Frequently Asked Questions

This document outlines common questions and answers regarding the Greater Math in North Dakota (Math in ND) program and expectations for applicants/grantees. Additions will be made to this document and noted with a different font color.

GENERAL INFORMATION

Q. What is Math in ND?

The NDDPI is committed to helping improve mathematical concept understanding for all North Dakota children and equipping educators with the tools to do so. The Math in ND program is a grant opportunity made available through ESSER III funds to promote the use of blended learning instructional approaches in grades 3-8 math classrooms in North Dakota. Because math is cumulative, unfinished learning and skills from prior years make it difficult for students to master new concepts and achieve proficiency in later grades (New Classrooms, 2019). This program aims to increase math growth by closing the students’ math gaps by implementing a high-quality blended learning model.

Q. Why is the NDDPI focusing on mathematics?

The NDDPI is concerned that many students are not proficient in math—and risk staying behind without improved math instruction. In the year before the pandemic, the percentage of students proficient in math on the North Dakota State Assessment or the state's Alternate Assessment was 45% (Table 1). The COVID-19 pandemic appears to have exacerbated this problem; in the 2021–2022 school year, the percentage of students identified as proficient was even lower (39%). There is a general decrease in proficiency in higher grade levels in grades 3-8, with the highest percentage of students identified as proficient in grade 3.

Table 1. Percentage of students proficient or above on the North Dakota State Assessment or the state’s Alternate Assessment (Insights of North Dakota, n.d.)

<table>
<thead>
<tr>
<th>School Year</th>
<th>All students</th>
<th>Grade 3</th>
<th>Grade 4</th>
<th>Grade 5</th>
<th>Grade 6</th>
<th>Grade 7</th>
<th>Grade 8</th>
</tr>
</thead>
<tbody>
<tr>
<td>2018–2019</td>
<td>45</td>
<td>49</td>
<td>43</td>
<td>48</td>
<td>47</td>
<td>40</td>
<td>47</td>
</tr>
<tr>
<td>2019–2020</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>2020–2021</td>
<td>38</td>
<td>48</td>
<td>36</td>
<td>42</td>
<td>39</td>
<td>38</td>
<td>38</td>
</tr>
<tr>
<td>2021–2022</td>
<td>39</td>
<td>48</td>
<td>37</td>
<td>43</td>
<td>40</td>
<td>37</td>
<td>34</td>
</tr>
</tbody>
</table>

Note: School districts did not administer state assessments during the 2019-2020 school year due to the COVID-19 pandemic; therefore, student growth and achievement data are unavailable.

Because math is cumulative, unfinished learning from prior years makes it difficult for students to master new concepts and achieve proficiency in later grades (New Classrooms, 2019). This incomplete learning has implications for school success and adult success. Research indicates that a student’s math achievement is related to consequential long-term outcomes, including well-being, satisfaction with life, health, wages, employability, and longevity (Lipnevich et al., 2016).
Studies examining the predictive effect of math achievement in early elementary grades show students who start with high achievement often grow at a faster pace than students who start with low achievement, leading to an ever-widening gap between high and low achievers (Hansen, Jordan, & Rodrigues, 2017; Lu, 2016; Scammacca et al., 2020). Additionally, it is unlikely that students far behind in grade 4 math proficiency will be proficient on grade 8 math assessments (Dougherty & Fleming, 2012). Students who fail middle school math courses are less likely to graduate from high school (Balfanz & Herzog, 2005). Further, high school math proficiency predicts college success and access to high-status and high-paying professions (Rose & Betts, 2001). A strong foundation of early math instruction builds higher-level math knowledge and skills later in a student's academic trajectory.

Q. What is blended learning?

For this grant, blended learning programming combines face-to-face instruction with online learning by leveraging technology to assist educators in diagnosing students' prior knowledge, differentiating academic paths for each student, and adjusting lesson execution.

Q. How is blended learning a form of differentiated instruction?

This grant program primarily promotes blended learning. One mechanism for delivering differentiated instruction is when teachers use a combination of traditional (face-to-face) and technology mediated that NDDPI believes will make it easier for North Dakota educators to customize instruction to meet individual students' needs.

In particular, NDDPI believes that technology can support teachers to better differentiate instruction by using embedded assessment to understand students' unique needs and to tailor mathematics instruction and practice to those needs in a way that is less likely to happen without technical support. In addition, technology can better support teachers' ability to use small groups for differentiating instruction. For example, teachers can pull small groups for teaching while the rest of the class engages with a virtual math program tailored to their skill level.

Q. Can our school build a blended learning system?

This grant focuses on using tools or platforms that you already have/use and how to refine those. A blended learning system is “how” one uses the tools and platforms. Districts will receive training on using these tools to implement a blended-learning system. If a district is not currently using a tool or platform, the training will give Math teams insight into what to look for to implement a successful system.

Q. Can we have more than one online tool or platform that supports blended learning?

Yes. You can have multiple online tools or platforms that range in different grade levels at your school. You will indicate on your application which tools/platforms are currently used and with what grades. During the training sessions, Math teams will learn how to effectively use these online tools and platforms already built into the school system and can decide if online tools/platforms need to be changed. This grant opportunity does not have a list of online tools or platforms school districts have to use.
ELIGIBILITY

Q. Who is eligible to apply?

Public school districts working with students in grades 3-8 in the content area of math are eligible to participate and apply.

Although applicants targeting a series of three consecutive grade levels (i.e., grades 3, 4, and 5) will be considered eligible, those committing to reform math instruction in all grades 3-8 will receive higher preference; provided to schools within the same feeder pattern in a large district.

Q. Does our school/district have to have a blended learning tool, program, or platform?

Not necessarily. Schools and districts with an implemented system-wide blended learning tool, program, or platform may be given preference during the application process. However, all interested entities are encouraged to apply.

Q. If awarded, can the district utilize funds to purchase a blended learning tool, program, or platform?

No. Funding from this grant to purchase the math program is not allowable. However, using funds to enhance understanding, implementation, and professional development of the math program is permissible.

Q. Can we use grant funds to pay for a professional position like a math coach, strategist, etc.?

At this time, it would be difficult to determine if adding staff to enhance blended learning is the best next step. Or if investing in the current staff makes more sense. This grant aims to reform the practices of current educators in math. Consideration is given to each district's budget on a case-by-case basis. Budget details do not need to be outlined to apply. Please see the table below for when budget planning is done.

GRANT COMPONENTS: BUDGET

Q. On the application, do we report all students on the budget chart?

Yes. Please report the current enrollment from 2022-2023 for each identified grade.

Q. On the application, do we report all teachers on the budget chart or just math teachers?

Yes. Although this is a math grant, please indicate all certified staff on number of educators for the 2022-2023 school year who work with the identified grades.

Q. On the application, do we report support staff on the budget chart?

No. Support staff or non-classified staff should not be reported.
**GRANT COMPONENTS: PROFESSIONAL LEARNING**

Q. What training and support will the >Math in ND program provide?

REL Central will support districts/schools selected for this grant opportunity through a collaborative training and staff development approach. The outline below provides a general overview of the support and training schedule offered throughout the grant program.

<table>
<thead>
<tr>
<th>Title</th>
<th>Description</th>
<th>Anticipated Timeframe</th>
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<tbody>
<tr>
<td>&gt;Math in ND Blended Learning Training Sessions and Follow-up</td>
<td>Facilitated by REL Central, these training sessions will focus on understanding the evidence for blended learning and strategies for strengthening current practices.</td>
<td>March 2023 (virtual) April 2023 (virtual) May 2023 (face-to-face)</td>
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<tr>
<td>&gt;Math in ND Budget Planning</td>
<td>Informed by the spring training sessions, grantees will submit budget proposals to support implementation through September 2024.</td>
<td>May through August 2023</td>
</tr>
<tr>
<td>&gt;Math in ND Community of Practice (CoP)</td>
<td>Facilitated by REL Central, this CoP is comprised of grantee educators, including school/district leaders and instructional personnel, to support the implementation of evidence-based blended learning strategies and practices in math.</td>
<td>2023-2024 school year (monthly starting in Sept.)</td>
</tr>
<tr>
<td>&gt;Math in ND Budget Planning</td>
<td>Informed by the training sessions, CoP and program implementation grantees will submit budget proposals to support implementation through June 2025. <em>At the time of this grant release, funding beyond September 2024 had yet to be obtained; however, the NDDPI is working diligently to secure resources.</em></td>
<td>May through August 2024</td>
</tr>
<tr>
<td>&gt;Math in ND Community of Practice (CoP)</td>
<td>Facilitated by REL Central, this CoP will be comprised of grantee educators, including school/district leaders and instructional personnel, to support the implementation of evidence-based blended learning strategies and practices in math.</td>
<td>2024-2025 school year (monthly starting in Sept.)</td>
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Q. Are grantees required to participate in spring 2023 training sessions and 2023-2024/2024-2025 Community of Practice (CoP)?

Yes. By supporting educators to deliver instruction and intervention through a high-quality blended learning model targeted to individual student needs, The >Math in ND will help to fill unique gaps in student knowledge skills and increase personal growth and proficiency in math. >Math in ND will support educators in developing their skills through a community of practice and virtual group coaching.
Q. Can school partners or supporters participate in the spring 2023 training sessions and 2023-2024/2024-2025 Community of Practice (CoP)?

Yes. This grant opportunity utilizes a collaborative approach for sustained change by including resources and support from the REL Central (a mathematics research firm serving North Dakota), the NDDPI, and local Math teams from selected districts, as well as involvement from other educational partners, including the ND Regional Education Associations. We recognize schools and districts receive support from various education partners (i.e., ND REA, Special Education Unit, etc.). All partners are invited to the Math in ND table to learn with us.

Q. Will the Community of Practices (CoP) align with the math standards?

Our current math standards are under revision and will be updated by spring 2023. The grant opportunity focuses on quality blended learning. The CoP will focus on implementing learning standards to create individualized student learning.

GRANT COMPONENTS: >MATH TEAM

Q. Who should be represented on our local >Math Team?

Each district/school will have a team of individuals engaged in learning and guiding math implementation through the grant. Teams should consist of a lead administrator, classroom teachers of math for each of identified grades, math specialists, math instructional coaches, STEM coordinator, and any others who will contribute to the program's success.

If the school implements blended learning, an educator with experience in blended learning, a technology coordinator, etc., will be a great asset to the >Math Team.

Q. What if we do not have a math specialist or instructional coach?

The above listing is the recommended team makeup; however, resources vary significantly between each school and district. The >Math Teams should include those educational members responsible for teaching math and informing decisions about math in the school/district.

QUESTIONS

Q. Who should I contact with further questions?

Please direct all questions and communications regarding this grant opportunity to the below-listed contact points.

<table>
<thead>
<tr>
<th>Project Coordinator: Brooklyn Schaan</th>
<th>Director: Ann Ellefson</th>
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</thead>
<tbody>
<tr>
<td>Phone: 701-328-2132</td>
<td>Phone: 701-328-2488</td>
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<tr>
<td>Email: <a href="mailto:bcschaan@nd.gov">bcschaan@nd.gov</a></td>
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