

Doctoral Comprehensive Examination Questions:
(See Page 2 & Page 3)

FACULTY AND STUDENT PERCEPTIONS OF COLLEGE-READINESS
IN THE COMMUNITY COLLEGE: A FRAMEWORK
FOR POLICY REALIGNMENT

Reference:
Chapter III:
Methods

Doctoral Comprehensive Examination Response:
Kenneth Edward Scott

Prepared for Dr. Margaret E. Ross, Associate Professor
College of Education
Educational Foundations, Leadership and Technology
Auburn University

Submitted:
August 7, 2006

Comprehensive Examination Questions for Ken Scott From Dr. Margaret Ross

Directions

Respond to the following questions. You may prepare your responses before the comprehensive examination date(s) and you may use any resources you want as long as you cite them appropriately.

Cite some or all of the following readings:

- Linn, Robert. (2001). The design and evaluation of educational assessment and accountability systems
- Frisbie, David A. (2005). Measurement 101: Some fundamentals revisited
- Moss, Pamela A. (1998). The role of consequences in validity theory
- Streiner, David L. (2003). Being inconsistent about consistency: When coefficient alpha does and doesn't matter
- Benson, Jeri. (1998). Developing a strong program of construct validation: A test anxiety example
- Messick, Samuel. (1994). Validity of psychological assessment: Validation of inferences from persons' responses and performances as scientific inquiry into score meaning

Provide a copy of your research questions.

1. Describe your population in detail and how you will sample the population. Respond in paragraph format (as if you were writing the participants section of your dissertation). (approximately one page)

2. Describe in detail "what" you are measuring (the variables).

3. Describe in detail your measures (both for the independent variable(s) and the dependent variable). Respond in paragraph format (as if you were writing the measures section of your dissertation). Include:

- what is asked
- item format (e.g. Likert-type scale, open-ended questions, etc.)
- how responses to the survey will be summarized to obtain a value to use in analyses
- how validity is addressed (e.g. content, construct, etc.)
- how reliability is addressed

(two to three pages)

Note: If you develop the instrument, also describe the development process:

Theory

Constructs

Literature

Panel of Judges

4. Describe the procedures used (in detail) to complete the data collection and analyses (including analyses done to establish validity and reliability) for the study. (one to two pages)

5. Justify your methods for (a) choosing the participant population and sample, (b) the measures you will use, (c) and the procedures employed. Use the following questions as guidelines:

- Why did you choose the population(s) you're using? (paragraph)
- Why did you choose your data collection methods? (paragraph)
- What are the advantages and disadvantages of using survey research methods? (see Dillman) (approximately one page)
- Why did you choose the analyses you will use to answer the research questions/hypotheses? (paragraph)

Provide a copy of your research questions. Below is the background information for the study and the research questions.

Background Information

Community colleges have become the doorway to higher education for a significant number of college-eligible students (Hendrick, Hightower & Gregory, 2006; Kisker, 2006; Perin, 2006; Alabama College System, 2005). Conley (2005) defined college-eligible as a process of fulfilling various admission requirements. Furthermore, college-eligible and college-ready were noted as dichotomous in function. Whereas college-eligible is a process of ensuring the correct college entrance forms and prerequisites have been completed, college-ready is a process of successfully meeting the prerequisites and rigors of college-level coursework.

Students and faculty in the community college have different perceptions of college-eligibility and college-readiness (Grimes & David, 1999; Merrow, 2006). Students perceived themselves to have mastered their courses in high school, achieving a significantly accomplished GPA (Smith, 2006); conversely, faculty perceived student readiness differently. According to the Higher Education Research Institute (HERI) (2005), approximately 50% of faculty indicated their satisfaction with the college-readiness of their students. In terms of how students and faculty separately and collectively perceived college-readiness, the study noted that 36% of postsecondary faculty (from four-and-two-year institutions, both public and private) considered that most students are well prepared academically for college. Forty-one percent of all survey respondents – and 65% of faculty at public two-year colleges – revealed that most of the students they taught lacked the basic skills needed for college-level coursework; 70% of

entering college students perceived themselves as above average or in the highest 10% academically; and 48% reported earning A grades in high school. The college-readiness perceptual differences between students and faculty in the community college formed the framework for this dissertation.

This study investigated underlying perceptions of students and faculty and how these perceptions relate to college-readiness initiatives and policies. To investigate the dependent, independent, interrelated, and interdependent variables, the following research questions were used in this study (alternate hypothesis):

1. What are the college-readiness perceptions of community college students and faculty members?
2. Is there a significant difference in the perceptions of college-readiness between students and faculty members in the community college?
3. Is there a significant difference (homogeneity or heterogeneity) in the perceptions of college-readiness within student and faculty groups in the community college?
4. What are the relationships of college-readiness perceptions by faculty and students as related to selected datasets and policies?
5. What college-readiness variables are identified as the best predictors to inform policy designers that policy reform is statistically significant, educationally sound, and perceptually relevant?
6. Do faculty members perceive college-readiness as an indicator of variance in attitudes towards and support of students, specifically or generally?

7. Do students perceive college-readiness as an indicator that their own success is relational to their self-perceptions?
8. What variables do *both* students and faculty perceive to be the *most* significant indicators for improving college-readiness as a means to inform policy designers that perceptions have statistical significance, policy influence, and educational merit?

Chapter III provides an explanation of the research methods used in this study.

Moreover, the topics in Chapter III included: an introduction; methodology and design of the study; research questions; population, sample, confidentiality and anonymity; instrumentation, reliability and validity; procedures; and, data collection, analysis, and coding.

1. Describe your population in detail and how you will sample the population. Respond in paragraph format (as if you were writing the participants section of your dissertation).

The total population for this study included primary educational participants in the community college system of education (hereafter the community college). These individuals were the teaching-learning participants within the 1,186 community colleges in the United States. The population was categorically classified as students and faculty members. Within the community college, there were approximately 11.6 million students and 593,211 faculty members (American Association of Community Colleges, 2006; Digest of Education Statistics, 2004). To operationalize general transferability, validity, and reliability to the total population (Benson, 1998; Frisbie, 2005; Messick, 1994), a selected convenience sample was conducted.

The convenience sample was drawn from the Alabama College System (ACS) in which a representative sample was obtained. The ACS had a population of 79,381 students, 1,766 faculty, and 22 community and 3 technical colleges (Alabama College System, 2005; Alabama Commission on Higher Education, 2005). A researcher developed survey, *Student and Faculty Perceptions of College-Readiness*, was used to quantitatively and qualitatively measure participant responses. The sample conducted included all 25 community and technical colleges in Alabama with surveys randomly distributed to 50 students and 25 faculty members in each of the institutions in the Alabama College System. The methodology applied resulted in a data pool of 1,250 student and 625 faculty member respondents.

To survey the respondents, permission was obtained from each institution via Letters of Request to participate in the study. Each survey was then mailed to a

designated representative at each institution with a timeline for random participation and completion. The surveys used both quantitative and qualitative measures. Quantitative survey questions measured responses by using a five point Likert-scale system of: 1 = strongly disagree, 2 = disagree, 3 = neither agree nor disagree, 4 = agree, and 5 = strongly agree; qualitative survey questions measured responses by using open-ended questions for the purpose of enabling construct validity (Moss, 1998) with the quantitative-type responses.

An example qualitative question to measure the variances of student and faculty perceptions of college-readiness is found in the following event in the Summer Term, 2006, in one of the technical colleges in the Alabama College System. Student-x and Faculty-y met to discuss the registration of Student-x for Fall Semester 2006. COMPASS scores (ACT COMPASS System, 2006) for Student-x indicated excellent reading and writing preparation, while math scores indicated a college-readiness level requiring remedial coursework. The perception of Student-x was noted as, "I don't understand how I tested this low in math because I completed math courses all the way through trigonometry and made A's." Faculty-y's perception, based on COMPASS scores, indicated that the student was not prepared for college-level math, while the perception of Student-x was a perception of being overly prepared; this relationship suggested a negative correlation between the college-readiness perceptions of Student-x and Faculty-y.

Therefore, using a mixed-methods convenience sample survey of the Alabama College System suggests general applicability and transferability of the outcome of the study to the community college system of education.

2. Describe in detail “what” you are measuring (the variables).

This study measured the perceptions of two categorically disparate, but interrelated and interdependent groups. First, students have perceptions about their own college-readiness which may differ from the college-readiness perceptions of faculty members. Secondly, students may have variances among themselves as do faculty members. For example, within group variances may be different even among student samples, just as within group variances among faculty members. It is assumed in this study that the results of the findings will reject the null hypothesis that there is no statistical difference in the perceptions within and between students and faculty members; however, it is assumed in this study that homogeneity is more identifiable within the faculty group.

For this study, the independent variables (IVs) listed here (See Question 3) do not indicate the sum total of all variables; however, the IVs noted are those which this study will utilize to measure the perceptions of the dependent variable (DV) of college-readiness. What is being measured is the statistically significant relationship among and between students and faculty in terms of their perceptions of college-readiness. The reason for measuring these variables (IV and DV) is to establish the significance between and among these groups so that the outcomes of the measured variables will then be used to suggest relationships between other datasets and policies which have influenced the college-readiness perceptions of students and faculty members. Additionally, what is being measured in terms of variables are the perceptions of many factors related to what a student and faculty member perceives to be the foundation for understanding college-readiness. For example, is GPA perceived as a positive determinant of college-readiness?

3. Describe in detail your measures (both for the independent variable(s) and the dependent variable). Respond in paragraph format (as if you were writing the measures section of your dissertation). Include:

- what is asked
 - item format (e.g. Likert-type scale, open-ended questions, etc.)
 - how responses to the survey will be summarized to obtain a value to use in analyses
 - how validity is addressed (e.g. content, construct, etc.)
 - how reliability is addressed
- (two to three pages)

**Note: If you develop the instrument, also describe the development process:
Theory, Constructs, Literature, and Panel of Judges**

The methodology used in this study was a mixed-methods approach (Dillman & Tarnai, 1988; Tashakkori & Teddlie, 2003). The mixed-methods approach included both qualitative and quantitative methods for the purpose of “collecting and analyzing both quantitative and qualitative data in a single study” (Creswell, 2003, p. 210). A researcher developed survey, *Student and Faculty Perceptions of College-Readiness*, was used to quantitatively and qualitatively measure participant responses. To facilitate data acquisition, the survey process used convenience sampling as the method to obtain and measure responses from the population sample.

The framework for the survey instrument was derived from a review of the literature on college-readiness, and included studies on college-readiness, policy data, college-readiness datasets, and perceptions between and among students and faculty. To also foster a survey instrument consistent with the principles of validity and reliability, the survey instrument was reviewed by the following: (1) the dissertation committee, (2) a panel of institutional research experts, and (3) a panel of Developmental Studies experts. A pilot test of perceptions by students and faculty at a selected community college was conducted and the results were reviewed by the experts noted.

As a mixed-methods instrument, the survey consisted of two sections: (1) Section I: *Quantitative Measures, Student & Faculty Ratings of Perceptions of College-Readiness*, (2) Section II: *Qualitative Measures, Student & Faculty Open-Ended Opinions and Perceptions of College-Readiness*.

Section I of the survey consisted of questions and answers in which the respondent rated the response to each question on a 5-point Likert-scale. The rating scale was configured as follows: 1 = Strongly Disagree, 2 = Disagree, 3 = Neither Agree nor Disagree, 4 = Agree, and 5 = Strongly Agree. Respondent ratings formed the basis of strengths or weaknesses of the perceptions of college-readiness and addressed the independent variables imbedded in each question. For example, a sample question is: High school Grade Point Average (GPA) is a strong indicator for college-level coursework success (GPA is the independent variable; college-level course success is equivalent to the dependent variable of college-readiness). Based on the literature and differences in perceptions, students are more likely to Agree or Strongly Agree, while faculty are more likely to Disagree or Strongly Disagree (Higher Education Research Institute, 2005). In this example, the student SPSS compiled rating may have been 4.2, while the faculty rating may have been in the 3.0 range. Therefore, each question will be summed and coded in SPSS to perform statistical comparative analysis using ANOVA or predictive analysis using Regression procedures. Although not stated on the survey, the questions will be configured in such a way that specific items will be used to compare groups, while other questions will be written as predictors of college-readiness, e.g., GPA, motivation, family support, study habits, etc.

Section II data will be used as a correlation to the rated questions in Section I. The open-ended questions in Section II will be reviewed and selectively applied to the rated questions as positive or negative correlates to the rated questions. For example, if faculty rate GPA as a low-value indicator, and open-ended questions support the ratings, such a positive correlation would suggest greater validity and reliability of the question being measured (Frisbie, 2005).

The variable, Grade Point Average (GPA), is an example of an independent variable used to measure its relationship to the dependent variable of college-readiness. For example, if GPA is determined to be a valid input variable in measuring the effectiveness of college-readiness procedures and policies, then GPA is suggested as a valid and reliable measure of college-readiness. However, if GPA is perceived to be a valid measure by one group, e.g., students, and an invalid measure by the other group, e.g., faculty, such negative correlations can then be evaluated as an input variable to realign policies to restructure the process of using GPA as a valid and reliable measure of effective college-readiness policies and practices. As noted by Daugherty (2005), “as a state policy-maker and education leader, you will see considerable variety in state policies. You will be able to assess your individual state policies by how well they support your state’s overall college-readiness effort” (p. 2). This statement alludes to how independent variables can be used as measures to discover the relationship between the IVs and college-readiness to impact college-readiness policies. The researcher designed survey was intended to uncover and suggests this relationship.

Calculations were conducted in SPSS to test the reliability and validity of the survey-data domain (Streiner, 2003). It is expected that Cronbach’s alpha will yield an

acceptable alpha coefficient value ≥ 0.7 (Nunnally, 1978), to indicate consistent and reliable responses to the survey and to suggest acceptable reliability in measuring the same underlying construct, e.g., perceptions of college-readiness are not the same between faculty and students (alternate hypothesis). Furthermore, it is anticipated that factor analysis will yield results ≥ 0.8 to suggest a statistically significant correlation between independent and dependent variables, e.g., patterns of inter-correlations (or factors) between variables and subsets.

To ensure the most reliable and valid survey instrument, the researcher also reviewed other related surveys. Based on these related surveys (and datasets), the *Student and Faculty Perceptions of College-Readiness* survey included previously used questions which had been field-tested. (All questions were appropriately cited.)

4. Describe the procedures used (in detail) to complete the data collection and analyses (including analyses done to establish validity and reliability) for the study. (one to two pages)

To complete the cycle of data collection and analysis, the first procedure is to establish the data collection process. Data collection, analysis, and conclusions have the prerequisite of random sampling to prevent a biased dataset, as well as establishing “construct validity...whereby the theory and the test [data] are constantly being evaluated and refined” (Benson, 1998, p. 10). Therefore, the first step is the data collection process, which was conducted as follows: (1) approval to conduct a random survey of students and faculty was obtained from each community college via formal letters to appropriate administrators, (2) an official at each community college was contacted as the liaison for the random sampling process, (3) surveys were distributed, completed, and collected by local liaison and sealed in pre-coded envelopes by community college for mailing, (4) anonymity and confidentiality were guaranteed for all respondents to ensure full-disclosure in responding to the survey questions, (5) 75 student and 40 faculty surveys were requested, with the goal of randomly coding 50 students and 25 faculty responses from each institution in SPSS (See Question 1, p. 7) and (6) the survey instrument was reviewed and field-tested (pilot tested) to enhance reliability and validity prior to the convenience sampling data collection process.

As noted by Moss (1998), “the definition of validity is not just an interesting philosophical question; it can be seen to have real ethical, political, and economic consequences” (p. 6). Consequently, this study will use SPSS to measure the validity and reliability of the dataset using the features in SPSS which will statistically evaluate the correlations between independent and dependent variables, including interrelationships.

The purpose in giving significant attention to validity and reliability in terms of the data and the collection instrument is that the outcome of the study will make recommendations as a matter of findings. From a review of the literature and studies conducted on college-readiness, the phenomenon of college-readiness is one of the most important issues in education (Byrd & MacDonald, 2003; U. S. Department of Education, 2000; Kirst & Venezia, 2006; Phillips & Skelly, 2006). Thus, the data collection process is critical to this study, as well as the coding and output of the statistical information from SPSS.

Specifically, the data will be coded in SPSS and components of ANOVA and Regression will be used to uncover statistical significance between students and faculty. The analysis will then be discussed in Chapter IV, *Results*, to interpret and discuss the findings as a matter of correlation to the research questions. In terms of validity and reliability, as previously noted, calculations will be computed to measure Cronbach's coefficient alpha and factor analysis. As a minimum, the results of these two values will support or reject the survey instrument, process and the resulting data.

The overarching goal of the study is to collect data properly, code the data to produce significant output ($p \leq 0.05$), and achieve results which suggests transferability to the community college system of education. Transferability is applicable if the study uses unbiased, reliable, and valid data; furthermore, a discussion of the results is more likely to be reliable if the procedure in SPSS is conducted properly.

5. Justify your methods for (a) choosing the participant population and sample, (b) the measures you will use, (c) and the procedures employed. Use the following questions as guidelines:

- **Why did you choose the population(s) you're using? (paragraph)**
- **Why did you choose your data collection methods? (paragraph)**
- **What are the advantages and disadvantages of using survey research methods? (see Dillman) (approximately one page)**
- **Why did you choose the analyses you will use to answer the research questions/hypotheses? (paragraph)**

As previously noted in the example of Student-x and Faculty-y, the perceptions of the independent variable, GPA, were significantly different. As suggested in this study, GPA is but one attribute of college-readiness and college-readiness is a major concern in higher education, particularly in the community college (Conley, 2005). For example, remediation alone consumes a considerable amount of resources in the Alabama College System. With 25 colleges and 79,381 students, the Alabama Commission on Higher Education (2005) reported that on average, the Alabama College System experienced a 16.9% average rate of remediation. In other words, remediation alone is an independent variable impacting college-readiness at the rate of 13,415 students deficient in reading, writing, or math skills needed for college-level courses. Therefore, the community college population is an excellent source of data for a study on the perceptions of college-readiness by faculty and students as a framework to suggest changes in college-readiness policies and practice.

To collect the data most appropriately for a study of this magnitude, a convenience sample has been selected. As noted by Benson (1998), to maximize construct validity, the hypothesis and data are constantly being evaluated and refined. Therefore, to perpetuate a positive relationship to the construct validity of the research

questions and data, a survey of qualitative and quantitative methods was used. This researcher believes that both types of measures will most effectively gather a representative sample of data as pertaining to perceptions of college-readiness, to include homogeneity and heterogeneity within groups. Consequently, the population chosen for this study was a natural extension of twenty-one years of experience with the population sample. As already noted, a convenience sample will be conducted in the Alabama College System, and the outcome of this study is suggested transferability to the larger population of community college students, faculty, and policy-designers.

To analyze the data, this study will use both ANOVA and regression. ANOVA will be used to measure the relationships between groups and within groups. To correlate the research questions to the data collected, ANOVA will statistically evaluate correlations between student and faculty groups as a measure of statistical significance as related to the research questions. For example, research question two states: Is there a significant difference in the perceptions of college-readiness between students and faculty members in the community college? ANOVA will process the input data and statistically produce output to be interpreted as an answer to this question. Specifically, ANOVA will be used as there are two groups in this study. It is anticipated that sub-groups will also be addressed, but that to limit the scope of this study, the sub-groups will be defined in detail in Chapter III and Chapter IV.

Hierarchical regression is also to be used in this study as a measure of research question five: What college-readiness variables are identified as the best predictors to inform policy designers that policy reform is statistically significant, educationally sound, and perceptually relevant? A select group of variables, based on college-readiness

research, will be selected as a group of predictors to identify the most effective input variables to most positively influence the realignment of college-readiness policies. One caveat is that this study acknowledges that faculty members may provide the most accurate set of predictors; however, a null hypothesis may be in mix in this assumption as students and faculty may indicate an aligned set of predictor variables. [Should this occur, the assumption would be that students are more aware of issues surrounding college-readiness than assumed by the researcher.] Hierarchical regression will be used to analyze the direct and indirect relationships between the independent variables and the dependent variable, including the interdependency of the predictor variables with each other and the interrelationship of the predictor variables (IVs) to the predicted variable (DV).

Finally, what are the advantages and disadvantages of using survey research methods? According to Dillman (1991), there are several methods for conducting survey research. The methods included telephone surveys, face-to-face interviews, self-administered procedures, interactive web surveys, and mail surveys. Of these types, the study by Dillman indicated that 90% of the self-administered surveys were implemented using the U. S. Postal mail system method. Dillman references several attributes for each type, but because this dissertation will use the mail survey method, the advantages and disadvantages of this method will be referenced. Before discussing the mail survey method advantages and disadvantages, a few general constructs of survey research methods noted by Dillman are in order, which suggested general advantages and disadvantages of survey research methods:

The sample survey is distinguished from other research methods frequently used by [researchers] by its ability to estimate quantitatively the distribution of a characteristic in a population, and to accomplish this by obtaining information from only a small proportion of that population, usually a few hundred or a thousand. Thus, one can learn from a sample survey... (p. 226)

To generalize the results for the sample to the population from which it is drawn, one must normally contend with at least four potential sources of error, any one of which may make the survey results unacceptable. These sources of error include: (a) sampling error, (b) non-coverage error, (c) non-response error, and (d) measurement error. Efforts to do quality mail, or for that matter telephone or face-to-face, surveys require that we attempt to eliminate, or least reduce, all four types of error. Each kind of error describes a reason for the discrepancy between the population attribute measured and the estimate derived from the sample survey (p. 227).

This study will use the mail survey research method. As noted by Dillman (1991) and Owens (2002), the advantages and disadvantages of this type of survey research method are, respectively:

1. Lower costs to administer and can be administered without survey research organizations;
2. May be administered by a smaller survey team (no field staff necessary);
3. Easier access to survey respondents without travel, or busy populations;
4. Respondents can research information or consult with others (may skew data or create outliers).

1. Most difficult to obtain cooperation across the population sample;
2. No interviewer involved in the collection of the data;
3. Need good sample, and without direct observation, this is assumed;

4. More likely to need an incentive for respondents;
5. Slower data collection (response rates) period than telephone.

This study will use the mail survey research method. According to Dillman (1991), “another factor suggesting the increased use of mail surveys is the increased cost and non-response problems associated with telephone and face-to-face interviews, which have moved us toward mixed mode surveys” (p. 246). The mixed mode method is the research survey method of choice for this study as it would suggest the best method for data collection and subsequent analysis.

Sources

- ACT COMPASS System. (2006). Comprehensive Computer-Adaptive Testing System. ACT, Inc. Retrieved July 7, 2006, from <http://www.act.org/compass/index.html>
- Alabama College System. (2005). *The Chancellor's Report 2005*. Montgomery, AL.
- Alabama Commission on Higher Education. (2005). *Average faculty salaries by gender and rank: Public two-year institutions, 2004-2005*. Montgomery, AL.
- American Association of Community Colleges. (2006). *Community College Fact Sheet*. Retrieved July 21, 2006, from http://www.aacc.nche.edu/PrinterTemplate.cfm?Section=Fast_Facts1&Template=/ContentManagement/ContentDisplay.cfm&ContentID=14967.
- Benson, J. (1998). Developing a strong program of construct validation: A test anxiety example. *Educational Measurement: Issues and Practice*, 17(1), 10-22.
- Byrd, K., & MacDonald, G. (2005). Defining college-readiness from the inside out: First generation college student perspectives. *Community College Review*, 33(1), 22 – 37.
- Conley, D. (2005). *College Knowledge: What it Really Takes for Students to Succeed and What We Can Do to Get Them Ready*. Jossey-Bass, San Francisco, CA.
- Creswell, J. (2003). *Research design: Qualitative, quantitative, and mixed methods approaches*. SAGE Publications: Thousand Oaks, CA.
- Daugherty, R. (2005). *High school to college and careers: Aligning state policies*. Southern Regional Education Board, Atlanta, GA.

- Digest of Education Statistics. (2004). *National Center of Education Statistics*, U.S. Department of Education, Washington, DC. Table 224: Employees in degree-granting institutions, by employment status, sex, primary occupation, and control and type of institution: Fall 2003.
- Dillman, D. (1991). The design and administration of mail surveys. *Annual Review of Sociology*, 17, 225-249.
- Dillman, D., & Tarnai, J. (1988). *Administrative issues in mixed mode surveys. Telephone Survey Methodology*, ed. Robert Groves et al, pp. 509-528. New York: Wiley & Sons.
- Frisbie, D. (2005). Measurement 101: Some fundamentals revisited. *Educational Measurement: Issues and Practice*, 24(3), 21-28.
- Grimes, S., & David, K. (1999). Underprepared community college students: Implications of attitudinal and experiential differences. *Community College Review*, 27(2), 73-92.
- Hendrick, R., Hightower, W., & Gregory, D. (2006). State funding limitations and community college open door policy: Conflicting priorities? *Community College Journal of Research and Practice*, 30, 627-640.
- Higher Education Research Institute. (2005). *The American college teacher: National norms for the 2004-2005 HERI faculty survey*. University of California, Los Angeles.
- Kirst, M., & Venezia, A. (2006). What states must do. *The Chronicle of Higher Education*, 52 (27), B36.

- Kisker, C. (2006). Integrating high school and the community college: Previous efforts and current possibilities. *Community College Review*, 34(1), 68-86.
- Merrow, J. (2006). My college education: Looking at the whole elephant. *Change*, 38(3), 8-15.
- Messick, S. (1994). *Validity of psychological assessment: Validation of inferences from persons' responses and performances as scientific inquiry into score meaning*. Research Report RR-94-45, Educational Testing Service, Princeton, NJ.
- Moss, P. (1998). The role of consequences in validity theory. *Educational Measurement: Issues and Practice*, 17(2), 6-12.
- Nunnally, J. (1978). *Psychometric theory*. New York: McGraw-Hill.
- Owens, L. (2002). *Introduction to survey research design*. Survey Research Laboratory, SRL Fall 2002 Seminar Series. Retrieved 21 July 2006, from <http://www.srl.uic.edu/seminars/Intro/introsrm.pdf>.
- Philips, D., & Skelly, K. (2006). College-readiness for all. *School Administrator*, 63 (1), 26-32.
- Smith, V. (2006). Bridging the gap between high school and college: An interview with David Spence. *Change*, 38(3), 40-46.
- Streiner, D. (2003). Being inconsistent about consistency: When coefficient alpha does and doesn't matter. *Journal of Personality Assessment*, 80(3), 217-222.
- Tashakkori, A., & Teddlie, C. (2003). *Handbook of mixed methods in social and behavioral research*. SAGE Publications. Thousand Oaks, CA.

U. S. Department of Education, National Center for Education Statistics. *Remedial Education at Degree-Granting Postsecondary Institutions in Fall 2000*, NCES 2004-010, by Basmat Parsad and Laurie Lewis, Project Officer: Bernard Greene. Washington, DC: 2003.