This article demonstrates the sometimes compromised techniques involved in data collection and their subsequent reporting capabilities. To illustrate this point, a joint venture between the community colleges of Missouri, the Coordinating Board of Higher Education, and a national testing corporation completed a project assessing student outcomes. Surveys critiqued a wide range of self-reported abilities and attainments from randomly sampled students among the community colleges. The sampling was approximately six to seven percent. Questions concerned college services such as financial aid and advising, and accomplishments such as knowledge acquired and impression of academic offerings. A cursory review of returned survey data showed both the assets and liabilities inherent in sampling, and supported the theory that fractional sampling is likely to be skewed at some level. The project concluded that institutions desiring the most explicit data for self-evaluation should consider the merits of techniques used, the inherent data limitations that accompany those methodologies, and the intrinsic restrictions of interpretation embedded in the assessment instruments of choice. (Contains survey). (EMH)
Assessment Designs Among Community Colleges

Erik J. Hilgendorf
Crowder College
ASSESSMENT DESIGNS AMONG COMMUNITY COLLEGES

Assessment on all levels in education has become a labyrinth of complexity. From national accreditation reviews spiraling downward to departmental and classroom implementation, assessment pervades education. Assessment involves educational practitioners in an arena few have even taken a course in, yet, they are expected to adroitly facilitate assessment into both syllabi and mission statement alike.

The word assessment is of French origin "assidere" meaning "to sit beside." So much of what takes place under the guise of assessment has little or nothing to do with the protégé or pupil "sitting beside" the instructor or professor in attempts to have an interaction of dialogue and feedback involving a topic worthy of discussion.

The foregoing is neither a condoning nor condemnation of current educational practices in America. It simply elucidates the existing circumstances. Most assessment takes the form of "scantronable" multiple choice critiques of students periodically throughout the term or semester. Of course, cost, time, ease, and committee-laden faculty have, in part, been the rationale for this trend. That is not to say there are not strands of genuine assessment taking place. To clarify, I would not hesitate to suggest that English courses are and should be writing intensive exercises co-mingled with in-depth classroom discussions and other worthwhile activities. The field of Art often utilizes portfolios as their major medium of critique accompanied by other methods of evaluation. This, too, would be consistent with authentic assessment.
Additionally, many states have collaborative efforts between public postsecondary institutions and their coordinating boards of higher education. Multiple projects usually include the additional input of a national testing company. These projects often implement surveys and analyses of various outcomes of interest to all involved parties. Sampling methodologies involving cross-sections of the student population are typical. However, at times, coordinated projects circumvent needful checks and balances crucial to valid, reliable, and useful data.

The purpose of this article is to demonstrate the sometimes-compromised techniques involved in data collection and their subsequent reporting capabilities. A joint venture between the community colleges of Missouri, the Coordinating Board of Higher Education, and a national testing corporation was inaugurated. The project involved assessing student outcomes. This collaborative effort is admirable, but slightly flawed. While the efforts are meritorious, methodologies lack the consistency to yield tangible results so necessary for the public citizenry, educational officials across the spectrum, legislative bodies, and students themselves to draw compelling conclusions.

The survey critiqued a wide range of self-reported abilities and attainments from sampled students among the community colleges. The sampling was approximately six-to-seventeen percent. Surveys were mailed to randomly chosen students.
Typically, the return rates of such endeavors are not high. Additionally, returned surveys would not yield institution-specific results. All returned survey data would be aggregated for a statewide analysis. Therefore, feedback is skewed by the intermingling of rural and metropolitan data. Actually, to yield both aggregate and individual institutional results would facilitate the most in-depth examination of trends and conceptions amongst community college attendees.

The questions on the survey are typical inquiries of students by colleges concerning services like: financial aid, advising, bookstore, intramurals, etc., and accomplishments such as acquired: knowledge within major, intellectual enhancement, accrued abilities and appreciation for academic subjects, and overall impression of academic offerings and facilities. Universities and institutions of higher education have polled students on these categories for years.

An abridged survey delving into the aforementioned areas was constructed. The survey follows the present narrative. It consisted of 49 questions. During a mandatory exiting exercise among 198 graduates, the survey was administered. The sampling represented roughly 88% of those students graduating. Consequently, an excellent return rate was assured. Additionally, those represented had the most precise knowledge and experience to critique Crowder College's offerings as well as their own attainments and Crowder's contribution to those accomplishments. A simple Likert Scale was utilized.
The results yielded three stratum of data. The first level indicated by "A =, B=", etc. comprised responses from the aggregate of 198 students. The second and third strata were random samplings of the 198. The second strata indicated by: S1 (sample one) represents a sampling of 10 percent of the 198, in this case 20 responses drawn from the 198. The third strata indicated by:S2 (sample two) represents a sampling of 5.5 percent of the 198, or 11 responses of the 198.

This was done in order to parallel the procedures so often instituted by polling and surveying entities. To clarify, surveys utilizing information gleaned from 3 to 8 percent return rates are far inferior to those that capture an 88 percent return. To accentuate the discrepancies in results that inevitably surface when handling mere fractions of the entire populace concerned, re-enactment of these flawed methodologies was instituted.

A cursory review of the data show both the assets and liabilities inherent in sampling. For example, question #1 shows that within the first strata of 198, 98 percent of the students indicated a combined favorable ("A" or "B") response (very satisfied 34% or satisfied 64% = 98%) to: "The learning environment provided by Crowder." In statum S1 and S2 responses (A and B) too, yielded very favorable combined indications to, question #1 at 100% (S1 = 50% plus 50% = 100%); and (S2 = 9% and 91% = 100%). So, the three samplings yield overall similar results, i.e. 98 to 100 percent high-satisfaction concerning question one. Yet, the results yield much disparity. There is a significant difference between S2 = 9% indicating "very satisfied" and S1=50% indicating the same.
One can only imagine how department heads or other pivotal personnel and divisions would prefer to be revealed in results issued in a brochure or before an accreditation agency, etc. Numerous other comparisons/contrasts can be drawn. Simply put, reliance on fractional sampling may or may not mirror actual overall tendencies, but are far more likely to be skewed at some level.

This brings us full circle to the reasons why current assessment practices are lacking in credibility. It should be further noted Crowder also implemented focus group questions to the 198 students. Facilitated by faculty over an informal brunch setting, we elicited qualitative answers to a series of questions posed to students. This technique was utilized to accentuate both qualitative and quantitative measures. In concert, a more accurate picture is able to be constructed of areas of improvement as well as areas of well-deserved merit. It must be acknowledged that a wide latitude of interpretation results from survey sampling. Hopefully, trends will lean back towards assessment practices utilizing assidere "sitting beside" but not at the expense of quantifiable data. A follow-up article will examine the statewide aggregate data and Crowder's local results.

Institutions desiring the most explicit data for self-evaluation should consider the merits of techniques used, the inherent data limitations that accompany those associated methodologies, and the intrinsic restrictions of interpretation embedded in the assessment instruments of choice.
How has Crowder contributed to your progression (attainment) in the areas contained in the following survey? Please critique, also, services, personnel, and facilities. Your honest appraisal permits us to strive for excellence, too! Please indicate your level of satisfaction for the following questions using the scale below:

** A = VERY SATISFIED
** B = SATISFIED
** C = DISSATISFIED
** D = VERY DISSATISFIED
** E = NOT USED / OR NOT APPLICABLE

** denotes total percentage of favorable responses combining “A” and “B”
(Due to rounding all figures do not necessarily comprise 100%)

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<thead>
<tr>
<th>Question</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>E</th>
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<tr>
<td>1. The learning environment provided by Crowder.</td>
<td>50</td>
<td>91</td>
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<td>2. My overall impression of the quality of a Crowder education.</td>
<td>35</td>
<td>82</td>
<td>0</td>
<td>0</td>
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<td>100</td>
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<td>3. Academic advising.</td>
<td>30</td>
<td>27</td>
<td>30</td>
<td>9</td>
<td>9</td>
<td>100</td>
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<td>4. Course / class scheduling.</td>
<td>15</td>
<td>45</td>
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<td>5. Personal counseling services.</td>
<td>15</td>
<td>36</td>
<td>0</td>
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</table>
6. My ability to think introspectively, view evidence and facts and then decide.
A = 34  B = 58  C = 4  D = 1  E = 2  **92%
S1 = 40  55  15  0  0
S2 = 18  73  0  0  0

7. Job placement services.
A = 9  B = 30  C = 7  D = 6  E = 46  **39%
S1 = 5  45  5  5  40
S2 = 9  0  18  64

8. Financial aid services.
A = 18  B = 39  C = 12  D = 10  E = 19  **57%
S1 = 35  25  15  0  20
S2 = 9  45  0  18  27

A = 19  B = 60  C = 14  D = 2  E = 5  **79%
S1 = 35  50  10  0  5
S2 = 18  73  9  0  0

10. Student Assistance Center: testing / assessment, tutoring, computers.
A = 30  B = 51  C = 4  D = 1  E = 15  **81%
S1 = 35  45  15  0  5
S2 = 27  55  9  0  9

11. My ability to convey my thoughts orally and written.
A = 35  B = 58  C = 5  D = 1  E = 0  **93%
S1 = 45  45  5  5  0
S2 = 27  64  9  0  0

12. Reading ability and comprehension.
A = 37  B = 57  C = 3  D = 0  E = 1  **94%
S1 = 50  35  10  0  5
S2 = 18  73  9  0  0

13. Study and test-taking ability.
A = 32  B = 57  C = 9  D = 2  E = 1  **89%
S1 = 40  45  10  5  0
S2 = 27  64  9  0  0

A = 22  B = 49  C = 10  D = 2  E = 15  **71%
S1 = 10  45  25  0  15
S2 = 36  36  18  0  9
15. School newspaper.
A = 11   B = 53   C = 12   D = 3   E = 19   **64%
S1 = 18
S2 = 18

A = 5    B = 26   C = 19   D = 12   E = 35   **31%
S1 = 10
S2 = 9

A = 23   B = 43   C = 23   D = 7    E = 4    **66%
S1 = 15
S2 = 9

A = 9    B = 38   C = 16   D = 6    E = 29   **47%
S1 = 9
S2 = 9

19. Quality of instruction in your major area of study.
A = 41   B = 45   C = 10   D = 3    E = 1    **86%
S1 = 5
S2 = 55

20. Library / Learning Resource Center.
A = 18   B = 53   C = 17   D = 8    E = 4    **71%
S1 = 15
S2 = 27

21. Recreational opportunities.
A = 7    B = 29   C = 18   D = 9    E = 35   **36%
S1 = 5
S2 = 9

22. Off-campus course offerings.
A = 13   B = 27   C = 9    D = 3    E = 47   **40%
S1 = 20
S2 = 9

23. My academic goals have been attained.
A = 31   B = 55   C = 10   D = 1    E = 1    **86%
S1 = 18
S2 = 18
24. My ability to pursue truth.

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<td>S2</td>
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25. Having become increasing responsible and accountable.

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26. I’ve never felt discriminated against by faculty/personnel.

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27. Wellness programs.

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28. College bookstore.

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29. Classrooms, furnishings, comfort, conducive learning environment.

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30. Out-of-class availability of instructors, office hours.

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<td>S1</td>
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<td>S2</td>
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31. My intellectual curiosity has become enhanced.

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<td>S2</td>
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32. Awareness of a divergent society.

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<td>75</td>
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<td>S2</td>
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<td>91</td>
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33. My becoming an active citizen.
A = 26  B = 55  C = 8  D = 1  E = 9  **81%
S1 = 30  50  5  0  15
S2 = 18  73  9  0  0

34. My coping strategies dealing with change, varying: persons, opinions, requirements.
A = 31  B = 59  C = 5  D = 1  E = 4  **90%
S1 = 30  65  0  0  5
S2 = 27  64  9  0  0

35. My ability to set future goals.
A = 39  B = 53  C = 2  D = 1  E = 3  **92%
S1 = 40  50  0  0  10
S2 = 45  45  0  0  0

36. My Listening ability.
A = 30  B = 58  C = 6  D = 2  E = 3  **88%
S1 = 25  60  5  0  10
S2 = 45  36  18  0  0

37. Attitude of faculty toward students.
A = 27  B = 56  C = 9  D = 6  E = 1  **83%
S1 = 25  60  15  0  0
S2 = 36  55  9  0  0

38. Attitude of other college staff towards students.
A = 15  B = 61  C = 15  D = 4  E = 3  **76%
S1 = 10  60  15  0  10
S2 = 27  55  9  0  9

39. Developmental / remedial services.
A = 7  B = 30  C = 3  D = 3  E = 55  **37%
S1 = 10  20  0  5  60
S2 = 9  45  0  0  45

40. Awareness of political / social issues.
A = 15  B = 62  C = 7  D = 2  E = 11  **77%
S1 = 15  55  0  5  25
S2 = 0  82  0  0  18
41. Formulating purpose direction and meaning for myself and others.
A = 25  B = 64  C = 3  D = 1  E = 6  **89%
S1 = 35  S2 = 18

42. Developing an interest and competence in raising a family.
A = 23  B = 42  C = 7  D = 2  E = 25  **65%
S1 = 25  S2 = 9

43. Understanding the importance and urgency of issues involving the aged.
A = 22  B = 54  C = 8  D = 4  E = 22  **76%
S1 = 15  S2 = 27

44. Lab facilities.
A = 19  B = 49  C = 18  D = 8  E = 2  **68%
S1 = 25  S2 = 18

45. Your appraisal of Crowder when being asked to recommend it to others.
A = 35  B = 54  C = 8  D = 1  E = 1  **89%
S1 = 45  S2 = 36

46. There was concern for me as an individual.
A = 23  B = 53  C = 13  D = 3  E = 7  **76%
S1 = 20  S2 = 20

47. My overall Crowder experience prepared me for further academic study.
A = 28  B = 55  C = 8  D = 1  E = 4  **83%
S1 = 40  S2 = 18

48. Crowder's courses were academically rigorous, but fair.
A = 20  B = 61  C = 14  D = 2  E = 1  **81%
S1 = 40  S2 = 18
49. I look forward to being a Crowder alumni and graduate.

A = 51  B = 37  C = 3  D = 2  E = 2  **88%**

S1 = 70  30  0  0  0

S2 = 55  36  9  0  0
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Corporate Source: Crowder College

Publication Date: 5/21/98

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Date: 5/21/98
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