

GLOBAL COMPETENCE MATRIX FOR MATHEMATICS

INVESTIGATE THE WORLD RECOGNIZE PERSPECTIVES COMMUNICATE IDEAS TAKE ACTION Students investigate the Students recognize their own Students communicate their Students translate their ideas world beyond their immediate and others' perspectives. ideas effectively with diverse and findings into appropriate environment. actions to improve conditions. audiences

Students:

- Identify issues and frame researchable questions of local, regional, or global significance that call for or emerge from a mathematical or statistical approach.
- Select or construct appropriate mathematical or statistical models or approaches to address globally significant researchable questions.
- Conduct, assess, and synthesize mathematical or statistical analyses to develop or review evidence, draw conclusions, and make decisions concerning globally significant questions.
- Interpret and apply the results of mathematical or statistical analyses to develop and defend an argument about a globally significant issue.

Students:

- Recognize and express their own perspective and understanding of the world, and determine how mathematics and statistics influence and enhance that perspective and understanding.
- Examine how the perspectives of other people, groups, or schools of thought influence the ways mathematical and statistical findings are interpreted and applied, and, conversely, how an understanding of and access to mathematics and statistics influences those perspectives.
- Explain how the development of mathematical knowledge is based on the contributions of different cultures and influenced by cultural interactions and how societies and cultures are influenced by mathematics.
- Explore and describe how differential access to mathematical and statistical knowledge, technology, and resources affects both the perspectives and quality of life of individuals and society.

Students:

- Recognize and express how diverse audiences may perceive different meanings from the same mathematical or statistical information and how that affects communication and collaboration.
- Use appropriate language, behavior, and mathematical and statistical representations to effectively communicate with diverse audiences.
- Select and use appropriate technology and media to model, analyze, represent, and communicate mathematical ideas for diverse audiences and purposes.
- Reflect on how mathematics contributes to crosscultural communication and collaboration in an interdependent world.

Students:

- Identify and create opportunities to use mathematical or statistical analyses to enable personal or collaborative action that improves conditions.
- Use mathematical or statistical descriptions. representations, or models to plan, weigh, and defend plausible and ethical actions for addressing a globally significant issue, taking into account previous approaches, varied perspectives, and potential consequences.
- Use mathematics and statistics to support personal or collaborative, ethical, and creative action that contributes to sustainable improvement, and assess the impact of the action.
- Reflect on how mathematics and statistics contribute to their capacity to advocate for local, regional, and/or global improvement.

Global Competence is the capacity and disposition to understand and act on issues of global significance. The global competence matrices help explain Global Competence and how to apply it. They were created as part of the Council of Chief State School Officers' EdSteps Project, in partnership with the Asia Society Partnership for Global Learning.







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