Accomplished teachers understand the similarities and differences between engineering design and scientific inquiry. They show their students that technology and engineering employ scientific principles to create products and processes that meet human and environmental needs. For example, when discussing reliance on the limited supply of fossil fuels, students may employ the design process to develop innovative ways to address the problem. Accomplished teachers are resourceful and mindful of environmental issues. They are adept at creating learning experiences that show students their dependence on, and relationship with, their communities and the natural environment. For instance, they may have students investigate changing air and water quality and create solutions to problems based on inquiry and the use of critical thinking skills. Teachers help students investigate, understand, and learn about community and environmental stewardship.

Using their knowledge of child development as well as an understanding of content in all curriculum areas, middle childhood generalists employ many strategies and techniques to facilitate scientific learning. Experiences such as these not only tap into students’ natural curiosity of the world and how it works, but also help these future stewards of the natural and technological world explore, understand, and contribute meaningful ideas and advancements.

**Social Studies**

Accomplished teachers have a strong foundation in the many disciplines that comprise social studies, such as civics, economics, geography, and history. They understand that social studies interconnects these disciplines to provide students with a broad basis for critical investigation and that this foundation will later enable students to pursue specific disciplines in greater depth. Each discipline represents its own area of knowledge based on research, theories, methods, themes, and concepts. Accomplished teachers understand that social studies is a core content area that interweaves these disciplines and presents students with a common means of understanding the human and physical worlds. They demonstrate their ability and skill to teach social studies by designing lessons that incorporate and interweave the disciplines. These lessons challenge students to build their knowledge and engage in higher level thinking.

Accomplished teachers understand the major issues, concepts, and themes in social studies, such as culture, technology and society, and global connections. They are also aware of the current issues and events in their communities, nation, and world. Teachers design lessons that require students to employ critical thinking skills as they gain an appreciation of these topics. Using available technology helps to make global connections possible. An accomplished teacher might collaborate with an English language teacher from Germany to conduct videoconferences between classes, thus providing students with opportunities to engage in dialogue with a peer group from another culture. Local resources can also help social studies concepts come to life. Teaching the economic concept of scarcity becomes tangible, for example, when a teacher has five water bottles for a class of twenty. How should the water be divided among the students? What is the value of each bottle? Is it the same for
every student? These are the types of questions that students might pursue in small and large group discussions. Accomplished teachers use their content knowledge to structure meaningful lessons and simulations for their students. They make sound curricular choices and design compelling instructional activities so that students may become informed, critical, and questioning citizens engaged in a global society.

Accomplished teachers realize that lessons become powerful when students can make connections to their surroundings, world events, and cultural environment. Teachers connect abstract concepts with concrete, real-world experiences. For example, after discussing the United States *Bill of Rights*, students could develop a children’s bill of rights. When participating in discussion groups to determine which rights should be addressed, students may share personal opinions and learn to listen respectfully to the opinions of others. Further inquiry might require students to use their research skills to find the published version of *The Children’s Bill of Rights* and compare this document to the one they have created. Acknowledging the viewpoints of others and respecting their rights are crucial responsibilities for a democratic citizenry.

Accomplished teachers use secondary sources such as textbooks, political cartoons, online stories, and magazine articles for students to acquire new knowledge and information, draw conclusions, assess perspectives, and think critically. They also use primary sources such as autobiographies, memoirs, oral histories, diaries, photographs, cultural artifacts, and other creative work to engage students in learning. For example, an accomplished teacher might have students listen to taped slave narratives from the National Archives while studying the Civil War. After a unit on immigration, another teacher may ask students to choose countries or cultures with which they identify and share the reasons for their connections. A student might decide to share a story related to Japanese heritage and describe the journey that student’s parents took to reach the United States; this student might also bring photographs and artifacts from home to help illustrate this culture’s influence on the student’s life. These activities demonstrate personal connections to humanity’s ongoing challenges and conflicts.

As accomplished teachers guide students through tasks such as recognizing propaganda and bias or discerning fact from opinion, they have them integrate skills like organizing, interpreting, critiquing, analyzing, and synthesizing across curricula to promote strong social studies programs. When studying world cultures, teachers may choose to read non-fiction picture books aloud and have students take notes on newly learned facts before writing an expository essay that incorporates previously learned knowledge as well. To extend this activity, students could analyze Web sites for bias and present their findings by creating products such as editorial responses that use appropriate citations.

Recognizing that social studies relates the social sciences with the humanities, accomplished teachers often extend student inquiries into the arts, religion, philosophy, science, and technology. This interweaving of subjects creates a stimulating environment. Students may address current and future global challenges while
examining the dynamic interaction of human beings and their ethical dilemmas and choices. They may be asked to write essays discussing conservation efforts around the world and offer their opinions on the most economically effective measures, using their social studies, science, and mathematics knowledge. Accomplished teachers create opportunities for students to use their information processing skills across curricula to increase their students’ social science vocabulary, ability to read, critical thinking skills, and effective use of technology.

Accomplished teachers create integrated lessons to help students build a foundation of facts and information for their exploration of social studies. With an acknowledgement of their biases and perspectives, teachers design activities that encourage respect for opposing points of view, appreciation of well-supported opinions, sensitivity to cultural differences, and commitment to the social welfare of communities. Teachers link new content with pre-existing knowledge and beliefs to help students make connections across curricula. They develop activities that encourage community involvement through which students may apply their knowledge to current, local issues. They provide experiences that feature active learning in small group settings to stimulate student interaction and collaboration. Accomplished teachers provide students with opportunities to develop a sense of belonging and heighten their awareness of the multicultural world in which they live so they may become engaged and empowered citizens.

The Arts

Accomplished teachers understand the intrinsic value of the arts and their usefulness in gaining insight into other disciplines. Dance, music, theater, and the visual arts individually and collectively contribute to the stimulation of imagination and cognitive growth while providing vehicles for creative expression. Teachers understand that the arts represent a unique human endeavor that enriches students’ artistic heritages, tastes, and creativity, while nurturing divergent thinking and an appreciation for various forms of expression. They know that teaching about and through the arts helps students develop knowledge and skill sets that can challenge, expand, and enhance their lives; teachers include the arts in their classrooms for the aesthetic, intellectual, and perceptual value they offer. By including the arts on their own, with the help of subject-area specialists, or through available community resources, middle childhood generalists foster a thoughtful and interactive learning environment. They know that involvement in the arts will develop their students’ thought processes, deepen their understanding of other academic areas, and promote their understanding of different cultures.

Accomplished teachers are willing to take risks to create environments that nurture their students’ individual expression of, and experimentation with, the arts. Teachers may share their personal artistic perspectives with students as they provide them with the opportunities, resources, and encouragement they need to explore their emerging tastes. Teachers recognize the value of the arts in bringing pleasure, enthusiasm, and heightened motivation to their students. They help students develop skills in the arts for their inherent creative value and as a means of communicating