the charter idea and its progress in a variety of publications, and is the author of "*Creating the Capacity for Change: How and Why Governors and Legislatures are Opening a New-Schools Sector in Public Education*" (Education Week Press, 2005).

A graduate of Carleton College and of the Woodrow Wilson School of Public Affairs at Princeton University, Ted was previously executive director of the Twin Cities Citizens League, a reporter and editorial writer for the Minneapolis Star and Tribune, and a senior fellow at the University of Minnesota's Hubert H. Humphrey Institute of Public Affairs.

ABOUT THE COVER PHOTOS

The report's cover photos help provide a visual image of the innovative schooling now taking place in Minnesota chartered schools. Pictured are students and teachers or advisors in El Colegio Charter School in Minneapolis, Minnesota New Country School in Henderson and Hmong Academy in St. Paul.

Funding for this publication was provided by the Annie E. Casey Foundation. We thank them for their support, but acknowledge that the findings and conclusions in this document are those of the authors alone and do not necessarily reflect the opinions of the Foundation.

ABOUT EDUCATIONIEVOLVING

Millions of America's students head off to school each morning sporting brightly colored backpacks and determined to make this their "best school year yet." At the same time, federal and state policymakers are making tough new demands that our schools change and improve – so that "All students learn at high levels." New standards, tests, timelines and consequences are all being put in place to make sure that "No child is left behind."

Yet, all across the country, many policymakers, journalists, teachers, parents and students themselves are troubled by a haunting feeling that all this effort may not really produce the degree of change and improvement that we need. At a minimum, we are now taking a series of risks that are neither wise nor necessary to be making with other people's children. These are, after all, demands and results well-beyond what we've ever expected of American public education – all at a time of severe budgetary pressures on states, districts and individual public schools.

That, at least is the serious concern of a small group of Minnesota-based public policy veterans who have come together as EducationIEvolving... a joint venture of the Center for Policy Studies and Hamline University. The individuals behind this initiative believe...

... it's an unwise and unnecessary risk for the state and nation to be trying to get the results we need solely by changing the schools we now have...

... the issues about teachers and teaching should not be debated only in the old employer/worker framework...

... the solution to maintaining financially viable public education in rural areas may not lie in the three old 'solutions' of excess levies, consolidation and state aid...

... today's schools should not go on largely failing to take advantage of new electronic technologies and other substantially different ways of teaching and learning...

... and the critical discussion about the future of K-12 education in Minnesota and nationally must not proceed solely as a discussion among adults, with students largely left on the outside looking in.

EducationIEvolving is undertaking a number of initiatives during the current year. They include a national initiative to convince policy makers, education reform leaders, journalists and others that *creating new schools* should be an essential element in achieving needed changes and improvements in teaching and learning – at least equal in importance to *changing the schools we now have*.

One focus of this initiative is to introduce the concept of an "*Open Sector*" – to help create the kind of legal and political environment in which new schools can be created and succeed. Another is designed to challenge the fundamental premise that teachers in schools must always be "employees." Another initiative is looking at the premises used in asking the critical question, "How are chartered schools doing?" EducationIEvolving has also worked to strengthen and enhance the role of the agencies and organizations that sponsor chartered schools. And EIE has placed a high priority on encouraging policymakers, journalists and others to more routinely and substantively tap into the experiences and perspectives of students and of young people not now attending school.

EducationIEvolving was founded by two Minnesota public policy veterans: **Ted Kolderie**, senior associate at the Center for Policy Studies, and **Joe Graba**, a senior policy fellow at Hamline University. Its coordinator is **Jon Schroeder**, former director of Charter Friends National Network. EducationIEvolving's activities are regularly updated on the initiative's recently redesigned web site www.educationevolving.org. To receive print and electronic updates of EducationIEvolving initiatives, contact info@educationevolving.org.



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Saint Paul, MN

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telephone: 651-789-3096

e-mail: info@educationevolving.org

web site: www.educationevolving.org