Case 1. The E-QoL-1 (a measure of electronic quality of life).

1. What kind of validity do you think this measure possesses, if any? Why do you think so?
   Evidence for face validity was generated via the analysis of the transcripts and especially by the expert review. This is probably the only kind of validity evidence produced by these procedures.

2. Do you see any major weaknesses in the validity of the measure?
   The measure is limited in validity in most respects. Clearly there is no other measure it is being compared against, so no type of criterion validity can be established. All that is possible then is some type of translation validity.

3. What is the impact of the sampling strategy used?
   Consider the possible limits imposed by utilizing a relatively small sample from one particular school.

4. What next steps could you suggest for Professor Smart to add to her validation of the measure?
   She should consider studying the measure in relation to all other validity types, some of which are addressed in the next example.

5. Discuss what steps the professor could take to examine the reliability of her measure.
   She should first consider what kind of reliability the measure should have based on the construct. That is, does she think the measure would be sensitive to momentary, daily, or other time-related changes in quality of life? Her examination of test-retest reliability should be guided by such ideas. Her analysis of the internal reliability of the scale should also be guided by a theoretical position, but could be enhanced by some additional data analysis not covered in the Knowledge Base, but which you can learn more about in your measurement courses (e.g., factor analysis).
Case 2. The E-QoL-2 (another measure of electronic quality of life).

1. What kind of validity do you think this measure possesses, if any? Why do you think so?
   This researcher is attempting to add to the face validity with evidence of content and convergent validity. The content validity of the measure is evident in the use of a relatively large sample of students, events, and time (one week vs. a single time assessment). The analysis of frequency of occurrence will also help to determine which items are most important, again adding a bit to the content validity of the measure. Studying the relationship of the measure to a previously established measure will help him to examine the convergent validity of the new measure.

2. Do you see any major weaknesses in the validity of the measure?
   The classification of items into categories can be criticized as based on an individual’s judgment rather than on statistical organization of the data.

3. What is the impact of the sampling strategy used?
   The use of a large sample, especially relative to the previous study, provides more confidence about the comprehensiveness of the items in the measure. We do not know to what extent the measure would be appropriate for other (non-undergraduate) populations.

4. What next steps could you suggest for Professor Smarter to add to his validation of the measure?
   Assuming that the professor is encouraged to continue with the measure, next steps could include predictive validity studies with a new sample of students and discriminant validity studies with measures that should theoretically be uncorrelated or negatively correlated with the new measure.

5. Discuss what other steps the professor could take to examine the reliability of his measure.
   We would have to see the results of the first reliability analyses to plan the next steps, but again it would be very important to understand the reliability of the measure in relation to the construct, both internally and over time.