

## Avoiding the Michael Scott Syndrome

Erin Nennig – Saint Francis of Assisi School, West Des Moines, Iowa

Grade Level (Req.): 7th grade	Content Area (Req.): Geography	Unit (Opt.):
Connections to Other Disciplines (Opt.):		
<ul style="list-style-type: none"> <li>•</li> <li>•</li> <li>•</li> </ul>		
Time Frame (Req.): 2-3 days	Goal (Req.): Students will know how to use maps.	
	Objective (Req.): Students will practice and navigate Google Earth. Students will practice creating mental maps.	
Materials Needed (Req.):	New Vocabulary (Opt.):	
<ul style="list-style-type: none"> <li>• Internet</li> <li>• Google Earth</li> <li>•</li> <li>•</li> <li>•</li> <li>•</li> <li>•</li> </ul>	<ul style="list-style-type: none"> <li>• Google Earth</li> <li>• Relative location</li> <li>• Absolute location</li> <li>•</li> <li>•</li> </ul>	
<p>Anticipatory Set/Introduction [Inquiry Question is required] (Req.): How does mental ability influence what they can and cannot do? Have students work in pairs to make a T-chart comparing the benefits of being a 12-year-old compared to being a 17-year-old. Once students have finished have them stand up if they included the ability to drive. Have students make a list on the board of what one would need in order to be a safe driver. List could include: license, knowledge of the road rules, a car that runs, an understanding of where things are located, the physical ability to drive, a desire to follow driving laws.</p>		
<p>Instructional Sequence/Procedure (Req.):</p> <ol style="list-style-type: none"> <li>1. Day 1: Give students ten minutes to draw a map of their community. Leave the directions brief to see what the students consider their community. Observe the amount of detail the students include, encourage them to work for the full ten minutes adding detail.</li> <li>2. After ten minutes have expired have students compare their maps with those near them and record at least three observations. Share these observations aloud and discuss with the students absolute and relative location in their maps.</li> <li>3. Teacher explains the car Garmin uses absolute location to help tell you where you are going. However, one can also find where to go using relative location. Today you are going to practice making mental maps through relative location simply because technology does not always work but your brain will.</li> <li>4. Show The Office: GPS YouTube clip. <a href="http://www.youtube.com/watch?v=BlakZtDmMgo">http://www.youtube.com/watch?v=BlakZtDmMgo</a></li> <li>5. After demonstrating how to use Google Earth, have students work in partners. Each partner will identify five locations in West Des Moines where they hang out after school or on the weekends. Then the partners will switch computers and describe the relative location of the five locations on the screen. Students will identify landmarks, street names and directions, in order to describe where each is located.</li> <li>6. Day 2: In partners, students will then use relative location to describe how to drive between two different places their home city. These places must be places they have been to and must be at least a mile apart. Students must again use landmarks and street names to navigate from place</li> </ol>		

to place. Students need to do three different places, repeating this process. When the directions become more complicated students can use a piece of paper to write down the directions.

7. When the students are done on the computer, have them close out of Google Earth. Using the written directions one student will read the directions and while the other student draws the map on how to get from place to place using relative location: landmarks, streets, directions.
8. Then ask students to imagine the following (independent assessment): A friend of yours is having a birthday celebration on Friday night. You are the only person who can drive in your group of friends. Because you have four friends who will join you for the birthday party you will need to take your parents' Ford Edge. While you don't mind driving the family car, you are a little nervous about not having the Garmin that is permanently mounted in your car. You are responsible for getting your friends from your house to paddle boating at Gray's Lake and then to dinner at Old Chicago. You decided you will go on the Internet to help you make a map. However, you discover your printer is broken so you must record directions by hand. You remember from your seventh grade geography class that landmarks are larger and easier to identify when trying to give and follow directions. You write down directions describing relative location of how to get from place to place. After you are finished writing down the directions you will close out of Google Earth and practice mental mapping by driving the directions in your head, like a simulation. Continue practicing this until you can successfully redraw mentally the route you will take.
9. When there is ten minutes left of class, collect the students' written directions and then have them draw their mental map on a loose leaf sheet of paper. Remind them to be sure to label their map using TOADS (title, orientation, author, date, symbols) and with landmarks, streets, and directions.

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Formative Evaluation (Req.): Teacher will observe of students' practicing Google Earth and relative location. Teacher will also give students feedback regarding the details they are using to describe location.

Assessment (Req.): Students will use Google Earth to plan a route for the birthday party and then using mental directions recreate the map on paper in order to practice mental mapping. Students will be graded on use of TOADS, detail, and accuracy.

Iowa Core Curriculum Standards Used (Req.):

- Geography, grade 6-8: Understand the use of geographic tools to locate and analyze information about people, places, and environments
- Technology, grade 6-8: Demonstrate creative thinking in the design and development of innovative technology products and problem solving.
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<p>Common Core Curriculum Standards Used (Opt.):</p> <ul style="list-style-type: none"> <li>•</li> <li>•</li> <li>•</li> <li>•</li> <li>•</li> </ul>	
<p>NGS Standards Used (Req.):</p> <ul style="list-style-type: none"> <li>• How to use maps and other geographic representations, tools, and technologies to acquire process, and report information from a spatial perspective</li> <li>• How to use mental maps to organize information about people, places, and environments in a spatial context</li> <li>•</li> <li>•</li> <li>•</li> <li>•</li> <li>•</li> <li>•</li> <li>•</li> <li>•</li> </ul>	
<p>Five Themes of Geography Used (Req.):</p> <ul style="list-style-type: none"> <li>• Location</li> <li>• Place</li> <li>•</li> <li>•</li> <li>•</li> </ul>	<p>School District Standards and Benchmarks (Opt.):</p> <ul style="list-style-type: none"> <li>•</li> <li>•</li> <li>•</li> </ul>
<p>21<sup>st</sup> Century Universal Constructs (Opt.): Collaboration</p>	
<p>Other Disciplinary Standards (Opt.):</p> <ul style="list-style-type: none"> <li>•</li> <li>•</li> <li>•</li> <li>•</li> <li>•</li> </ul>	
<p>Other Essential Information (Opt.):</p>	
<p>Other Resources (Opt.):</p> <ul style="list-style-type: none"> <li>•</li> <li>•</li> <li>•</li> <li>•</li> </ul>	