



Center for the Study of Mathematics Curriculum

Report of a Survey of State Mathematics Supervisors:
What influence has NCTM's *Curriculum Focal Points*
had on state-level specification of learning goals?

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Survey of State Mathematics Supervisors: Influence of NCTM’s *Curriculum Focal Points*

An e-mail survey was conducted in the summer of 2007 to obtain information from state supervisors of mathematics (employees of state departments of education with primary responsibility for K-12 curriculum leadership) regarding the impact of the National Council of Teachers of Mathematics (NCTM) 2006 publication, *Curriculum Focal Points (CFP) for Prekindergarten through Grade 8 Mathematics*. The survey (see Appendix A) sought information on the use and impact of *CFP* on current or future editions of state-level K-8 mathematics learning goals (commonly referred to as grade-level learning expectations or GLEs).

Findings

Forty-three of 52 state representatives (including DoE and DoDEA) responded to the survey (83% response rate). A list of states that responded is included as Appendix B of this report. All but two of the 43 respondents indicated familiarity with *CFP*. In fact, 33 respondents indicated they are “very familiar” with the document and eight indicated they are “somewhat familiar” with the document.

While most states regularly review and update their state mathematics standards/learning goals, they do so on different time schedules/cycles. The most recently published K-8 GLE document for mathematics is noted by state in Table 1.

Table 1. Publication date of current state K-8 Mathematics GLE document

Publication Year	Number of states	States
2007	8	FL, IA*, MN*, MO*, RI*, UT, WA*, WV
2006	8	DE, HI, ID, KY, MS, NV, NH, TX
2005	12	AK, AR, CA, CO, CT, DC, ME, MI, NE, NY, ND, OK
2004	9	DoDEA, GA, KS, LA, MD, MA, NJ, SD, VT
2003	4	AL, AZ, NC, WY
2002	2	NM, OR
2001	4	OH, SC, TN, VA
2000 or earlier	2	IL, IN, MT, PA, WI

* Draft document under review.

Since *CFP* was published in the fall of 2006, many states have not had an opportunity to utilize the recommendations to update or revise their existing GLE document. Thus, for the purpose of this report, states are separated into two categories – those that published, updated, revised or reviewed their state mathematics GLEs since the fall of 2006 (11 states) and states that have not yet published, updated, revised, or reviewed their state GLEs (32 states) since the publication of *CFP*.

Responses from States with Mathematics GLEs Published Prior to *CFP*

Thirty-one states responding to the survey published a mathematics GLE document prior to the release of *CFP*. These respondents were asked about the likelihood that *CFP* would influence a future version of state GLEs. Table 2 provides a summary of responses. As shown, 20 of 31 states indicated that *CFP* will “very likely” impact future revisions of state GLEs and 8 states indicated that it is “somewhat likely” that *CFP* will have an influence.

Table 2. Responses to: “How likely is it that *Curriculum Focal Points* will be used to assist in a future revision of your state mathematics curriculum standards?”

Response	States
Very likely	AL, AR, CT, DE, HI, ID, IL, IN, KY, LA, MA, MI, NE, NJ, NC, ND, OH, PA, VA, WI (20 states)
Somewhat likely	CA, GA, MD, NH, NY, OK, RI, VT (8 states)
Not likely	WY (1 state)
No response	CO, TX (2 states)

Comments from respondents include:

It is VERY LIKELY that *Curriculum Focal Points* will assist with future revision. In fact, if any ‘National Standards’ are established prior to our next revision cycle, those ‘National Standards’ along with *Curriculum Focal Points* will be considered.

We are about to embark on a new curriculum framework which is based on big ideas which evolved directly from the *Curriculum Focal Points*.

Responses from States with Mathematics GLEs Published Following the Release of *CFP*

Eleven of forty-three states responding to the survey have recently (since the release of *CFP*) published or are in the process of revising their state GLEs. These states include Arizona, Florida, Iowa, Minnesota, Missouri, Nevada, New Mexico, Tennessee, Utah, Washington, and West Virginia. All of these respondents report that *CFP* was used as a resource in the revision. In some cases *CFP* was used to identify the grade at which particular learning goals would receive attention. In others, *CFP* was used to organize state GLEs around “big ideas” of mathematics. Eight states (Washington, Utah, Tennessee, New Mexico, Nevada, Minnesota, Florida, and Iowa) report a “significant” impact of *CFP* on their new state mathematics GLEs. For example,

The Focal Points document is the major resource for our new K-8 standards. Rather than revise, we have written fresh, new standards using the [Curriculum] Focal Points, PSSM, Achieve Benchmarks, ACT Benchmarks, and NAEP standards.

Our K-8 Standards are based entirely on the [Curriculum] Focal Points. The 2007 State Standards for grades K-8 are written by grade level and use the Big Ideas and Connecting Ideas almost verbatim.

In Missouri and Arizona, *CFP* was used as a basis to update and make revisions to their current state documents (rather than rewriting them entirely). The Kansas respondent indicated that their document, published in 2004, was also reviewed in light of *CFP*:

Members of the standards committee met and compared the Curriculum Focal Points to the [state] standards item-by-item. It was determined that all the [Curriculum] Focal Points were included in our standards.

Comments and Suggestions Regarding *CFP*

Respondents were invited to, “Provide additional comments and/or suggestions regarding the role and impact of *CFP* within your state.” The most frequently occurring comment was in reference to *CFP* as a reference or guiding framework for revising and/or validating state standards. For example,

The *CFP* document has been reviewed and referenced for alignment, where possible, during the process of establishing pK-8 grade level expectations and model curriculum documents based on the 2005 Mathematics Framework.

Focal Points is seen as another resource for assisting schools and districts to implement a standards-based mathematics curriculum.

While some respondents communicated a broad level of support for and interest in *CFP*, others noted the complexity of attending to multiple national documents that describe mathematics learning goals. Still others offer suggestions for consideration by NCTM. Some sample comments include:

We have received many questions from districts asking how the Curriculum Focal Points will impact the standard[s] revision and also how local districts can use the Curriculum Focal Points in their district’s curriculum work.

The Curriculum Focal Points were helpful but our revisions were based on alignment with NAEP. Due to the NAEP alignment, there are several places we were not permitted to follow *CFP*.

We believe that it is important for NCTM to produce a standards document that is in the spirit of the focal points. We’re not sure that the focal points will have the impact that they are intended to have without revision to PSSM.

Several respondents mentioned a major shift in thinking about their state standards due to *CFP*. For example,

They [Curriculum Focal Points] highlighted for us that in our current document we list all our standards and they are presented as if all our standards and strands are equally important ... [CFP has prompted us to] frame our standards by identifying the big ideas and highlighting the important concepts/skills that should be focused on for each grade.
(Massachusetts)

Based on the responses to this survey, *CFP* has already had an impact on about a dozen states and will likely be used by most other states as they revise or update their current GLEs over the next decade. What is not clear, nor attended to in this survey, is whether *CFP* will contribute to greater consensus across states with regard to emphasis on important learning goals in mathematics at particular grades.

Appendix A: Survey

Please provide information about your current state mathematics curriculum standards document (the document that outlines learning expectations in mathematics).

1. Name of current document:
2. Year published:
3. URL where document can be found:
4. When do you expect to revise or replace the current document:

In the next section, please provide the following information about the use of recommendations provided in *Curriculum Focal Points for Prekindergarten through Grade 8 Mathematics* (NCTM, 2006).

5. How familiar are you with the NCTM *Curriculum Focal Points* document published in 2006?

- Very familiar
- Somewhat familiar
- Not familiar

6. Was *Curriculum Focal Points* used to assist in the development or revision of your current state mathematics curriculum standards?

- Yes
 - a. Explain how *Curriculum Focal Points* was used:
 - b. Estimate the impact of *Curriculum Focal Points* on your state standards.
 - No impact
 - Some impact
 - Significant impact
- No
 - a. Explain why not:
 - b. How likely is it that *Curriculum Focal Points* will be used to assist in a future revision of your state mathematics curriculum standards?
 - Very likely
 - Somewhat likely
 - Not likely

7. Please provide additional comments and/or suggestions regarding the role and impact of *Curriculum Focal Points* within your state.

Appendix B: States whose representatives responded to survey

Alabama	Kansas	North Carolina
Arkansas	Kentucky	North Dakota
Arizona	Louisiana	Ohio
California	Massachusetts	Oklahoma
Colorado	Maryland	Pennsylvania
Connecticut	Michigan	Rhode Island
Delaware	Minnesota	Tennessee
Florida	Missouri	Texas
Georgia	Nebraska	Utah
Hawaii	Nevada	Vermont
Idaho	New Hampshire	Virginia
Illinois	New Jersey	Washington
Indiana	New Mexico	West Virginia
Iowa	New York	Wisconsin
		Wyoming