

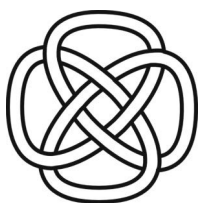
## **R** FIGURE 3.2. REDESIGNED GORDIAN KNOT LESSON

### **The Gordian Knot**

In the winter of 333 B.C.E., the Macedonian general Alexander and his army arrive in the Asian city of Gordium to take up winter quarters. While there, Alexander hears about the legend surrounding the town's famous knot, the "Gordian knot." A prophecy states that whoever is able to untie this strangely complicated knot will become king of Asia. The story intrigues Alexander, and he asks to be taken to the knot so that he can untie it. He studies it for several moments, but after fruitless attempts to find the rope-ends, he is stymied. "How can I unfasten the knot?" he asks himself (see van Oech, 1983, pp. 47-48; and Hyldreth, 2015).

How can you help Alexander? According to the legend, the knot is the only obstacle standing in the way of him becoming king of Asia. What are some of your suggestions?

Here are some sample suggestions from those who've attempted to solve this challenge:



Celtic Inspired Knots  
from Vector.me  
(by kattedkrab)

- a. Choose one cord in the knot and follow it to its end, painting the chord with a bright color as you go along to keep track of it.
- b. Drop the knot in water until it loosens.
- c. Shake the knot vigorously.

Can you guess what Alexander did? The ways he solved the Gordian knot puzzle is proof that the reason Alexander became great was not because he did things the conventional way!

*(Continued)*

**FIGURE 3.2, Continued: WEBQUEST**

Multiple Means of Representation		
Checkpoints	Scaffolding/Performance Assistance	Tools Utilized
<ul style="list-style-type: none"> <li>↘ Activate or supply background knowledge (3.1)</li> <li>↘ Clarify vocabulary and symbols; syntax and structure (2.1, 2.2)</li> <li>↘ Offer ways of customizing the display of information (1.1)</li> </ul>	<ul style="list-style-type: none"> <li>→ Stories from home describing Alexander the Great</li> <li>→ Picture of Gordian knot provided</li> <li>→ Essential words highlighted and meanings provided in call-out boxes</li> <li>→ Unit is in text and audio format</li> </ul>	<ul style="list-style-type: none"> <li>← Oral or written stories from home about heroes and/or about Alexander the Great</li> <li>← <i>Indiana Jones and Last Crusade</i> movie (1989; e.g., Netflix)</li> <li>← Bibliotherapy (books of choice)</li> <li>← Translator (Google or target language speaker)</li> <li>← Text to speech (e.g., Announcify, Orato)</li> <li>← Readability Index check (e.g., Flesch-Kincaid; (Fresch, 1948)</li> <li>← Bilingual Dictionary/thesaurus; collocation dictionaries</li> <li>← Student personal dictionary (students provide their own definitions of critical words)</li> </ul>
Multiple Means of Action and Expression		
Checkpoints	Scaffolding/Performance Assistance	Tools Utilized
<ul style="list-style-type: none"> <li>↘ Use of multiple media for communication (5.1)</li> <li>↘ Build fluencies with graduated levels of support for practice and performance (5.3)</li> <li>↘ Enhance capacity for monitoring progress (6.4)</li> </ul>	<ul style="list-style-type: none"> <li>→ Multimedia options to work with language 1 peers, language 1 and language 2 peers, and/or with teachers</li> <li>→ Range for problem solving strategies from easy to difficult</li> <li>→ Rubrics to help students assess progress</li> </ul>	<ul style="list-style-type: none"> <li>← Chat websites (e.g., Zoho chat, Scriblar)</li> <li>← Collaborative tools (e.g., TitanPad)</li> <li>← Class time to connect</li> <li>← Virtual hangout space (e.g., Google Hangout)</li> <li>← Graphic information organizers (e.g., Thinkport)</li> <li>← Rubistar (rubrics developer)</li> </ul>

(Continued)



**FIGURE 3.2, *Continued*: WEBQUEST**

Multiple Means of Engagement		
Checkpoints	Scaffolding/Performance Assistance	Tools Utilized
<ul style="list-style-type: none"> <li>↘ Optimize individual choice and autonomy (7.1)</li> <li>↘ Facilitate personal coping skills and strategies (9.2)</li> </ul>	<ul style="list-style-type: none"> <li>→ Choice of presenting work in language 1, language 1 and English, or English</li> <li>→ Choice of presenting written or orally in language 1, language 1 and English, or English</li> <li>→ Choice of sharing work multimodally (e.g., through pictures and music) one-to-one or in groups</li> </ul>	<ul style="list-style-type: none"> <li>← Share verbally in person or via Voice Thread</li> <li>← Paper or Digital Posters (e.g., Glogster, Nota, Magnoto)</li> <li>← Teachers or Peers as Scribes</li> <li>← Storytelling tools (e.g., ScrapBlog or Storybird)</li> </ul>

