1. **What student learning outcomes were assessed this year, and why?**

   This year we completed the CWU College Reading Assessment. This goal was chosen for us.

2. **How were they assessed?**

   Bachelor of Science majors in our Winter Quarter 2012 senior seminar class, MATH 499S, were asked to complete the reading assessment following the protocols included at the end of this report. Twelve students completed the assignment. All of our ten graduating BS majors were enrolled in the course. The rubric used for assessment of the paper is included at the end of this report.

3. **What was learned?**

   Overall, we are satisfied with the results of the assessment. Generally, students showed themselves to be competent readers. None of the students who failed to meet any of the criteria failed by a significant margin. It must be noted that mathematical writing is, in general, dense. Consequently students are trained to read slowly and carefully. Thus we do not consider the variable “Reading Rate” to represent important information for our discipline.

<table>
<thead>
<tr>
<th>Math 499S (n = 12)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rubric Element</td>
</tr>
<tr>
<td>Reading Rate</td>
</tr>
<tr>
<td>Summary-Details</td>
</tr>
<tr>
<td>Summary-Discipline Specific Vocabulary</td>
</tr>
<tr>
<td>Summary-Author’s Intent</td>
</tr>
</tbody>
</table>

*data on native vs. transfer students were not collected

4. **What will the department or program do as a result of that information?**

   Faculty in the Mathematics Department will be informed of this assessment. We will discuss the problems observed in the assessment and attempt to see whether the reading difficulties we saw can be solved.

5. **What did the department or program do in response to last year’s assessment information?**
Last year writing ability was similarly assessed. We have discussed how to make our students better writers. In particular, we would like them to be able to write more precise mathematical proofs. Towards that end we will be starting a Math Honors Program (open to all majors with a sufficient GPA) in which proof writing will be emphasized. We have also started a redesign of the BS curriculum that will expose students to mathematical critical thinking earlier and in great depth.

6. **Questions or suggestions concerning Assessment of Student Learning at Central Washington University:**

None.
Purpose: The CWU College Reading Assessment was created to help faculty quickly and simply determine:

- how effectively our students read course material,
- how clear the course material is in the minds of our students, and
- how well our students can summarize and demonstrate their understanding of what they read.

The goal is to use this data to adapt our teaching, support student processing of assigned readings, and/or direct students to available resources.

Rationale: Researchers have long demonstrated a strong relationship between a college student’s academic reading skills and his/her academic success. Consider:

- educators often assume that if our students have made it to our classroom, they know how to read
- students often use a surface approach to reading academic texts, and their comprehension suffers
- poor comprehension leads to poor class participation, dismal test scores, low-quality papers, and the inability to thoroughly understand course material.

Process Overview: Students will be asked to read a piece of text for one minute. After reading as much text as they can in one minute, students will mark the location of what they had read on the paper. Students will then be asked to spend three minutes writing a summary of what they have just read. The following guidelines and protocol for using the reading rubric are described below:

Getting Started:

1. Choose a piece of text*, of at least 500 words, that you expect your students to be able to read for your class. This can be a page from your course text, an article, etc.
2. On the master copy of your selected text piece count 500 words and mark that spot. Next mark the 500 word piece into 50 word increments. This step will make scoring students’ reading rate (words read in a minute) quick and easy.

* Rather than choosing a text, you may use one of the attached sample text pieces. These were taken from junior level course texts. They contain approximately 500 words and have been marked off in 50 word increments.
**Assessment Protocol:**

- **Instructor Says to Students:**

  *This CWU Reading Assessment will provide a snapshot of how quickly you read academic material, how well you comprehend the text as you read, and how well you can summarize, in writing, what you have read.*

  *You will be given 1 minute to read the text on the reverse side of the paper (or in your text book).*

- **Do:**

  Distribute blank sheets of paper for student responses.

  Distribute 500-word text or have students find the selected passage in textbook being used for the assessment. Instruct students to keep their papers face down or finger in the book until you say go.

- **Instructor Says:**

  *Go.*

- **Do:**

  At 1 minute tell students to STOP. Ask them to circle the last word read. If they are reading in an actual text, ask them to write on their response sheet which paragraph the word is in, which line, and which word they last read.

- **Instructor Says**

  *Without looking back at the text piece, you will have three minutes to write a summary of what you just read on your response sheet.*

  - **Do**

    Provide students with 3 minutes to write a summary. Time them and call STOP at 3 minutes.

    When the entire CWU College Reading Assessment is finished, collect the response sheets.

  - **Do**

    Score each students’ assessment using the CWU College Reading Rubric. By doing this you will be able to get a general snapshot of each student’s reading rate and ability to comprehend academic text.
Reading Rate Score:

- To determine a student’s reading rate, use your pre-counted text piece and locate the word your student indicated was the last word read. Using the beginning point of the selected text, count the number of words the student read. Mark this number on the College Reading Rubric.

  While the following is a rule of thumb, following are some basic levels for words per minute read (wpm):
  - wpm/301+ = good general reader
  - wpm/190-300 = average general reader (often too slow for college)
  - wpm/189+ = insufficient, below average

Note that the material read is academic/technical material, not recreational reading material. When students read academic/technical material at a below average rate, often times they could be struggling with the actual reading of the words. This struggling in decoding/identifying the words, takes mental energy away from actually understanding the material.

Text Summary Score:

- Read the student’s short Text Summary. As you read you are looking for the amount and kind of details the student uses, whether or not the student uses the vocabulary of the discipline, and how well the student captures the author’s intent. On the College Reading Rubric mark the appropriate boxes for your student’s ability to summarize the text.

  The ability to summarize is a comprehension skill, and can indicate how well the student understands the text. Many standardized reading assessments require summarization to gain an initial understanding of how well the student has comprehended the passage. Recalling the basic information is essential for higher levels of thinking to occur.

- Based on each student’s Reading Rate and Text Summary scores determine if s/he falls into the PASS or NO PASS range for each element.

Collecting & Reporting Results:

Collect Data: Student reading should be evaluated with the attached rubric. Data should be reported in pass/no pass format for institutional purposes. Data should be collected from courses within General Education (those that have reading as an outcome) and reported in the departmental yearly assessment report. Discipline based courses within the major would also be collected and reported separately in the yearly assessment report. Reporting for reading would be completed and reported by December, 2012.
**Report Format:** Results should be reported in terms of the number and percentage of students passing/not-passing each major element. See example below based on sample data from 30 students.

**Course Example: UNIV 111**

<table>
<thead>
<tr>
<th>Rubric Element</th>
<th>Pass Native</th>
<th>Pass* Transfer</th>
<th>Non-Pass Native</th>
<th>Non-Pass* Transfer</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reading Rate</td>
<td>10/33%</td>
<td>5/17%</td>
<td>5/17%</td>
<td>10/33%</td>
</tr>
<tr>
<td>Summary-Details</td>
<td>15/50%</td>
<td>15/50%</td>
<td>0/0%</td>
<td>0/0%</td>
</tr>
<tr>
<td>Summary-Discipline Specific Vocabulary</td>
<td>10/33%</td>
<td>10/33%</td>
<td>5/17%</td>
<td>5/17%</td>
</tr>
<tr>
<td>Summary-Author’s Intent</td>
<td>15/50%</td>
<td>10/33%</td>
<td>0/0%</td>
<td>5/17%</td>
</tr>
</tbody>
</table>

*Only Discipline based courses would identify number and percentage of native and transfer students passing/failing each element.

**Suggested:**

Students should be directed to the CWU College Reading Across the Curriculum Website. There students will find:

- suggestions for improving weak areas of comprehension
- strategies to use when reading technical/academic material
- media clips explaining/demonstrating strategies
- strategy bookmarks that can be printed and used regularly

Faculty can use the CWU College Reading Across the Curriculum Website to find:

- strategies to teach your students
- media clips to show your students
- websites that provide teaching tools that will help students with technical/academic reading
- schedule of workshops to support reading across the curriculum

**Reading Across the Curriculum Website:**

[http://www.cwu.edu/~gen_ed/readingcurriculum.html](http://www.cwu.edu/~gen_ed/readingcurriculum.html)
**COLLEGE READING RUBRIC**

<table>
<thead>
<tr>
<th>ELEMENTS</th>
<th>PASS</th>
<th>NO PASS</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Reading Rate</strong></td>
<td>___Student’s reading rate is average or above average (190+wpm)</td>
<td>___Student’s reading rate is below average (189-wpm)</td>
</tr>
<tr>
<td><strong>Summary-Details</strong></td>
<td>___Student’s summary contains details.</td>
<td>___Student’s summary does NOT contain details.</td>
</tr>
<tr>
<td><strong>Summary-Discipline Specific Vocabulary</strong></td>
<td>___Student’s summary contains discipline specific vocabulary.</td>
<td>___Student’s summary does NOT contain discipline specific vocabulary.</td>
</tr>
<tr>
<td><strong>Summary- Author’s Intent</strong></td>
<td>___Student’s summary communicates clearly the author’s intent.</td>
<td>___Student’s summary does NOT communicate clearly the author’s intent.</td>
</tr>
</tbody>
</table>