



Assessment Literacy Self-Study Quiz #1

by Tim Newfields

This newsletter is introducing a new column in which some basic questions about testing, statistics, and assessment are raised in a quiz format. For those who are new to statistics, it provides a chance to leisurely become acquainted with terms and concepts which frequently appear in educational journals. Readers with a solid background in educational research might also enjoy quickly reviewing these assessment-related topics.

Part I: Open Questions

1. What's the actual formula for the ubiquitous *hensachi* used in ranking school in Japan? _____
2. At the RateMyProfessors.com (www.ratemyp Professors.com) website claiming to have over six million ratings over 700,000 professors in North America, the British Isles, Australia, and New Zealand two different professors teaching the same course received these ratings -

	Total Ratings	Total Quality
Professor A 	4	4.3
Professor B 	18	3.1

What can we assume about these teachers based on this information? And what are some of the validity issues to consider when examining any data from the web sources such as RateMyProfessors.com?

3. A teacher wants to select a random sample of high school students out of a total population of 400 students ($N=400$). How big does her sample need to be ($n=?$) to have a 95% confidence interval for that population?
4. A survey was conducted of student attitudes towards a placement test. Three hundred questionnaires were handed out, but the response rate was 60%. The 120 students who did not respond were ignored and all research findings were based on the remaining 180 responses. When 144 students (80% of the survey sample) indicated support for a given idea, the administrator of the survey claimed "80% of the students were in favor of X." Any problem?
5. How widely accepted is Yerkes-Dodson Law (1908) today?
What pedagogical applications, if any, does it have?
6. What information should technically be contained in an informed consent form? For EFL research would simple verbal agreements suffice?

Part II: Multiple Choice Questions

1. To calculate the reliability coefficient for some data, which of the following variables are needed?
 - (A) Standard Deviation (SD) from a specific measure
 - (B) Standard Error of Measurement (SEM)
 - (C) Standard Error of Estimation (SEE)
 - (D) Sampling Distribution of the Mean

HINT: Please select two variables.
2. To calculate the Kuder-Richardson 21 internal consistency reliability for some data, three variables are needed: (1) the mean, (2) the standard deviation, and (3) _____.
 - (A) the number of respondents
 - (B) the number of items in a test
 - (C) the range of scores for that test
 - (D) the number of "misfitting" items in that test
3. To calculate a chi-square statistic with one degree of freedom for two groups, which of the following is NOT needed:
 - (A) the mean score of each group
 - (B) the standard deviation of each group
 - (C) the size of each sample
 - (D) the range of scores for the group
4. Which of the following is NOT a characteristics of a curve with a perfectly normal distribution:
 - (A) It is platykurtic.
 - (B) It is asymptotic.
 - (C) It is bell-shaped.
 - (D) The mean, median, and mode are the same.
5. To find out how the total score on a test correlates with the chance of getting a single item on that test correct, a _____ should be ascertained.
 - (A) point biserial correlation
 - (B) Pearson product-moment correlation
 - (C) point estimation
 - (D) Spearman's Rho

HTML: <http://jalt.org/test/SSQ1.htm>  PDF: <http://jalt.org/test/PDF/SSQ1.pdf>