How the Structure of Human-Centered Design Drives Creativity and Innovation

Across the state of Minnesota and across the nation, Minnetonka Public Schools has developed a strong reputation as a leader in innovation. This culture has grown out of a structured, predictable approach to employee engagement in place for more than seven years. The District begins each fall with an open-innovation event called The Big Hunt for Ideas, inviting all employees to share their ideas through a virtual, web-based platform. This “crowd-sourcing” approach allows staff to socialize their ideas with colleagues in a virtual environment and surface the top small, medium, and big ideas at all school levels.

“The high level of innovation found in Minnetonka is deliberate and unique,” Superintendent Dr. Dennis Peterson said. “We believe it is essential that school districts continue to meet the changing minds of students and support the development of emerging skills that students will need in the future. The results of our innovation work provide unmatched opportunities and programs for students, and they are thriving.”

Minnetonka’s approach to innovation combines Human-Centered Design (focusing on empathy and the customer experience) and Lean Start-Up (micro-testing of ideas with minimal resources). “Over time,” said Associate Superintendent Eric Schneider, “The Big Hunt for Ideas has produced game-changing innovations like VANTAGE (our junior/senior professional studies program), Tonka Online (online learning taught by Minnetonka teachers), Tonka Codes (K-5 coding curriculum), Minnetonka Research (an authentic research opportunity in high school) and many, many others. The District’s agility in the areas of innovation and problem solving builds confidence in the employee group in ways that extend to the classroom and in our daily work with students.”

Teaching Human-Centered Design

With innovation woven into the fabric of the District, it’s only natural that teachers and administrators would bring the innovation mindset and Human-Centered Design (HCD) principles to students. Although this is happening around the District with students of all ages, one intentional example is the Minnetonka High School (MHS) Student Innovation Team, now in its second year.

From the Chair

As the research article in this month’s newsletter highlights, the recently released state budget forecast offers state policymakers an opportunity to begin addressing some of the pressing issues facing our school districts. We need your help advocating for our students and our schools. AMSD has created an advocacy video about special education funding in Minnesota. You can find the video on the AMSD Facebook page and we encourage you to share it with staff, parents and citizens concerned about public education in your community. I also encourage you to contact Governor Dayton and legislative leaders to ask them to reduce the state share of the special education cross-subsidy by at least 10 percent ($30 million) in their respective supplemental budgets. Thank you in advance for your advocacy!

Steve Adams, school board member from Hopkins Public Schools, is chair of AMSD.
Students are taught the five-step HCD process—empathize, define, ideate, prototype and test—to understand and develop action steps to solve problems quickly and in a way that’s collaborative, thoughtful and inclusive. Nearly 40 students in grades 10-12 come together each month to learn and practice design thinking to solve problems that matter most in their own world. Students work in small groups to propose solutions to such issues as: (1) navigating the complex course choice and registration processes, (2) improving efficiency in the cafeteria to serve students quickly, (3) reducing wait times for counseling appointments, and (4) improving traffic safety around the high school.

**Growing Through the Process**

“Through HCD, we embrace the belief that all problems can be solved and that the people who face the problems hold the key to the best solutions,” says Nicole Snedden, Minnetonka’s Innovation Coordinator. “This helps us be deeply invested in others’ points of view, to work together, think critically, drive toward action, and take risks in prototyping and presenting new possibilities.”

Students are quick to share lessons learned from their innovation work and recognize the personal growth that impacts their abilities in and out of the classroom.

“Through the innovation process, we have encountered obstacles, which is completely normal,” MHS senior Alexandra Hernandez said. “Looking back, while sometimes frustrating, I appreciate working through the obstacles because that helps us learn so much more. We often feel like we are backtracking, but we are really moving forward with better ideas in the long run.”

Connor Hansen, a junior at MHS, said that what sets the HCD process apart is the empathy piece. “Empathy drives understanding of different points of view, ideas you might not be comfortable with or concepts you simply don’t know. Through the Student Innovation Team we’ve learned in an authentic way in a safe and supportive environment where we’re not afraid of confrontation. The process helps us look at polarizing topics, in some cases, with more of a bird’s eye view. We are then able to determine, as a group, what we think is the best way forward.”

According to MHS junior Max Rader, “Participating on the Student Innovation Team has increased my personal level of confidence. Now it feels totally natural to jump into an activity or conversation that might have felt awkward before.”

Students are taught the value of respectfully agreeing or disagreeing with others’ points of view. If the team struggles to define a problem, they do not simply move on, but are challenged to return to the ‘empathy’ stage to better understand needs and perspectives.

**Fulfilling Our Commitment to 21st Century Skill Building**

With full support of the Minnetonka School Board, MHS has added a course elective for the 2018-19 school year: “Innovation Science.” This course supports the Board goal of incorporating experiential and inquiry-based learning throughout the Minnetonka curriculum. The Innovation Science instructor will teach steps in HCD and Lean Start-Up and include activities and projects that help students develop a problem statement, and then move through the HCD steps, from empathizing to testing ideas. Students will hone 21st Century skills laid out in the District’s Teaching and Learning Instructional Framework—authentic and real-world learning, collaboration, creativity, critical thinking and more—as they stretch and find context and meaning in their work.

In addition to providing great new ideas for the District to consider, Minnetonka’s culture of innovation helps build a new generation of leaders—teachers, students, administrators, staff—many of whom go on to lead new programs and projects that develop as a result of the innovation process.

*This month’s member spotlight was submitted by the Minnetonka Public Schools Communications Department.*
Budget Surplus Offers Opportunity to Address Key Education Issues

The State Budget and Economic Forecast released on February 28 projects a budget surplus of $329 million for the 2018-19 biennium and $313 million for the 2020-21 biennium. The February forecast establishes the budget parameters the Governor and legislators will use when considering adjustments to the biennial budget and conforming to the Federal Tax Cuts and Jobs Act approved by Congress in December. While the 2018 session is not a budget-setting session, the budget surplus offers state policymakers the opportunity to address key education issues, including the special education funding shortfall and stabilizing state pension funds.

Special Education Funding Shortfall
AMSD’s 2018 Legislative Platform calls on state policymakers to increase special education funding to reduce the state share of the special education cross-subsidy by at least 10 percent. The special education cross-subsidy is the amount by which federal and state special education funding falls short of meeting school district expenditures on mandated special education services. The most recent special education cross-subsidy report from the Minnesota Department of Education projects that the cross-subsidy will reach $715 million in FY 2018. In other words, in the current school year school districts are redirecting $715 million of general education revenue to cover the special education funding shortfall.

There is a common misperception that special education funding is strictly a federal issue. However, as the graph below shows, school districts would face a significant special education cross-subsidy even if the federal government was meeting its goal of providing 40 percent of the cost of special education services. A chart showing how the special education funding shortfall impacts each AMSD member school district is available on the AMSD Website.

AMSD is also calling on lawmakers to create a special education working group to review the delivery and costs of special education services and to submit a written report to the Legislature in 2019 outlining a plan to eliminate the state share of the cross-subsidy by 2023. The working group should be charged with analyzing the components of the state special education funding formula, including the tuition billing system and the practice of making school districts financially responsible for students they do not serve.

Stabilizing State Pension Funds
There is broad agreement among education stakeholders and policymakers that action is needed in the 2018 session to stabilize the state pension funds. AMSD’s Legislative Platform urges policymakers to reform and stabilize the Teachers Retirement Association Fund and the St. Paul Teachers Retirement Fund by increasing employer and employee contributions and adjusting benefits. With many school districts continuing to face budget challenges, it is critical that any employer contribution increase be covered through the pension adjustment mechanism in the school funding formula. This would help avoid cuts to programs for students by ensuring that each school district’s actual increased cost is covered.

The complete AMSD Legislative Platform is available here: AMSD 2018 Legislative Platform.

To stay informed about the 2018 Legislative Session, please visit the legislative page on our website.

AMSD Members: Anoka-Hennepin School District, Bloomington Public Schools, Board of School Administrators (Associate Member), Brooklyn Center Community Schools, Burnsville-Eagan-Savage, Columbia Heights Public Schools, Eastern Carver County Schools, Eden Prairie Schools, Edina Public Schools, Elk River Area School District, Equity Alliance MN (Associate Member), Farmington Area Public Schools, Fridley Public Schools, Hopkins Public Schools, Intermediate School District 287, Intermediate School District 917 (Associate Member), Inver Grove Heights Schools, Lakeville Area Public Schools, Mahtomedi Public Schools, Metro ECSU (Associate Member), Minneapolis Public Schools, Minnetonka Public Schools, Monticello Public School District, Mounds View Public Schools, North St. Paul-Maplewood-Oakdale School District, Northeast Metro Intermediate School District 916, Northwest Suburban Integration District (Associate Member), Orono Schools, Osseo Area Schools, Prior Lake-Savage Area Schools, Richfield Public Schools, Robbinsdale Area Schools, Rochester Public Schools; Rockford Area Schools, Rosemount-Apple Valley-Eagan Public Schools, Roseville Area Schools, Shakopee Public Schools, South St. Paul Public Schools, South Washington County Schools, Southwest Metro Intermediate District (Associate Member), Spring Lake Park Schools, St. Anthony-New Brighton Independent School District, St. Cloud Area Schools, St. Louis Park Public Schools, St. Paul Public Schools, Stillwater Area Public Schools, TIES (Associate Member), Wayzata Public Schools, West Metro Education Program, West St. Paul-Mendota Heights-Eagan Area Schools and White Bear Lake Area Schools.