NCTM Strategic Plan[1]

Mission: NCTM is the public voice of mathematics education, supporting teachers to ensure equitable mathematics learning of the highest quality for all students through vision, leadership, professional development, and research.

Vision: NCTM is the global leader and foremost authority in mathematics education, ensuring that all students have access to the highest quality mathematics teaching and learning. We envision a world where everyone is enthused about mathematics, sees the value and beauty of mathematics, and is empowered by the opportunities mathematics affords.

Strategic Priorities

1. **Access and Equity**: Advance knowledge about, and infuse in every aspect of mathematics education, a culture of equity where everyone has access to and is empowered by the opportunities mathematics affords.

2. **Advocacy**: Engage in public and political advocacy to focus policymakers and education decision makers on improving learning and teaching mathematics.

3. **Curriculum, instruction, and assessment**: Provide guidance and resources for developing and implementing mathematics curriculum, instruction, and assessment that are coherent, focused, well-articulated, and consistent with research in the field, and focused on increasing student learning.

4. **Professional Development**: Provide professional development to all stakeholders to help ensure all students receive the highest quality mathematics education.

5. **Research**: Ensure that sound educational research is integrated into all programs and services provided by the Council.

6. **Technology**: Promote strategic use of technology in the classroom to advance mathematical reasoning, sense making, problem solving, and communication.

Internal Organizational Goals

1. To grow membership through increased retention and acquisition in order to increase mission impact and revenues.

2. To produce an annual net surplus budget within a timeframe to be determined.

3. To optimize alignment, communication, and timely decision-making among Board, staff, and committees.

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[1] Developed during the Board-staff retreat on July 18-19, 2013 in Williamsburg, VA. This strategic plan document was finalized and approved by the NCTM Board of Directors at the October 10-12, 2013 board meeting and covers the period 2013-16.

4. To improve staff retention, satisfaction, and education.

5. To use technology in order to more effectively address our mission and strategic priorities.

Strategic Priorities: **Strategies and Measures** *(Consultant Note: None of the participant groups changed the original statements for these six Foundation Priorities but this could be considered now that further direction is provided through the framing statements)*

1. **Access and Equity**: Advance knowledge about, and infuse in every aspect of mathematics education, a culture of equity where everyone has access to and is empowered by the opportunities mathematics and mathematics education affords.

   Broad Framing Statement (i.e., what is most important to NCTM, what can we impact?): Change actions, perspectives, and beliefs,

   - Externally around mathematics as a discipline and who can do mathematics;

   - Externally around access to a high quality school environment for learning mathematics; and

   - Internally about who plays leadership roles within NCTM.

   1.1. Analyze and increase explicit focus on and quantity of access and equity in publications, professional development offerings, and conference presentations consistent with relevant position statements, research briefs and clips.

      1.1.1. Define what is meant by access and equity.

      1.1.2. Review and update all position statements associated with access and equity.

      1.1.3. Provide information about and examples of research-based instructional practices that focus on access and equity within implementation of Common Core Standards.

      1.1.4. Link position statements to Access and Equity strategic priority on the website in order to make a focus on access and equity explicit.

   1.2. Ensure that access and equity are explicitly addressed in Project 2014 development, review, and rollout processes.

   1.3. Support periodic surveying of members, attendees, and the profession on changed actions, perspectives, and beliefs.

      1.3.1. Conduct internal surveys with members and conference attendees.

      1.3.2. Provide feedback on content in national surveys.

   1.4. Design and implement an explicit process to promote diversity of member leaders involved as members of committees, authors submitting journal articles, and presenters at conferences.

2. **Advocacy**: Engage in public and political advocacy to focus policymakers and education decision makers on continuous improvement of learning and teaching mathematics.

Broad Framing Statement: Engage the Board, NCTM leadership, and other members to convince decision makers that

- Mathematics is fundamental to all learning and any career as well as integral to STEM.

- Quality mathematics teachers and teaching are fundamental to all learning, as well as to success in STEM and career readiness.

- All students can be successful mathematics learners with appropriate opportunities and supports, and that school, district, state/provincial, and national policies significantly influence access to such opportunities and supports.

2.1. Develop a case statement that mathematics stands on its own as a discipline and is essential to STEM, for global and business competitiveness, and college and career readiness (i.e., why it matters), and the increasing importance of modeling, statistics, and discrete mathematics as part of that preparation.

    2.1.1.   Increase the frequency of inquiries and requests for information from decision makers.

2.2. Develop and communicate a clear dominant narrative around the Common Core State Standards that supports teachers and positions NCTM as a leader in supporting implementation and developing the next iteration of the CCSSM.

2.3. Update the communications strategy to increase value and member awareness of NCTM's advocacy initiatives and desired outcomes (e.g., legislative platform, advocacy positions, advocacy toolkit).

2.4. Increase member engagement in advocacy campaigns, with a special emphasis through NCTM Affiliates.

2.5. Advocate for and inform school, district, state/provincial, and national policies that support access and equity and communicate such efforts to members and staff.

2.6. Additional measures to monitor the effectiveness of NCTM advocacy.

3. **Curriculum, instruction, and assessment**: Provide guidance and resources for developing and implementing mathematics curriculum, instruction, and assessment that are coherent, focused, well-articulated, and consistent with research in the field, and focused on increasing student learning.

Broad Framing Statement (i.e., what is most important to NCTM, what can we impact?): Stay current, emphasizing member needs for implementing CCSSM and support for greater diversity (e.g., generational, teaching environment, pressures, passions, what is important to them, teaching issues, and credentialing background).

3.1. Inform members about effective new models of instruction and assessment and the research that supports their effectiveness.

       3.1.1.   Define and support formative assessment practices.

       3.1.2.   Identify curricular frameworks aligned with summative assessment.

3.2. Re-examine position statements relative to curriculum, instruction and assessment, and align these with Project 2014 document.

3.3. Develop a position statement that expresses NCTM's definitive stance on CCSSM.

3.4. Tag appropriate new and existing website content to CCSSM.

3.5. Study the curricular implications of the newly released reports, NRC's *The Mathematical Sciences in 2025* and the NCEE's *What Does It Really Mean to be College and Career Ready*.

       3.5.1.   Inform members about these reports and their implications for secondary and college mathematics;

       3.5.2.   Collaborate with other organizations (e.g., CBMS societies) regarding implications of these reports for high school and college mathematics courses.

3.6. Develop core programs that address the key needs of members.

       3.6.1.   Develop a fluency program (i.e., instructional activities for concept and skill development) that stems from the Project 2014 document relative to curriculum, instruction, and assessment (e.g., planning, implementation, assessment resources; tools for use by members) and address implications for professional development.

3.7. Prepare for the 2015-16 "perfect storm" of international and U.S. ranking assessments[2].

4. **Professional Development**: Provide professional development to all stakeholders to help ensure all students receive the highest quality mathematics education.

Broad Framing Statement (i.e., what is most important to NCTM, what can we impact?): Improve connections and collaboration across divisions, activities, and products related to professional development and support greater diversity (e.g., generational, teaching environment, pressures, passions, what is important to them, teaching issues, credentialing background).

4.1. Develop a specific, coordinated, and coherent professional development plan for priority content and issues (e.g. Common Core State Standards for Mathematics, Project 2014, and technology).

4.2. Develop and refine new professional development opportunities (e.g., interactive institutes, preconference workshops, online offerings).

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[2] TIMSS 2015 assessment reports are due December 2016 (http://timssandpirls.bc.edu/home/pdf/T2015_TIMSS.pdf) and the PISA 2015 results likely in mid- to late-2016 based on past reporting patterns (http://www.oecd.org/pisa/aboutpisa/)

4.3. Examine how we might increase participation in NCTM professional development experiences.

4.4. Engage NCTM Affiliates to address their professional development needs and bring to scale professional development programs that mutually benefit NCTM, its Affiliates and the profession.

4.5. Use technology as a vehicle for PD and to increase awareness of available PD resources.

5. **Research**: Ensure that sound educational research is integrated into all programs and services provided by the Council.

Broad Framing Statement (i.e., what is most important to NCTM, what can we impact?): Increase awareness among members and all stakeholders in mathematics education about the availability, meaning, and practical use of research. Increase member engagement in the processes of conducting research, including being participants in studies and helping to translate research to practice.

5.1. Focus research as both process (i.e., member engagement) and product (i.e., linking research to practice products).

   5.1.1. Link issues of practice with those who can engage in research.

   5.1.2. Develop members as consumers and generators of research.

   5.1.3. Encourage members' willingness and understanding to be research participants and contributors to enable researchers to answer the questions of relevance.

5.2. Use research data to support decision making within NCTM programs and services.

5.3. Provide information on ways that help classroom teachers to see the connections of research to what they do.

5.4. Explore the possibilities of a research-focused group on mathematics teaching comparable to National Association for Research in Science Teaching[3].

5.5. Connect research to member needs through sustained development of research briefs and clips with an ongoing focus on issues of access and equity.

   5.5.1. Explicitly link NCTM position statements and research clips and briefs whenever possible so that our position statements refer to, and use the same language, as our research clips and briefs.

   5.5.2. Create research clips and briefs to support our position statements whenever possible.

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[3] NARST: A Worldwide Organization for Improving Science Teaching and Learning Through Research. Since its inception in 1928, NARST has promoted research in science education and the communication of knowledge generated by the research. The ultimate goal of NARST is to help all learners achieve science literacy. https://www.narst.org/

Technology: Promote strategic use of technology in the classroom and by teachers to advance mathematical reasoning, sense making, problem solving, and communication, and as a vehicle for professional learning.

    6.1. Share best practices with teachers at all levels of expertise that integrate the appropriate and strategic use of tools and technology in the math classroom.

        6.1.1.   Integrate technology effectively in relevant publications, professional development offerings, and conference presentations

        6.1.2.   Encourage increased member use of technology.

        6.1.3.   Develop a system for reviewing CCSSM-aligned technology resources (e.g., apps).

        6.1.4.   Survey effectiveness of and whether tools and information are being used appropriately.

    6.2. Model effective uses of technology as a vehicle for professional learning experiences.

    6.3. Work with other organizations on appropriate strategies.

Internal Goals: Strategies and Measures

1. To grow membership through increased retention and acquisition in order to increase mission impact and revenues.

    1.1. Drive greater engagement of members (and potential members).

        1.1.1.   Move transactional members to become more engaged and mission supporters.

        1.1.2.   Increase Affiliate engagement in NCTM activities.

    1.2. Target early career math teachers for membership.

        1.2.1.   Consider new-teacher member category.

    1.3. Develop member categories (e.g., entity, corporate, parent, children) as alternatives to individual membership.

    1.4. Redefine member-only access information, programs, and services so as to improve the member value of dues payment.

2. To produce an annual net surplus budget within a timeframe to be determined.

    2.1. Enhance and diversify operating revenue streams.

    2.2. Reassess programs and services that are not at least revenue neutral.

    2.3. Clarify the NCTM organization reserves target.

    2.4. Make more realistic budget assumptions.

    2.5. Recognize the larger scope of resource implications in Board-level decision making.

    2.6. Align organization resources with strategic priorities.

2.7. Identify, cultivate, and obtain project funding from external sources.

2.8. Develop greater fiscal awareness of Board members.

3. To optimize alignment, communication, and timely data-driven decision making among Board, staff, and committees.

    3.1. Ensure consistent, purposeful collection, analysis, and use of data to guide good decision making.

    3.2. Improve communication and collaboration across divisions, activities, and products.

    3.3. Align Board, staff, and committee work cycles.

4. To improve retention, satisfaction, and development of staff.

    4.1. Optimize organizational capacity.

      4.1.1.   Board sets clear priorities to enable executive director to effectively allocate resources

    4.2. Ensure that all staff are supported and empowered to do their job.

    4.3. Improve avenues for communication and collaboration among staff, and between staff and other stakeholders.

    4.4. Support and encourage staff to participate in job-related professional development.

5. To use technology in order to more effectively address our mission and strategic priorities.

    5.1. Enhance website effectiveness.

      5.1.1.   Ensure content is up to date, relevant, and high quality.

      5.1.2.   Improve organization and usefulness of the website.

    5.2. Deepen engagement of members through activities and tools such as: social media, webinars, apps, podcasts, virtual opportunities, online math games, other electronic materials, and virtual special interest groups.

    5.3. Increase strategic use of technology in publications.

    5.4. Develop monitoring tools to measure effectiveness of our technology use.

Attachment A: NCTM Board of Directors Planning Definitions and Process

The general purpose of a **Strategic Plan** is to provide a clear direction or roadmap for the organization. It is used as a communication tool for the Board of Directors to communicate this desired direction to the chief executive, volunteer leaders, and members; for the chief executive to communicate with all staff; and for all leaders to communicate to external stakeholders or key decision-makers.

The **Strategic Plan** is further fleshed out within the chief executive's **Organization Strategic Plan**, **Department Annual Plans**, and individual **Staff Accountabilities**.

The following are brief definitions of planning "levels" which each add greater meaning, clarity, and definition of the desired strategic direction.

Level I: Mission and Vision

A **mission statement** encapsulates an organization's purpose and communicates its essence to members, stakeholders, and the public. It states why the organization exists, what it seeks to accomplish, what it does to achieve this end, and the ultimate result of its work.

A **vision statement** is a guiding image of an organization's success and the resulting contribution to society. A vision statement describes the best possible outcome and what the future consequently looks like. The purpose of a vision statement is to inspire, energize, motivate, and stimulate creativity.

Level II: Priorities and Goals

Strategic Priorities relate to the industry and profession of teaching mathematics. They are general outcomes or general courses of action that are essential for completing the mission and vision of the organization. In other words, when asked about a specific priority, in order to achieve what, the answer is, to achieve the mission or vision.

Internal Organization Goals relate to the internal administration, operations, and well-being of the association. They are general outcomes or general courses of action that are essential for completing the mission and vision of the organization. In other words, when asked about a specific goal, in order to achieve what, the answer is, to achieve the mission or vision.

Level III: Objectives, Tactics, and Measurements

Objectives further clarify meaning and direction of each strategic priority or internal organization goal. They are either an expected outcome or a major activity that ensure the attainment of the priority or goal. The **Strategic Plan** documents the major outcomes and activities that rise to the level of governance oversight, but other major outcomes and activities may exist at the staff department plan level in support each priority or goal.

Tactics add clarity and meaning to objectives in the same way as objectives support priorities and goals, but are seldom discussed or reported at the Board level.

Measurements are incorporated into objective statements when possible, either as a quantifiable result or as a date for completion (sometimes both). Objectives that are outcomes can be quantified more easily, whereas major activities are usually monitored by completion or milestone dates. The early stages of planning might offer only direction action verbs like: expand, grow, and increase or develop, survey, and study, or maintain, stabilize, and stem losses. They may be more activity driven too. But, as planning becomes part of the group's culture and measures become more available for study, then quantification will improve.

Board of Directors - Fiduciary Oversight

Accountability to achieve the entire strategic plan rests first and foremost with the chief executive and organization President. The chief executive then assigns selected objectives to appropriate senior managers on down the line; the President assigns relevant objectives to officers, committees, and task forces.

Oversight of these assignments is covered through periodic reporting through tools like required written updates, quarterly dashboards, and annual chief executive performance evaluation. Additionally from time to time the Board should complete its own self-assessment and evaluation of committee or task force accomplishments.

As noted above, the Board designs supporting **policies** that require the chief executive to be able to show them that he or she has an effective internal system of aligning the staff's work with the strategic plan, assigning appropriately so that there is accountability throughout the organization, and providing oversight or coaching to ensure results.

Board of Directors - Ongoing Strategic Thinking

The process of good strategic planning usually surfaces additional issues that need more study, reflection, and discussion by the Board and senior staff. These issues should make up the **President's Strategic Agenda** for future Board meetings. As the direction needed to be taken on an individual issue becomes more focused it can be added appropriately to the strategic plan. In essence strategic plans should not be considered "carved in stone" but flexible and pliable as the environments and members change.