

Central Washington University
Assessment of Student Learning: Reading

Academic Year of Report: 2011-2012

College: College of Education and Professional Studies

Department: Nutrition, Exercise, and Health Sciences (NEHS)

Programs: Exercise Science, Clinical Physiology

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Chair: Dr. Vince Nethery

This reading assessment was conducted on students in the Exercise Science and Clinical Physiology majors. The course chosen for the assessment was EXSC 351 covering human anatomy and physiology.

This course is required in these two degree programs, and is also taken by students in other programs such as Paramedicine. The assessment was performed in Spring quarter 2012 and the data from two enrolment sections were added together.

The reading assessment, taken on a day that a quiz was scheduled ensuring maximum participation, was comprised of complex scientific material extracted from Renal Physiology that described symptoms and treatment of renal failure. Students were naïve to material specifics, thus providing “new” reading material in the discipline of physiology. Data for Native and Transfer students appears in Table 1. Native refers to students who have taken courses solely from CWU, while Transfer refers to students who have transferred courses to CWU from one or more different schools. Data analyzed by program, Clinical Physiology vs. Exercise Science vs. Other appears in Table 2. Data broken down by class status (Freshman, Sophomore, Junior or Senior) appears in Table 3.

Table 1. Pass/No Pass results for Native and Transfer students.

Rubric Element	Pass- Native	Pass- Transfer	No pass- Native	No Pass transfer
Reading Rate	11/34%	7/20%	21/66%	27/80%
Summary- details	21/ 65%	20/59%	10/35%	14/41%
Summary- discipline specific	5/15%	11/32%	26/85%	23/68%
Summary- author intent	7/22%	13/38%	24/78%	26/62%

Total number of students: 66 (32 Native, 34 Transfer).

Table 2. Pass/No Pass results for Exercise Science, Clinical Physiology or Other.

Rubric Element	Pass EXSC	Pass Clin. P	Pass Other	Pass Undecided	NP EXS C	NP Clin. P	NP Other	NP Undecided
Reading Rate	6/ 32%	6/25%	6/27%	0	13/68 %	18/75%	16/73%	1/100%
Summary- Details	11/58%	15/63%	13/60%	0	7/42 %	9/37%	9/40%	1/100%
Summary Discipline specific	3/16%	6/25%	7/32%	0	15/84 %	18/75%	15/68%	1/100%
Summary- author intent	2/11%	10/42%	9/41%	0	16/89 %	14/58%	13/59%	1/100%

Total number of students: 66 (19 Exercise Science, 24 Clinical Physiology, 22 Other, 1 undecided).

Table 3. Pass/No Pass results for class status.

Rubric Element	Pass Senior	Pass Junior	Pass Sophomore	Pass Freshman	No-Pass Senior	No Pass Junior	No-pass Sophomore	No-pass Freshman
Reading Rate	3/25%	8/24%	5/26%	1/100%	7/75%	26/76%	14/74%	0
Summary- Details	9/75%	23/68%	11/58%	0	4/25%	11/32%	8/42%	1/100%
Summary Discipline specific	5/42%	8/24%	5/26%	0	7/58%	26/76%	14/64%	1/100%
Summary- author intent	6/50%	8/24%	9/47%	0	6/50%	26/76%	10/53%	1/100%

Total number of students: 66 (12 Seniors, 34 Juniors, 19 Sophomores, 1 Freshman).

Analysis

Reading Rate: Of the 66 students assessed, 32 were Native to CWU while 34 were Transfer students. Thirty four percent of Native students passed the average general reader rate of 190 wpm, higher than the 20% passing rate shown by Transfer students. A majority of students (66% Native and 80% Transfer) did not reach the 190 wpm mark for an average reader. Similarly the passing reading rate by program was 32% Exercise Science, 25% Clinical Physiology and 27% Other. The majority of students in each discipline did not reach average reader status. Analyzing reading rate by class status, showed a similar pattern with 25% of Seniors, 24% of Juniors and 26% of Sophomores passing the reading rate. Overall, Native students did slightly better than Transfer students, class or program status had little effect of the scores. In general the majority of students did not reach the average general reader and no one reached the good general reader level. See conclusion for additional commentary.

Summary Details: Sixty five percent of Native students passed summary details section of the reading assessment, slightly higher than the 59% passing rate shown by Transfer students. Looking at the summary detail by program showed 58% Exercise Science, 63% Clinical Physiology and 60% Other passed. Analyzing summary details by class status showed an ordinal response with 75% of Seniors, 68% of Juniors and 58% of Sophomores passing the summary detail section. Higher-class status was related to greater retention of summary details. Overall, the majority of students passed this section with a slightly higher rate of passing for native students, program discipline had little effect but class status did, with Seniors scoring higher than Sophomores.

Summary Discipline Specific: Fifteen percent of Native students passed summary discipline specific section of the reading assessment, quite a bit lower than the 32% passing rate shown by Transfer students. The majority of students (85% Native, 68% Transfer) did not pass this section. Looking at the summary detail by program showed 16% Exercise Science, 25% Clinical Physiology and 32% Other passed. Clinical Physiology and Other students were better able to use discipline specific terminology. Summary details by class status showed a higher pass rates for Seniors 42%, compared to Juniors 24% or Sophomores 26%. Transfer students were slightly better than Native, Clinical Physiology and Other students were better than Exercise Science, and Seniors did better than Juniors or Sophomores.

Summary- Author intent: Twenty two percent of Native students passed the author intent section of the reading assessment, lower than the 38% passing rate shown by Transfer students. Program analysis showed 11% Exercise Science, 42% Clinical Physiology and 41% Other passed. Summary by class status showed a higher pass rates for Seniors 50%, and Sophomores 47% compared to Juniors 24%. Transfer students were slightly better than Native, Clinical Physiology and Other students were better than Exercise Science and Seniors and Sophomores did better than Juniors.

Conclusions

Student overall reading assessment of naïve, complex, physiologic material was generally quite low. Students were better at providing summary details with most of the students passing this section and Seniors doing better than other class levels. Discipline specific summaries were also low with Seniors again achieving higher levels. Author intent summaries followed a similar pattern. The complex terminology and the novel nature of the material likely contributed substantially to the low reading assessment scores.