

The New Teacher Center's e-Mentoring for Student Success (eMSS) is an innovative content- and exceptionality-specific online mentoring program that supports the professional growth and development of new secondary (grades 6-12) math and science teachers (STEM) and new K-12 special education teachers. eMSS reached new teachers in all 50 states during the 2011-2012 school year and impacted approximately 30,000 students.

e-Mentoring for Student Success (eMSS) has completed its tenth year as a highly interactive online science and math education community and second full year of eMSS-Special Education. The eMSS program originated from a partnership of the National Science Teachers Association (NSTA), the New Teacher Center (NTC), and the Science Math Resource Center at Montana State University (SMRC@MSU) with funding from the National Science Foundation to develop a national network for online mentoring for beginning science and math teachers. In 2007, funding was received

"...The New Teacher Center's eMSS program is a true leader in the field of new teacher content support and retention. They have capitalized on the use of technology to bring practical and timely support to teachers in the classroom."

Debra Dixon,
Louisiana Department of Education

"This year my novice teachers participated in eMSS. They were able to face challenging situations and find success with the help of the online mentors and other mentees. My novice teachers felt supported and were able to get a variety of ideas from other teachers across the country. This helped them fine-tune their teaching craft and learn teaching strategies that have helped their students grow."

Allison Fannin
Special Education
Mentor Program Coordinator,
Reno, Nevada





from Goldman Sachs to fully develop eMSS--Math. With the financial support of the state Departments of Education of Nevada, Louisiana, and funds from the US Department of Education, OSEP to develop the infrastructure, eMSS embarked on supporting special education teachers in the spring of 2010.

Participating in eMSS increases the fundamental content knowledge of these new teachers, provides a supportive online professional community of learning, and has been shown to increase the retention rate of teachers in some of these hard-to-staff subject areas.

Expert science, math and special education teachers are most often in short supply in urban districts, rural areas, and smaller

school districts. School leaders have limited ability to release their few available content experts from their classrooms in order to provide much-needed content support and mentoring for colleagues in their first years of teaching. As a result, many new STEM and Special Education teachers have nowhere to turn for content- and exceptionality-specific support or professional development related to their subject area. NTC's eMSS program provides a high-quality and cost-effective solution, providing content and pedagogic support for these beginning teachers.

Through eMSS, new teachers are matched with veteran teachers and university STEM and special education faculty to collaborate in an interactive community with the aim of ensuring high-quality teaching for all students. Beginning teachers are assigned a subject/exceptionality and grade-alike mentor from this group of participating experts who works with them in a password-protected

online community as well as through email, phone, and video conferencing. eMSS is research-based, and offers beginning teachers the opportunity to interact within a community of practice anytime, anywhere through technology that is easy to learn and use. Other program components provide resource materials, lesson plans, and networking capabilities that encourage new teachers from across the country to share ideas and provide suggestions.

eMSS Program At-a-Glance



The award-winning* eMSS program offers:

- Content-focused mentoring program inclusive of professional development and program administration.
- Beginning teachers matched with a mentor who has experience teaching the same discipline or exceptionality and grade level.
- Facilitated online curriculum that focuses on content and pedagogy that directly applies to the teacher's classroom.
- Nationwide, online network of science, math, and special educators and university faculty that facilitates the exchange of information, ideas and resources.
- Leadership and professional development opportunities for science, math, and special education teachers.

*www.eschoolnews.com

Explorations

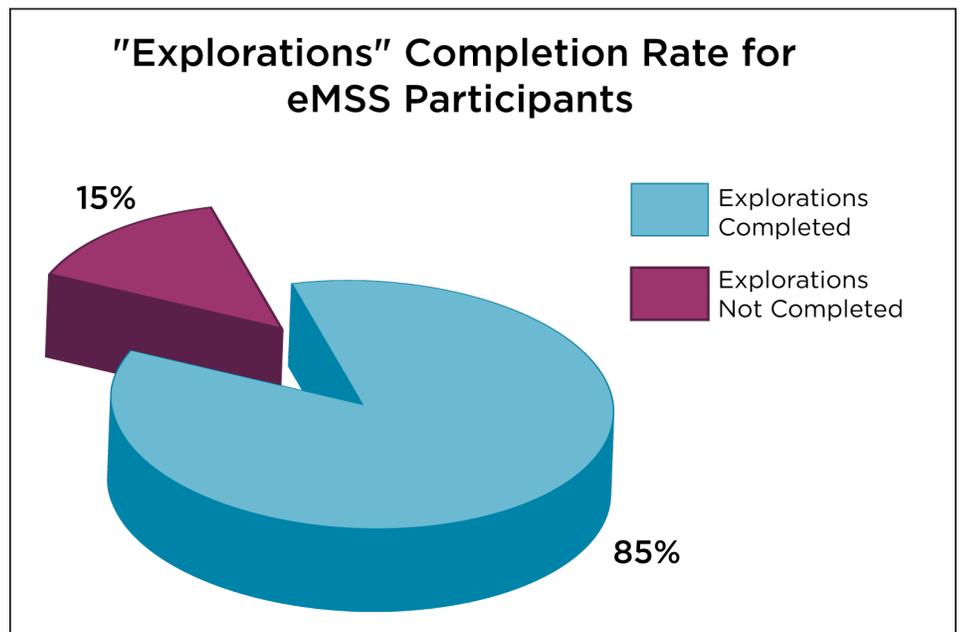
for Special Education Teachers



The program also provides an opportunity for “Explorations,” eight-week focused inquiry action plans, eligible for university credit, that involve a team of mentees and mentors working together in a structured online conversation centered on one of 15 instructional topics including:

- Accommodations & Modifications in Curriculum
- Managing Student Behavior
- Assistive/Adaptive Technology for Students
- Co-Teaching in the Inclusive Classroom
- Working with Paraprofessionals

Explorations are guides designed to help mentees—with the help of their mentors—deepen their teaching practice and boost their effectiveness with students. These inquiry action plans, which form the core of the eMSS program, comprise a series of online conversations based on classroom practices. Three cycles are offered per year. A complete list of 2011-2012 topics is found on page 8. Each Exploration is flexible and adaptable for a mentee’s own particular teaching situation. Mentees work together within a small group on an Exploration over a period of eight weeks and each participant spends about 30 hours completing a single cycle. During the three cycles that were offered in the 2011-2012 school year, eMSS participants initiated 609 Explorations and completed 520, an average 85% completion rate. Research indicates that beginning teachers who complete appropriate Explorations subsequently employ the associated strategies and practices in their classrooms.



Community Forums & Resources: Dilemmas

eMSS is focused on strengthening content knowledge and ways to deepen student engagement in the subject matter. New teachers, however, often confront unanticipated pedagogical issues and eMSS provides a supportive resource for dealing with these important matters. *Dilemmas* are short interactive discussions of pedagogical issues that aim to offer practical solutions to pedagogical challenges.

Online activity rates indicate that this resource provides a popular forum for beginning teachers. An example of a *Dilemma* that was discussed last year is: *“One of my students, hardworking and conscientious but terrified of testing, is often absent on test days. When she does take tests, her scores are not representative of the knowledge she displays in class and in homework. How can I help her lower her anxiety and raise her performance?”* Another example was *“I am co-teaching in a regular classroom. I hold my own in English and history, but I am weaker than my general education co-teacher in math and science. How can I be equally effective in all content areas? I’m feeling overwhelmed.”*

Kansas eMSS Special Education Participant Demographics in 2011-2012

Eighteen beginning special education teachers from Kansas participated in eMSS during the second semester of the 2011-2012 school year. Of these teachers, two taught at the Pre-K level; seven taught at the Elementary level, three at the Middle School level, and three at the High School level. Three participants taught at more than one level.

Kansas eMSS program participants comment about the program:

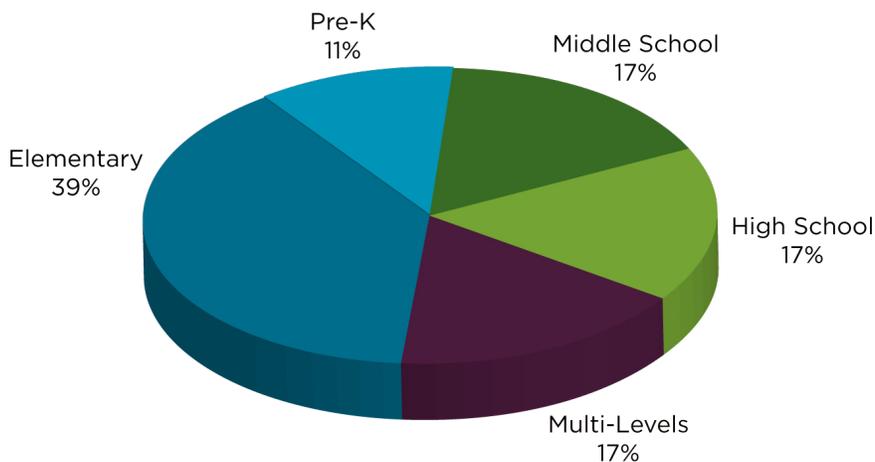
“I gained a new insight to the profession. I learned new ways of teaching. I collected tools and methods for collaborating with my general education team members, collecting academic and behavioral data, as well as managing students and paraprofessionals.”

Elementary Special Education Teacher, Kansas

“I gained knowledge and confidence that I did not have before. I felt the support that set me on the right track.”

Multi-Level Special Education Teacher, Kansas

Teaching Grade Levels of eMSS Special Education Participants from Kansas





About participating in the eMSS professional learning community:

“Lots of ideas and collaboration!”
Elementary Special Education
Teacher, Kansas

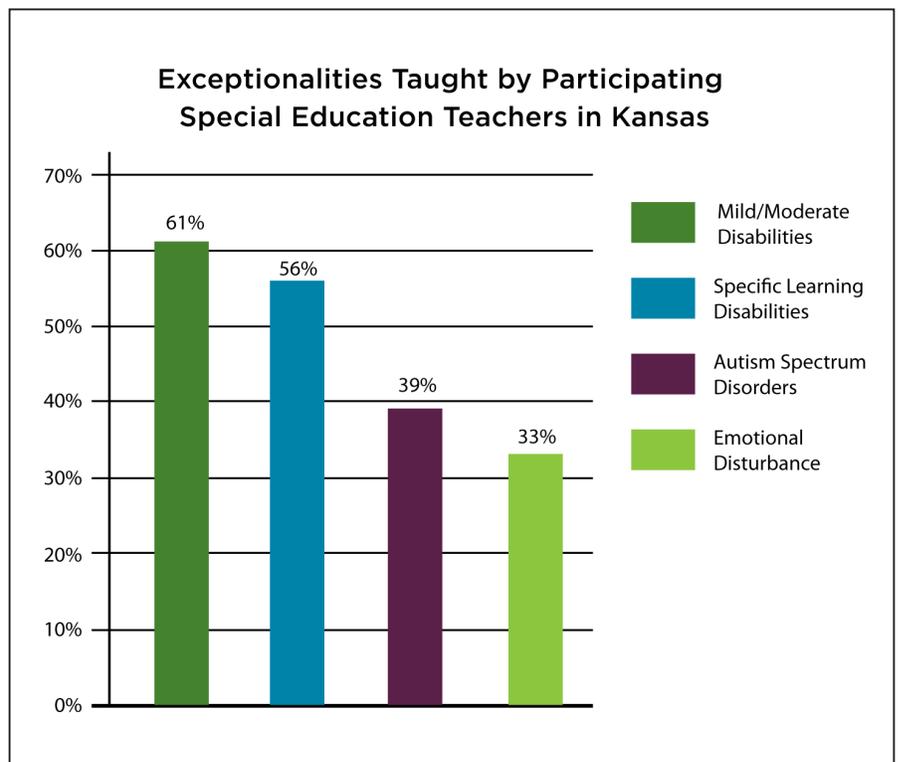
*“I learned that there are many
teachers that struggle with
issues. I was given many words of
encouragement through my group.”*
Multi-Level Special Education
Teacher, Kansas

Each participant is matched with a highly skilled online mentor with years of experience teaching the mentee’s grade level and course content. About 88% of Kansas eMSS special education participants were active users on the eMSS site. Kansas participants logged in over 360 times—an average of 22 log-ins per active participant--during their single semester of participation and posted 100 comments and contributions on the Special Education Home Site. Posts are an important indicator of engagement in the process because they denote the readiness to share and/or request materials and ideas with and from their peers. Research indicates that participants read approximately eight posted conversations (a total of about 40 posts) for every one they originate.

Most beginning special education teachers have a teaching load that includes students with more than one exceptionality. About 56% of all the participating new special education teachers from Kansas are teaching students with specific learning disabilities. Over 61% teach students identified with mild/moderate mental disabilities;

about 39% teach students with autism. A third (33%) of the participating new Kansas special education teachers have students who are identified as emotionally disturbed. No teachers in this year’s cohort indicated that they taught students with severe/profound disabilities.

Over half (51.5%) of the participating new teachers have students who are identified as emotionally disturbed. Approximately 19% teach students with severe/profound disabilities.



Measuring Kansas eMSS Participants' Growth

At the beginning and the end of the year, each eMSS participant responds to an identical survey. (Kansas eMSS special education teachers in 2011-2012 participated for only one semester or even less. Thus, the pre-survey was administered when the Kansas beginning special education teachers started the eMSS program--approximately January, 2012--and the post-survey was administered at the end of the school year.) The questions are aimed at determining new teacher growth in core teaching capabilities and dispositions that advance student learning. Among the questions are 14 content-specific questions that ascertain a beginning teacher's own sense of competence in areas that are key to effective special education teaching.

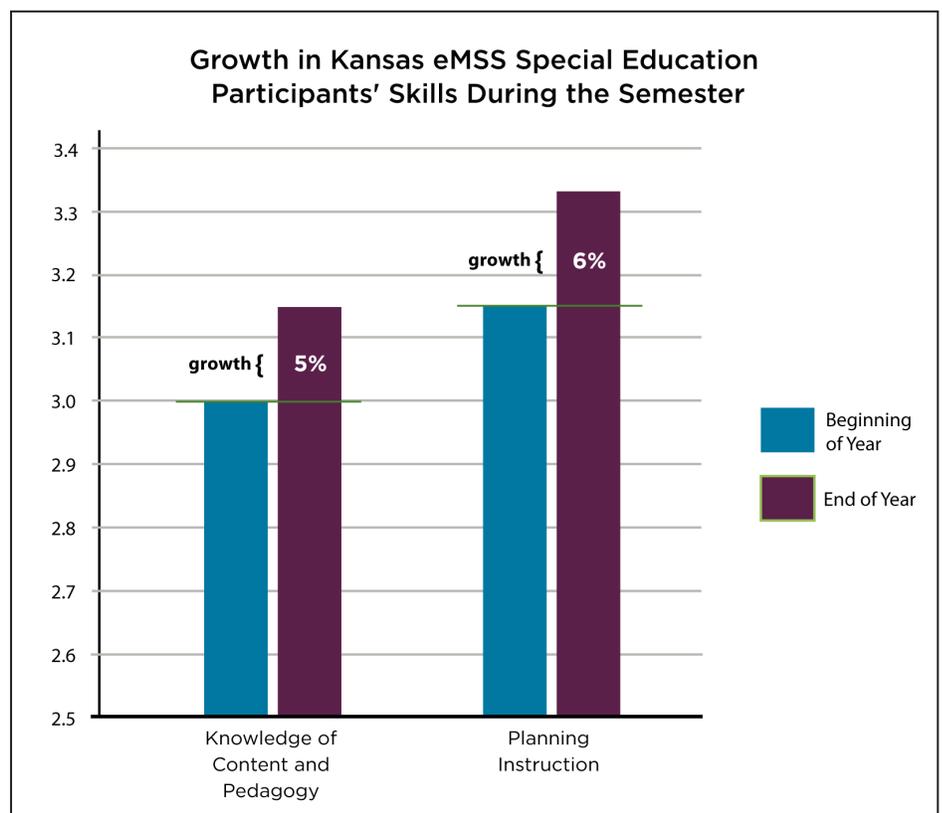
For example:

How WELL PREPARED do you feel to set and achieve goals as written in students' IEPs in your own teaching?

How WELL PREPARED do you feel to provide instruction for multiple learning styles in your own teaching?

With choices of "Not at all prepared (=1)," "Somewhat Prepared (=2)," "Fairly Prepared (=3)," and "Very Prepared (=4)," the survey responses at the beginning of the semester averaged 3.15. After their semester in the eMSS program, responses averaged 3.33. The average gain in participating

beginning Kansas special education teachers' perception of being prepared to meet the demands of their careers showed a gain of about 6% at the conclusion of just one semester in the program. It may be of interest to note that another state's similarly-sized cohort of beginning special education teachers showed a gain of about 11% after participating in the eMSS program for the full year.



Kansas eMSS Special Education program participants comment:

About their mentors

"I gained a safe place to ask questions and to access a broader base of experience."

Pre-Kindergarten Special Education
Teacher, Kansas

"I gained a friend (Ms. A.) and some wonderful ideas and strategies to use in the future."

High School Special Education
Teacher, Kansas

"(I gained) mentor support that I will be able to call on for years to come."

Middle School Special Education
Teacher, Kansas

Several additional questions were aimed at discerning the beginning special education teachers' familiarity with important material affecting their development as teachers. These include the Disabilities Education Act and the Kansas standards, benchmarks, and comprehensive curriculum. At the beginning of the second semester, on a scale of 1 to 4, they rated their familiarity with these laws and standards at an average of 3.0. At year end, their familiarity had risen to an average of 3.15, a gain of 5% in only one semester.

eMSS Enhancements for 2012-2013: Video Observations

During the 2012-2013 school year, experienced mentors will conduct observations of their beginning teachers using video annotation software. The system provides the capacity for mentors to add notations to the videos uploaded by the mentee, permitting the beginning teacher and the mentor to review identified points of interest efficiently and simultaneously. Since mentors and their mentees can be widely separated geographically, this technological solution is aimed at responding to one of the biggest challenges in online mentoring—providing the capacity to be in the classroom with the beginning teachers. The opportunity to participate in a video observation cycle will be made available to most beginning teachers in the implementation year. Research has linked this use of video to an improvement in the beginning teacher's ability to create a productive learning environment and analyze evidence of student learning in multiple ways. This process contributes to the core capabilities and dispositions in which new teachers should be proficient at the end of their induction period.

Special Education Explorations Topics for 2011-2012

Fall 2011

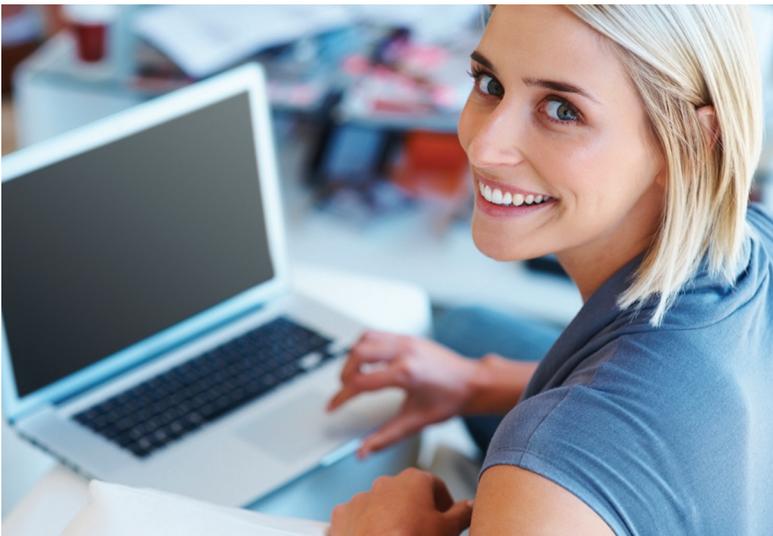
Working with Paraprofessionals
Co-Teaching and Teaching in Inclusive Classrooms

Winter 2011

Assistive/Adaptive Technology for Students

Spring 2012

Accommodations/ Modifications in Curriculum
Transition Plans



General Explorations Topics for 2011-2012

Fall 2011

Classroom Procedures
Managing Student Behavior
Effective Labs
Parent Communication
Communication in Math
Science Inquiry

Winter 2011

Analyzing Student Work
Looking at Student Understanding
Using Data
Using Technology in the Classroom
Lesson Design
Multiple Representations in Math
Teaching with TI technology

Spring 2012

Uncovering Student Ideas in Science
Diversity
Scientific Articles
Analyzing Student Work
Math Manipulatives
Effective Labs
Using Technology in the Classroom
Science Inquiry

To discuss your state or district's support needs for beginning teachers of math, science, or special education, email us at emss@newteachercenter.org or call 831.600.2200

More information and a comprehensive brochure on eMSS can be found at www.newteachercenter.org/services/emss