

## Text Complexity Analysis Template

Text complexity analysis						
<b>Created by:</b> Text and Author	Monica Grezlik "Combing the Universe for a New Galaxy Leads to Unexpected Space Discovery" -By San Jose Mercury News, adapted by Newsela staff	<b>Event/Date:</b> <b>Where to Access Text</b>	TeachFest Connecticut: Summer Academy, July '14 Newsela.com, click on "Science" (6-5-04) <a href="https://www.newsela.com/articles/sjstate-space/id/4174/">https://www.newsela.com/articles/sjstate-space/id/4174/</a>			
Text Description						
<p>The text is a non-fiction article that makes a connection with adolescent readers by focusing on a 21 year old student, Michael Sandoval, who made a remarkable discovery: a "hypercompact cluster," the intensely starry remains of a galaxy in the nearby universe. The text shows how Sandoval was inspired by another student, Richard Vo, who had done the same earlier. Direct quotes help to grab young readers' attention. For example: "After only a week of looking, 21-year-old Michael Sandoval stumbled upon what he and his professor have named a hypercompact cluster... Some people take years and never find anything significant." The text focuses directly on a young, driven scientist who made such an extraordinary discovery despite struggles in his life (his mother's death).</p>						
Quantitative						
<b>Lexile and Grade Level</b>	930L - 6 <sup>th</sup> Grade	<b>Text Length</b>	676 words			
Qualitative						
<b>Meaning/Central Ideas</b>	<b>Text Structure/Organization</b>					
Meaning and central idea of the text (never give up on your dreams, despite obstacles or challenges that may stand in your way) is clearly highlighted for students. Michael Sandoval's discovery serves as an example of determination and perseverance for young students.	Structured and organized like an article. Text features used: a caption, a visual, headings and direct quotes. Headings help follow sequence of events in chronological order. Quotations help students understand and relate with thought processes of main characters.					
<b>Prior Knowledge Demands</b>	<b>Language Features</b>					
The topic of Space- familiarity with space related terms.	<ul style="list-style-type: none"> <li>-Similes such as "Think of a dwarf galaxy as being like an apple core...what Sandoval found is like the seeds..."</li> <li>-Provides students with some definitions of terminology. For example, "What Sandoval found is like the seeds- <u>in other words</u>, it is even smaller and denser. Also, provides a short definition of "Black holes."</li> </ul>					
Potential Reader/Task Challenges						
<p>If students are unfamiliar with space related terms, they may have some difficulty with Tier 3 vocabulary related to the topic of space. Expressions such as "Basically finding Waldo," may be a confusing expression for ELLs. In addition, multiple meaning words may be difficult for ELL students. Vocabulary activities, such as using the dictionary (or a science textbook) to define new terms along with student created illustrations of new words, can help with comprehension of new vocabulary/multiple meaning words.</p>						
Big Takeaway						
<p>Never give up on your dreams, despite how difficult the circumstances may be. Hard work pays off if you continue to pursue your goals. The concluding section makes a connection to immigrants, which ELL students can directly relate with, demonstrating that no obstacle should ever stand in the way of achieving your goals. Readers are provided with an example of a "non-traditional" scientist who makes a remarkable discovery, showing them that you can accomplish your goals if you are motivated and driven. After reading this article, young readers may become more interested to explore the topic of space, given the inspiring examples of Sandoval and Vo's discoveries.</p>						

## Vocabulary Analysis Template

	<b>Words that demand less teaching time (i.e. the definition is singular and concrete)</b>	<b>Words that demand more teaching time (i.e. words with multiple meanings and/or that are part of a word family)</b>
<b>Words that can be determined in context</b>	<ul style="list-style-type: none"> <li>• Astrophysics (Tier 3)</li> <li>• Physics (Tier 3)</li> <li>• Intensely starry (Tier 2)</li> <li>• Remarkable (Tier 2)</li> <li>• Dense (Tier 2)</li> <li>• Astounding (Tier 2)</li> <li>• Astronomers (Tier 2)</li> <li>• Verified (Tier 2)</li> <li>• Black Holes (Tier 3)</li> <li>• Glimpsing (Tier 2)</li> <li>• Outspoken (Tier 2)</li> <li>• “Basically finding Waldo (Tier 2)- this term may be confusing for ELLs.</li> </ul>	<ul style="list-style-type: none"> <li>• Combing (Tier 2)</li> <li>• Stumbled (Tier 2)</li> <li>• Consumed (Tier 2)</li> <li>• Stellar (Tier 2)</li> <li>• Juggling (Tier 2)</li> <li>• Plain sight (Tier 2)</li> <li>• Breakthroughs (Tier 2)</li> <li>• Spot (Tier 2)</li> </ul>
<b>Words that cannot be determined in context</b>	<ul style="list-style-type: none"> <li>• Hubble Space telescope (Tier 2)</li> <li>• Sloan Digital Sky Survey (Tier 2)</li> </ul>	<ul style="list-style-type: none"> <li>• Elliptical galaxy (Tier 3)</li> <li>• Hypercompact cluster (Tier 3)</li> <li>• Ultracompact dwarf galaxy (Tier 3)</li> </ul>