St. Cloud State University

COOPERATING TEACHER DATA: SOCIAL STUDIES EDUCATION (2007-2010)

Report No. SocStu. COOP.11

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The data in this report were collected via mail surveys administered to cooperating teachers at the end of each semester, dating back to the 2000-2001 academic year. Only the past three collection cycles are analyzed here, 2007-2008, 2008-2009, and 2009-2010. The approximate numbers are as follows: 2007-2008 = 12, 2008-2009 = 15, and 2009-2010 = 20 represent about a 70% response rate. It is difficult to calculate an exact figure because some cooperating teachers see more than one candidate during each period. As a proportion of candidates, the figure is close to 80%.

The report begins with descriptive and demographic data collapsed across the past three cycles. Data regarding cooperation teachers' attitude toward the preparation of St. Cloud State University (SCSU) candidates make up the last two-thirds of the report.

Demographic Data: Respondents and Their Institutions

Tables 1 and 2 contain descriptive data related to respondents, in this case cooperating teachers. It appears that, in line with more objective indicants, the schools where SCSU teacher candidates are assigned have become more diverse. Unfortunately, the great majority of CTs still self-identify as white (97.1% of those responding to the item, unit-wide).

<u>Table 1. Selected demographic information. Gender and age-category distribution of sample</u> [respondents, not candidates] 2007- 2010).

| | Frequency | Valid |
|---------|-----------|---------|
| Gender | | Percent |
| Male | 27 | 60.0 |
| Female | 18 | 40.0 |
| Total | 45 | 100.0 |
| | | |
| | | |
| 25-30 | 6 | 13.3 |
| 31-35 | 8 | 17.8 |
| 3 36-40 | 13 | 28.9 |
| 4 41-45 | 9 | 20.0 |
| 5 46-50 | 4 | 8.9 |
| 6 51-55 | 2 | 4.4 |
| 7 56+ | 3 | 6.7 |
| Total | 45 | 100.0 |

<u>Table 2. Cooperating Teacher racial-ethnic background and racial/ethnic background of the student body, 2007 to Spring 2010, Social Studies.</u>

| Racial/Ethnic Category | Frequency | Percent | Valid Percent |
|--|-----------|---------|---------------|
| Asian Pacific Islander | 1 | 2.1 | 2.2 |
| African American | | | |
| American Indian | | | |
| Latino(a) | | | |
| White | 45 | 95.7 | 97.8 |
| Other | | | |
| Total | 46 | 97.9 | 100.0 |
| Missing | 1 | 2.1 | |
| TOTAL | 47 | 100.0 | |
| | | | |
| Percentage Student Body Minority/Ethnic | | | |
| 1 less than 5% | 25 | 53.2 | 53.2 |
| 2 6%-25% | 14 | 29.8 | 29.8 |
| 3 26%-50% | 4 | 8.5 | 8.5 |
| 4 51%-75% | 1 | 2.1 | 2.1 |
| 5 76%-95% | 2 | 4.3 | 4.3 |
| 6 more than 96% | 1 | 2.1 | 2.1 |
| Total | 47 | 100.0 | 100.0 |
| Missing | | | |
| Total | 47 | 100.0 | 100.0 |

Table 3 includes items associated with INTASC Principles. The "percent prepared" vector was derived by labeling values on scales above 2.50 as "prepared (Top figure, designated "A")" Because this is based on averages, we believe that these figures are overestimated. We also calculated the proportion of candidates who averaged 2.75 and above on scales made up of multiple items, finding that this figure proved to be a better estimate of the average of the proportion of respondents who selected the two highest designations across individual items (lower figure, designated as "Estimate B").

Table 3 data are arranged in descending order by '06-'10 means. This allows for a quick reference to relative programmatic strengths and weaknesses, as perceived by responding Cooperating Teachers.

<u>Table 3. Explanation of INTASC Principles (Social Studies, descending order by '09-'10 means).</u>

| | | | 2007-20 | | | 2008-2 | | | 2009-20 | |
|---|---|------|---------|---|------|--------|---|------|---------|---|
| | | | N ~ 1 | | ļ | N ~ 1 | | ļ | N ~ 2 | |
| Principle & Reliability | Explanation of Principle | Mean | SD | Percent Prepared A and B ¹ | Mean | SD | Percent Prepared A and B ¹ | Mean | SD | Percent Prepared A & B ¹ |
| INTASC 6, Communication, Items 34-38, Reliability = .86 | The teacher uses knowledge of effective verbal, nonverbal, and media communication techniques to foster active inquiry, collaboration, and supportive interaction in the classroom. | 3.00 | .75 | 100.0 58.3 | 2.89 | .77 | 91.7 | 3.26 | .47 | 100.0 95.0 |
| INTASC 3 Diverse Students Items 22-25, Reliability = .89 | The teacher understands how students differ in their approaches to learning and creates instructional opportunities that are adapted to diverse learners. | 3.06 | .67 | 100.0 75.0 | 2.92 | .79 | 92.3 73.3 | 3.22 | .56 | 100.0 |
| INTASC 10 Collaboration, Items 60, 61 Reliability = .72 | The teacher fosters relationships with school colleagues, parents, and agencies in the larger community to support students' learning and well-being. | 2.83 | 1.07 | 81.8 58.3 | 3.20 | .80 | 100.0 | 3.18 | .78 | 94.7 80.0 |
| INTASC 9 Reflective Practice, Items 52-54, Reliability = .92 | The teacher is a reflective practitioner who continually evaluates the effects of his/her choices and actions on others (students, parents, and other professionals in the learning community) and who actively seeks out opportunities to grow professionally. | 2.58 | .68 | 90.0 | 2.67 | .76 | 83.3 53.3 | 3.12 | .68 | 100.0 70.0 |
| INTASC 1 Subject Matter, Items 13-17, reliability = .89 | The teacher understands the central concepts, tools of inquiry, and structures of the discipline(s) he or she teaches and can create learning experiences that make these aspects of subject matter meaningful for students. | 2.77 | .55 | 100.0 | 2.63 | .82 | 84.6 66.7 | 3.09 | .67 | 100.0 70.0 |

Table 3, Continued

| | | 2007-2008 N ~ 12 | | 2 | 2008-2009 N ~ 15 | | | 2009-2010 N ~ 20 | | |
|---|---|---------------------|-----|---|---------------------|-----|---|---------------------|-----|---|
| Principle & Reliability | Explanation of Principle | Mean | SD | Percent Prepared A and B ¹ | Mean | SD | Percent Prepared A and B ¹ | Mean | SD | Percent Prepared A & B ¹ |
| INTASC 2 Student Learning, Items 18-21, reliability = .88 | The teacher understands how children learn and develop, and can provide learning opportunities that support their intellectual, social and personal development. | 2.77 | .56 | 100.0 75.0 | 2.52 | .68 | 84.6 60.0 | 3.04 | .55 | 100.0 |
| INTASC 5 Learning Environment, Items 29-33, Reliability = .92 | The teacher uses an understanding of individual and group motivation and behavior to create a learning environment that encourages positive social interaction, active engagement in learning, and self-motivation. | 2.53 | .55 | 100.0 | 2.60 | .68 | 100.0 46.7 | 3.04 | .70 | 100.0 75.0 |
| INTASC 8 Assessment, Items 44-48, Reliability = .95 | The teacher understands and uses formal and informal assessment strategies to evaluate and ensure the continuous intellectual, social and physical development of the learner. | 2.50 | .67 | 80.0 | 2.73 | .80 | 84.6 53.3 | 3.03 | .66 | 75.0 |
| INTASC 7 Instructional Planning, Items 39-43, Reliability = .93 | The teacher plans instruction based upon knowledge of subject matter, students, the community, and curriculum goals. | 2.57 | .56 | 87.5 41.7 | 2.83 | .72 | 85.7 80.0 | 3.01 | .54 | 100.0 70.0 |
| INTASC 4 Instructional Strategies, Items 26-28, Reliability = .79 | The teacher understands and uses a variety of instructional strategies to encourage students' development of critical thinking, problem solving, and performance skills. | 2.67 | .68 | 87.5 50.0 | 2.89 | .70 | 91.7 46.7 | 2.97 | .52 | 100.0 |
| TOTAL Reliability = .98 | Across scales | 2.73 | .55 | 100.0 | 2.79 | .65 | 92.3 | 3.10 | .51 | 100.0 |

Table 4 includes all items for the most recent academic year ('09-'10) in descending order by mean.

Table 4, all items, 2009-2010 in descending order by mean value (Social Studies Ed.).

| Items | N | Mean | SD | Percent Prepared |
|---|----|------|------------|---------------------|
| 58. Understand the responsibility for obtaining licensure | 20 | 3.50 | .61 | 95.0 |
| 24. Respect student as individual including family background | 20 | 3.45 | .69 | 90.0 |
| 34. Be a thoughtful listener | 20 | 3.40 | .60 | 95.0 |
| 38. Use a variety of media communication tools | 20 | 3.40 | .68 | 90.0 |
| 37. Communicate in ways dmstrt sensitivity to cultural differences | 20 | 3.35 | .49 | 100.0 |
| 50. Maintain records of student work | 20 | 3.35 | .49 | 100.0 |
| 57. Understand code of ethics for MN teach | 20 | 3.35 | .81 | 90.0 |
| 23. Value human diversity | 20 | 3.30 | .57 | 95.0 |
| 56. Collaborate with professional colleagues | 20 | 3.26 | .73 | 84.2 |
| 59. Understand the responsibility for maintaining licensure35. Appreciate the cultural dimensions of communication | 20 | 3.26 | .73 .44 | 84.2 100.0 |
| 60. Understand the role of teacher as a public employee | 20 | 3.25 | .85 | 85.0 |
| 29. Design Lrn communities where students responsible for selves | 19 | 3.23 | .54 | 94.7 |
| 20. Use student thinking as a basis for class discussions | 20 | 3.20 | .70 | 85.0 |
| 21. Use student uninking as a basis for class discussion | 20 | 3.20 | .62 | 90.0 |
| 25. Develop a learning community that respects individual differences | 20 | 3.20 | .70 | 85.0 |
| 52. Understand the value of critical thinking as habit of mind | 20 | 3.20 | .70 | 85.0 |
| 15. Use differ. methods of inquiry | 20 | 3.15 | .75 | 80.0 |
| 28. Use educational technology to broaden student knowledge | 20 | 3.15 | .75 | 90.0 |
| 39. Implement, learning experiences appropriate for curriculum goals | 20 | 3.15 | .59 | 90.0 |
| 40. Implement learning experiences relevant to learners | 20 | 3.15 | .59 | 90.0 |
| 17. Use curricula that encourage students to understand ideas | 20 | 3.10 | .64 | 85.0 |
| 41. Implement learning experiences based on effective practices | 20 | 3.10 | .64 | 85.0 |
| 44. Value ongoing assessment | 20 | 3.10 | .72 | 80.0 |
| 45. Use a variety of formal assess techniques | 20 | 3.10 | .64 | 85.0 |
| 53. Understand the value of self-directed learning as habit of mind | 20 | 3.10 | .64 | 85.0 |
| 61. Understand the purpose and contributions of Ed. organizations | 20 | 3.06 | .80 | 83.3 |
| 14. Uses students prior understanding to link new concept | 20 | 3.05 | .76 | 75.0 |
| 16. Develop curricula that encourage students to understand ideas | 20 | 3.05 | .69 | 80.0 |
| 19. Provide. opportunity for students to shape learning | 20 | 3.05 | .69 | 80.0 |
| 30. Design. learn communities for students to work collaboratively | 20 | 3.05 | .76 | 85.0 |
| 47. Use various assess to evaluate student progress | 20 | 3.05 | .69 | 80.0 |
| 49. Monitor teaching strategies related to student success51. Communicate student progress to parents | 20 | 3.05 | .76 .52 | 75.0 89.5 |
| 54. Understand the role of reflection as an ongoing process | 20 | 3.05 | .89 | 75.0 |
| 31. Manage time to provide for engagement of students | 20 | 3.00 | .97 | 75.0 |
| 32. Manage activities to provide active eng of students | 20 | 3.00 | .79 | 70.0 |
| 22. Understand that children can learn at high level | 20 | 2.95 | .69 | 75.0 |
| 27. Monitor. and adjust strategies in resp. to learner feedback | 20 | 2.95 | .76 | 80.0 |
| 33. Maximize the class time spent in learning | 20 | 2.95 | .94 | 75.0 |
| 46. Use a variety of informal assess techniques | 20 | 2.95 | .83 | 75.0 |
| 48. Use various assessment techniques to modify teaching | 20 | 2.95 | .83 | 75.0 |
| 36. Probe for leaner understanding | 20 | 2.90 | .85 | 70.0 |
| 43. Create long-term plans linked to student needs | 20 | 2.85 | .75 | 75.0 |
| 26. Implement MN Graduation Standards | 20 | 2.80 | .70 | 65.0 |

Table 4, Continued

| 42. Create short-term plans linked to student needs | 20 | 2.80 | .83 | 65.0 |
|---|----|------|-----|------|
| 18. Design interdisciplinary learning experiences | 19 | 2.68 | .75 | 52.6 |
| 55. Use professional literature to support development as teacher | 20 | 2.58 | .96 | 57.9 |

Specialty Scales

Technology items. Items 28 and 38 reflect the use of technology. Data for the past three years are laid out below. In addition, a small scale made up of the two items is provided in, The average performance across items is shown in two ways, first by generating a category running from 1 to 2.49 (designated as unprepared) and one running from 2.500 to 4.00 as prepared. The second way is to average the proportions expressing agreement across the two items.

Table 5. Technology items and scale (Social Studies Education).

| | 2007-2008 N ~ 12 | | | 2008-2009 N ~ 15 | | | 2009-2010 N ~ 20 | | |
|---|---------------------|-----|-----------|---------------------|-----|-----------|---------------------|-----|-----------|
| Item or Scale | Mean | SD | % Prep | Mean | SD | % Prep | Mean | SD | % Prep |
| 28. Use educational technology to broaden student knowledge | 2.75 | .87 | 66.7 | 3.13 | .83 | 73.3 | 3.15 | .75 | 90.0 |
| 38. Use a variety of media communication tools | 3.17 | .84 | 75.0 | 3.20 | .99 | 66.7 | 3.40 | .68 | 90.0 |
| Average of two items (Scale) | 2.96 | .78 | | 3.17 | .92 | | 3.28 | .66 | |
| Average "Prepared" percent across items | | | 70.9 | | | 70.0 | | | 90.0 |

Scales generated via structural analysis. Factor analytic studies rarely support the INTASC structure (Hoover & Ackerman, 2008); this is true for the *Cooperating Teacher Survey*, where we have found that three to four factors produce the most defensible structure. In preparing this report, we recalculated the 2008 factor analysis to investigate the construct validity of the scale (originally designed around the INTASC Principles). The analysis discussed below is more correctly described as a principle components analysis in that prior communality estimates were not calculated nor inserted into the main diagonal of the correlation matrix, a defining characteristic of factor analysis.

A combination of the scree plot shown below and loadings suggests that four factors produce the cleanest structure. The factor descriptions, associated characteristic roots (eigenvalues, λ), and item loadings are provided below. Loadings (Pearson correlations between items and factors) below .45 were not interpreted. As can be seen from the scree plot, the first factor (Pedagogy/ Content Knowledge) explains the great majority of the reliable variance associated with the model; however, three other reliable (but correlated scales) are supported by the analysis.

The resulting structure does not match the INTASC Principles on which the instrument was originally based. Two of the scales fall out very similarly to those implied by the INTASC arrangement, Assessment and Diversity/Equity. The construction turns out to be simpler than that represented by the 10 INTASC

Principles. This suggests that educators should advocate for more straightforward models for understanding the expertise and preparation of new teachers.

Table 7 shows the performance of SCSU candidates on the "new" scales generated by the principal component solution (as judged by their cooperating teachers) by year. As can be seen, CTs rate candidate performance highest on equity and diversity and lowest on assessment, a finding consistent across the past several assessment cycles. It points to a possible need for increased attention on assessment in teacher preparation.

Table 8 contains a correlation matrix for the scales based on the factor analysis. Note that the varimax (orthogonal, e.g., stipulated to be uncorrelated) rotation produced a readily interpretable simple structure; evidence for this is that very few items either loaded (.45 and above) on multiple factors or failed to load on any factor. However, the evidence in Table 8 suggests that an oblique rotation (for example, Oblimin or Quartemax) would be justified. However, it is difficult to imagine a better simple structure, so this step was not taken in the current investigation.

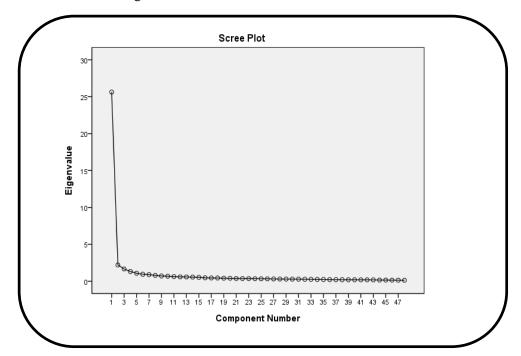


Table 6. Rotated Factor structure (Varimax rotation, four factors selected, unit-wide data).

| | 1 Pedagogy | 2 Assessment | 3 Responsibility | 4 Diversity |
|--|---------------|-----------------|---------------------|----------------|
| Characteristic root (λ; eigenvalue) | 11.95 | 7.19 | 5.92 | 5.76 |
| Percent of variance explained | 24.9 | 15.0 | 12.3 | 12.0 |
| Reliability (Cronbach's α) | .97 | .94 | .92 | .92 |
| Factor 1: Knowledge of Subject matter and ability to impart kno | wledge and | skills (e.g., | pedagogy) | |
| 15. Use differ. methods of inquiry | .679 | | | |
| 31. Manage time to provide for engagement of students | .677 | | | |
| 32. Manage activities to provide active eng of students | .670 | | | |
| 18. Design interdisciplinary learning experiences | .669 | | | |
| 14. Uses students prior understanding to link new concept | .666 | | | |
| 17. Use curricula that encourage students to understand ideas | .666 | | | |
| 16. Develop curricula that encourage students to undrst ideas | .665 | | | |
| 19. Provide. opportunity for students to shape learning | .658 | | | |
| 41. Implement learning experiences based on effective pract | .651 | | | |
| 33. Maximize the class time spent in learning | .644 | | | |
| 40. Implement learning experiences relevant to learners | .644 | | | |
| 39. Implement. learning experiences appro for Curric. goals | .635 | | | |
| 20. Use student thinking as a basis for class discussions | .629 | | | |
| 29. Design Lrn Cmnts where students responsible for selves | .626 | | | |
| 21. Use student experience as a basis for class discussion | .615 | | | |
| 43. Create long-term plans linked to student needs | .612 | | | |
| 30. Design. learn comnts for students to work collaborative | .610 | | | |
| 42. Create short-term plans linked to student needs | .600 | | | |
| 27. Monitor. and adjust strategies in resp. to learner feedback | .589 | | | |
| 36. Probe for leaner understanding | .546 | | | |
| 53. Underst the value of self-directed learning as habit of mind | .514 | | | |
| 52. Understand the value of critical thinking as habit of mind | .501 | | | |
| 26. Implement MN Graduation Standards | .492 | | | |
| 28. Use educational technology to broaden student knowledge | .470 | | | |
| Factor 2: Assessment skill and the ability to understand and com | municate a | ssessment fir | ndings | ı |
| 47. Use various assess to evaluate student progress | | .783 | | |
| 45. Use a variety of formal assess techniques | | .765 | | |
| 46. Use a variety of informal assess techniques | | .746 | | |
| 48. Use various assessment techniques to modify teaching | | .707 | | |

Table 6, Continued

| | | Fo | actors | |
|---|---------------|-----------------|---------------------|----------------|
| | 1 Pedagogy | 2 Assessment | 3 Responsibility | 4 Diversity |
| 44. Value ongoing assessment | | .687 | | |
| 50. Maintain records of student work | | .673 | | |
| 51. Communicate student progress to parents | | .633 | | |
| 49. Monitor teaching strategies related to student success | .488 | .587 | | |
| Factor 3: Collaboration and professional responsibility | | | | |
| 58. Understand the responsibility for obtaining licensure | | | .803 | |
| 59. Understand the responsibility for maintaining licensure | | | .803 | |
| 57. Understand code of ethics for MN teach | | | .715 | |
| 60. Understand the role of teacher as a public employee | | | .704 | |
| 61. Understand the purpose and contributions of Ed. organiza | | | .681 | |
| 56. Collaborate with professional colleagues | | | .560 | |
| 55. Use prfsnl literature to support development as teacher | | | .480 | |
| 54. Understand the role of reflection as an ongoing process | | | .425 | |
| Factor 4: Equity and diversity | | | | |
| 24. Respect student as individual including family background | | | | .791 |
| 23. Value human diversity | | | | .771 |
| 25. Develop a learning community that respects indiv differen | | | | .734 |
| 35. Appreciate the cultural dimensions of communication | | | | .662 |
| 37. Communicate in ways dmstrt snstvty to cultural differ | | | | .638 |
| 22. Understand that children can learn at high level | | | | .559 |
| 34. Be a thoughtful listener | | | | .527 |
| Items not loading | | | | |
| 38. Use a variety of media communication tools | | | | |

<u>Table 7. Candidate performance on scales developed through structural analysis (descending order by</u> '09-'10 means, Social Studies Education data).

| | 2007-2008 N ~ 12 | | 2008-2009 N ~ 15 | | | 2009-2010 N ~ 20 | | | |
|---|---------------------|-----|------------------------------|------|-----|------------------------------|------|-----|------------------------------|
| Scale | Mean | SD | % Prep A & B ¹ | Mean | SD | % Prep A & B ¹ | Mean | SD | % Prep A & B ¹ |
| Factor 4: Equity and diversity/ Items related to equitable treatment of | 2.68 | .50 | 75.0 | 2.66 | .69 | 80.0 | 3.05 | .54 | 95.0 |
| diverse students | | | 75.0 | | | 60.0 | | | 90.0 |
| Factor 3: Collaboration and professional responsibility | 2.51 | .68 | 75.0 58.3 | 2.78 | .80 | 80.0 73.3 | 3.08 | .57 | 95.0 90.0 |
| Factor 1: Knowledge of Subject matter and ability to impart knowledge and skills (e.g., pedagogy) | 2.73 | .74 | 66.7 58.3 | 3.02 | .78 | 66.7 60.0 | 3.17 | .58 | 80.0 70.0 |
| Factor 2: Assessment skill and the ability to understand and communicate assessment findings | 3.07 | .66 | 41.7 41.7 | 2.90 | .75 | 73.3 46.7 | 3.27 | .47 | 85.0 75.0 |

¹¹The top figure is the percentage of respondents averaging 2.500 and above across items. The bottom figure is the percent scoring at 2.75 or above.

Table 8. Correlation between scales based on factors.

| Scale | 1 | 2 | 3 | 4 |
|--------------------------------|----------|------------|----------------|-----------|
| | Pedagogy | Assessment | Responsibility | Diversity |
| Factor 1: Pedagogy | 1.00 | .83 | .78 | .78 |
| Factor 2: Assessment | | 1.00 | .69 | .67 |
| Factor 3: Prof. Responsibility | | | 1.00 | .72 |
| Factor 4: Diversity | | | | 1.00 |

Assessment of student teacher supervision. For the past half decade, respondents have been asked to answer a set of seven items formatted via a "yes-No" system. Last year, an item that appeared to produce confusion was removed from the instrument

<u>Table 9. Cooperating teachers' ratings of university supervisors (2007-2010), descending order by "valid percent yes," Social Studies Education data.</u>

| | 2007-2008 N ~ 12 | 2008-2009 N ~ 15 | 2009-2010 N ~ 20 |
|---|---------------------|---------------------|---------------------|
| Item: The university supervisor | Valid % Yes | Valid % Yes | Valid % Yes |
| was cooperative and supportive; | 91.7 | 100.0 | 100.0 |
| discussed and explained the cooperating teacher's responsibilities; | 91.7 | 93.3 | 100.0 |
| delivered and explained Cooperating Teacher Handbook; | 100.0 | 93.3 | 95.0 |
| made regular visits; | 100.0 | 100.0 | 95.0 |
| was available to discuss the student teacher; | 100.0 | 93.3 | 95.0 |
| was on time; | 91.7 | 86.7 | 90.0 |
| discussed and explained Cooperating Teacher Handbook ¹ | 83.3 | 92.9 | |
| Mean Percent "Yes" across items | 94.1 | 94.2 | 95.8 |

¹Item eliminated from survey, 2009