Nebraska School Counseling State Evaluation

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Executive Summary and Recommendations

A statewide evaluation of Nebraska school counseling program was recently conducted to address the following questions:

(1) Do school counseling programs in Nebraska high schools contribute significantly to students' educational outcomes?

(2) What aspects of school practice contribute the most to students' educational outcomes?

(3) Based upon these results, how might school counseling practice in Nebraska be improved?

The evaluation model used in this study utilized three types of data to examine the contribution of counseling programs and practices to student educational outcomes. School-level outcome data (e.g., attendance rates and suspension rates) were obtained from the Nebraska Department of Education. School-level demographic data (e.g., per pupil expenditures and the percentage of students eligible for free or reduced lunch) were also obtained from the Nebraska Department of Education. Information about schools' school counseling practices and programs was collected through an internet-based survey of high school counselors and principals. This survey was composed of one 20-item standardized measure of program implementation (i.e., *The School Counseling Program Implementation Survey*, Carey & Elsner, 2005; Clemens, Carey & Harrington, in press), items used in previous state-level evaluations, and items specific to the state of Nebraska that were developed in consultation with personnel at the State Department of Education.

Outcome and demographic data were obtained from a total of 272 high schools in Nebraska. The breakdown of school setting was 236 rural schools, 12 suburban, and 24 urban. School counseling survey data was contributed by 206 counselors and

111principals, however, many respondents did not complete the full survey. A total of 128 counselors (115 from rural schools, 4 from urban schools, and 9 from suburban schools) and a total of 68 principals (60 from rural schools, 5 from suburban schools and 3 from urban school) completed the entire survey resulting in overall response return rates of 48.9% for counselors and 26.0% for principals.

Twelve school-level measures related to student educational outcomes were identified for the purposes of this study. These measures are as follows:

- Suspension rate
- Discipline incidence rate
- Attendance rate
- Dropout rate
- Graduation rate
- Average ACT score
- Percentage of students scoring Proficient in Math on the state standardized test
- Percentage of Students scoring Proficient in Reading on the state standardized test
- Percent Proficient in Technical Skills (Perkins Data)
- Percent Program Completion (Perkins Data)
- Nontraditional Program Participation rate (Perkins Data)
- Nontraditional Program Completion rate (Perkins Data)

Because of the lack of availability of some important outcome data at the school level, which particularly impacted urban schools, the main analyses in this report are data from rural and suburban high schools. Urban high schools were compared to these schools in the latter stages of analysis.

School Counseling programs were found to contribute to several important student educational outcomes after controlling for demographic differences among schools. School counseling *program features* accounted for a significant amount of variability in: suspension rates, discipline rates, attendance rates, Math proficiency, and Reading proficiency. *School Counselor ratios* also accounted for a significant amount of variability in attendance rates, Technical Proficiency (Perkins), and Program Completion (Perkins).

More effective delivery systems for school counseling services and more favorable student-to-counselor ratios can be expected to result in better student educational outcomes. Positive student educational outcomes can be expected to result when school counseling programs are structured so that:

- Needs Assessments are completed regularly and guide program planning.
- School counselors use student performance data to decide how to meet student needs.
- An annual review is conducted in order to collect information for improving next year's programs.
- School counselor job descriptions match actual duties.
- School counselors spend most of their time in activities that directly benefit students.
- The program includes interventions designed to improve the school's ability to educate all students to high standards.
- The program has the resources to allow counselors to complete appropriate professional development activities.
- School counseling priorities are represented on curriculum and education committees.
- School counselors communicate with parents to help coordinate efforts related to student achievement and to gain feedback for program improvement.

Several activities of Nebraska school counselors were found to be related to improved student educational outcomes. Effective practices of the school counselor (i.e., those which positively impact student educational outcomes) can be considered to include:

- Effectively consulting with administrators concerning students who are experiencing problems that interfere with school success.
- Collaborating with cross-curriculum faculty in developing programs of study to prepare students to be postsecondary and career ready.
- Using the online *C4C-Curriculum for Careers*, which aligns career exploration with the Nebraska Career Education Model.
- Providing effective college counseling services to all students.
- Implementing and assisting students in developing effective career and educational plans.
- Using sample *Personal Learning Plans* with recommended programs of coursework and school and community extended learning activities (with content already filled in) to inform students and parents of the most effective learning plan for clusters/pathways.
- Instructing students on the *16 Career Clusters* as part of the career development process.
- Collaborating with students and parents/guardians to assist students in developing a four-year plan as part of the education and career planning process.
- Providing all students and parents/guardians with accurate and up-to-date information about the world of work.
- Ensuring that all families receive support in filling out the FAFSA (Free Application for Federal Student Aid Form).

The degree to which a schools *Perkins Programs of Study* includes a coherent, articulated sequence of rigorous academic and career/technical education was found to be

significantly related to a number of important student educational outcome measures including: suspension rate, disciplinary incidence rate, attendance rate, percentage of students scoring Math proficient, and percentage of students scoring Reading proficient on the state standardized test. Full implementation of a rigorous Perkins program of study can reasonably be expected to reduce disciplinary problems, increase attendance and improve academic achievement.

Differences in school counseling programs for schools meeting AYP versus those not achieving this status were examined. The only significant difference found between these two groups was that non-AYP schools were more likely to have higher student-to-counselor ratios. Time distribution and the use of specific counseling practices associated with effective practice seem to be equivalent between AYP and non-AYP schools.

Similarly, the major differences between urban school counseling programs and their suburban and rural counterparts was that urban schools were likely to have higher student-to-counselor ratios and make less use of the Nebraska Career Education model. Time distribution and the use of specific counseling practices associated with effective practices seem equivalent among urban, suburban, and rural schools.

This evaluation study found evidence that school counseling programs in Nebraska high schools contribute significantly to students' educational outcomes. Specific characteristics of school counseling programs and particular school counselor activities that impact student educational outcomes were identified. Furthermore, this evaluation found that favorable student-to-counselor ratios also impact student educational outcomes.

We recommend that the State Department of Education continue existing policies and programs that will encourage and support the development of strong school counseling programs in Nebraska high schools. The Nebraska DOE should specifically promote the adoption of the programmatic features and aspects of practice identified in this report (see above) as being significantly associated with improved student outcomes.

Introduction

This evaluation study addresses the following questions:

(1) Do school counseling programs in Nebraska high schools contribute significantly to students' educational outcomes?

(2) What aspects of school practice contribute the most to students' educational outcomes?

(3) Based upon these results, how might school counseling practice in Nebraska be improved?

Conceptual Model for the Evaluation

The design of this statewide evaluation was modeled after previous statewide evaluations in Missouri (Lapan, Gysbers, & Petroski, 2003; Lapan, Gysbers, & Sun, 1997) and Washington (Sink & Stroh, 2003) and was based upon the evaluation model developed by the National Leadership Cadre (2007).

The evaluation model used in this study utilized three types of data to examine the contribution of counseling programs and practices to student educational outcomes. School-level outcome data (e.g., attendance rates and suspension rates) were obtained from the Nebraska Department of Education. School-level demographic data (e.g., per pupil expenditures and the percentage of students eligible for free or reduce lunch) were also obtained from the Nebraska Department of Education. Information about schools' school counseling practices and programs was collected through an internet-based survey of high school counselors and principals. This survey was composed of one 20-item standardized measure of program implementation (i.e., *The School Counseling Program Implementation Survey*, Carey & Elsner, 2005; Clemens, Carey & Harrington, in

press)items used in previous state-level evaluations, and items specific to the state of Nebraska developed in consultation with personnel at the State Department of Education.

The evaluation model called first for an overall analysis of the relationships of school counseling program characteristics to student outcomes after controlling for the variability in outcomes related to demographic differences among schools. More detailed correlational analyses were then conducted to identify which specific practices were associated with identified student outcomes. Finally, different groups of schools (i.e., based on geographical setting or AYP status) were compared and contrasted to determine how counseling differed between schools with known characteristics and student outcomes.

The evaluation model employed is cross-sectional and correlational and takes advantage of existing variability in practice to understand how school counselors' roles and responsibilities are related to outcomes. The major limitation of this model is its capacity to assure that given practices are causally related to improvements in student outcomes. However, this evaluation model will identify practices that are likely to cause improvements in student outcomes. Subsequent confirmation through longitudinal study is advised in order to confirm that changes in practice do indeed lead to improve outcomes.

Methodology

Survey Development

This survey used in this evaluation study consisted of a total of 53 questions with items composed from three sources: *The School Counseling Program Implementation Survey*(SCPIS)(Carey & Elsner, 2005; Clemens, Carey & Harrington, in press) items used in previous district- and state-level evaluations (i.e., the Chicago Public Schools and the state of Missouri); and items specific to the state of Nebraska that were created in consultation with personnel at the State Department of Education. The SCPIS was originally developed by Elsner and Carey (2005) at the Center for School Counseling Outcome Research at the University of Massachusetts Amherst. Factor analysis of the SCPIS, a standardized measure of program implementation, revealed a three-factor model that accounted for 54% of the variance in the data and a two-factor model that accounted for 47% of the variance in the data. Cronbach's alpha reliability estimates for SCPIS subscales ranged from .79 to .87 (Clemens, Carey & Harrington, in press).

The first two survey questions asked participants for their high school name and position with possible responses of "Principal", "Guidance Director", "School Counselor" or "Other". A response of "Other" was included for schools in which a career counselor or mental health provider may be completing the survey if the school did not have a professional school counselor in the building. The remainder of the survey questions were divided into three sections: 22 items about school counseling program characteristics; 13 questions about delivery of services; and 16 questions specific to the state of Nebraska. These items were written to reflect concrete, observable program characteristics (e.g., "Counselors implement and assist students in developing effective

career and educational plans.") For questions about school counseling program characteristics, participants were given the directions: "Please rate each statement below in terms of the degree to which it is currently implemented in your school counseling program." The rating scale used was: *1= Not Present; 2= Development in Progress; 3= Partly Implemented; 4= Fully Implemented.* Questions related to delivery of service and those specific to the state of Nebraska were preceded by the directions: "Please rate how accurate each statement is about the work of school counselors in implementing a Comprehensive Guidance Program in your building." The rating scale used in these two sections of the survey read: *1=Not Accurate; 2= Somewhat Accurate; 3=Accurate; 4=Very Accurate; 5=Extremely Accurate.*

Data Collection

Survey Data. A joint email from the Nebraska Department of Education and the Nebraska School Counselor Association was sent to principals and guidance directors of every public high school in Nebraska. The email informed respondents that they would soon be receiving an online survey as part of a national study examining if more fully implemented school counseling programs and school counselor activities are associated with stronger positive student outcomes. The email stressed the importance of both a principal and guidance director (or lead counselor) completing the survey and explained that the survey should take no more than 15 minutes to complete. Two days after this initial email principals and guidance directors (or lead counselors) received the online survey via their school email address. Two follow-up reminder emails were sent to participants when they did not respond to the survey. A total of 111 principals and 206

school counselors (62 guidance directors and 144 lead counselors) completed at least part of the survey.

Demographic Data. Data were collected on a number of student demographic variables including: the percentage of students who racially identify as Black or African-American, Latino/a or Hispanic, Asian, or Native American; percentage of students eligible for subsidized lunch; and per pupil expenditure for General Education, Title 1, Special Education, and ELL students. Data were also collected on the following school-level variables: 9-12 enrollment; school setting; percentage of full-time school counselors in the high school; percentage of full-time teachers in the high school. These data were provided by the Nebraska Department of Education.

Outcome Data. The outcome variables examined included: graduation rate, suspension rate, disciplinary incidence rate, dropout rate, attendance rate, average SAT/ACT score; SAT/ACT verbal average score; SAT/ACT writing average score; and the percentages of students reaching reading and math proficiency on the state standardized test. In addition, Perkins data were collected on: technical skill attainment; program completion; and, nontraditional participation and completion.

Data Analysis

Outcome and demographic data were obtained from a total of 272 high schools in Nebraska. The breakdown of school setting was 236 rural schools, 12 suburban, and 24 urban. School counseling survey data were contributed by 206 counselors and 111 principals, however, many respondents did not complete the full survey. A total of 128 counselors (115 from rural schools, 4 from urban schools, and 9 from rural schools) and a total of 68 principals (60 from rural schools, 5 from suburban schools and 3 from urban

school) completed the entire survey resulting in overall response return rates of 48.9% for counselors and 26.0% for principals.

One hundred percent of respondents who filled out the principal survey indicated that they were in fact the principal of the school. Of the respondents who filled out the counselor survey, 27% were guidance directors, 49% were school counselors and 4 indicated "other". The 4 respondents who identified as "other" were most likely career counselors.

Both a school counselor and a principal completed surveys in a total of 36 schools. Pearson correlation procedures were used to determine the strength of relationship between the counselors' and principals' ratings on the School Counseling Program Implementation Scale (SCPIS) which is composed of specific items related to how school counseling services are planned, organized, delivered and evaluated (e.g., "All students receive classroom guidance lessons designed to promote academic, social/personal, and career development."). Correlations between counselors and principals were very low (Total scale = .302; Program Orientation subscale = .177; Data Use subscale = .238; Services subscale = .304). In fact, none of these correlations reached a (.05) level of statistical significance. **This means that there was very little correlation between counselors' and principals' views of the nature of the school counseling program.** It is difficult to say whether this finding can be generalized given that it is based on only13.7% (36 out of 262) of the schools. However, based on this result we decided not to combine the data from counselors and principals and instead to use the counselor survey data in subsequent analyses.

Some student outcome measures (e.g., attendance and discipline data) were only available at the district level. These data were particularly missing in the urban districts where multiple high schools exits. Therefore we decided to conduct the initial analyses with rural and suburban schools and to analyze the urban school separately using only valid school-level data.

Evaluation Results

Survey Summary

Descriptive statistics for the survey are presented below in three parts. Table 1 includes the School Counseling Program Implementation Survey items for the survey completed by School Counselors.

Table 1. School Counseling Survey: Descriptive Statistics for SCPIS Items

SCPIS Item	Mean	SD	N
A written mission statement exists and is used as a foundation by all counselors.	2.83	1.254	135
Services are organized so that all students are well served and have access to them.	3.50	0.682	135
The program operates from a plan for closing the achievement gap for minority and lower income students.	2.83	1.053	135
The program has a set of clear measurable student learning objectives and goals are established for academics, social/personal skills, and career development.	2.75	0.992	134
Needs Assessments are completed regularly and guide program planning.	2.60	1.106	133
All students receive classroom guidance lessons designed to promote academic, social/personal, and career development.	3.01	0.967	133
The program ensures that all students have academic plans that include testing, individual advisement, long-term planning, and placement	3.47	0.680	135
The program has an effective referral and follow-up system for handling student crises.	3.40	0.862	134
School counselors use student performance data to decide how to meet student needs.	3.18	0.918	133
School counselors analyze student data by ethnicity, gender, and socioeconomic level to identify interventions to close achievement gaps.	2.63	1.144	135

School counselor job descriptions match actual duties.	2.75	1.120	133
School counselors spend at least 80% of their time in activities that directly benefit students.	3.24	0.922	135
The school counseling program includes interventions designed to improve the school's ability to educate all students to high standards	3.18	0.835	134
An annual review is conducted to get information for improving next year's programs.	2.26	1.151	131
School counselors use computer software to access student data.	3.59	0.791	132
School counselors use computer software to analyze student data.	3.04	1.024	131
School counselors use computer software to use data for school improvement	3.29	0.855	133
The school counseling program has the resources to allow counselors to complete appropriate professional development activities.	3.41	0.852	133
.School counseling priorities are represented on curriculum and education committees.	2.99	1.054	133
School counselors communicate with parents to coordinate student achievement and gain feedback for program improvement.	3.19	0.771	133

Table 2 contains descriptive statistics for the five school counselor time use items contained in the survey. Interestingly, near equal percentages of time were reported for each of the three main categories of student services (i.e., Guidance Curriculum, Responsive Service, and Individual Planning). It is also important to note that Nebraska school counselors average 18% of their time spent on activities that are unrelated to their role as counselors and that on average 14% of their time is spent on System Support (program-related activities that do not involve student contact).

Also significant are the large standard deviations associated with each category of school counselor activity. These differences mean that there is great variation across schools in how much time counselors spend on activities in each of the five categories.

Table 2. School Counseling Survey: Descriptive Statistics for Time Use			
Time Use Category	Mean	SD	N
Guidance Curriculum	21.2 %	14.87	129
Responsive Services	22.8 %	13.40	128
Individual Planning	24.5 %	14.45	129
System Support	14.8 %	09.04	127
Unrelated Duties	18.0 %	15.73	127

Table 3 contains descriptive statistics for additional survey items related to school counseling practice items that were in continuous response format.

Table 3. School Counseling Survey: Descriptive Statistics for Continuous Response Format Items			
Item	Mean	SD	N
All students experiencing problems that might interfere with their school success can easily receive help from a school counselor.	3.93	1.000	133
School counselors effectively consult with administrators concerning students experiencing problems that interfere with school success.	4.23	0.902	133
School counselors effectively consult with community- based mental health professionals concerning students experiencing problems that interfere with school success.	3.41	1.102	132
School counselors provide appropriate referral services for all students experiencing problems that interfere with school success.	3.80	0.997	133
School counselors provide effective consultation to other school-based personnel concerning all students experiencing problems that interfere with school success.	3.92	0.947	133
Counselors provide effective college counseling services to all students.	4.20	0.800	133
Counselors implement and assist students in developing effective career and educational plans.	4.03	0.814	133
Education and career planning activities include individual and group guidance sessions that assist all students and parents/guardians in effectively using standardized test results.	3.32	1.038	131
The education and career planning process involves collaboration with students and parents/guardians to assist students in developing a four-year plan.	3.56	1.052	132

Counselors provide all students and parents/guardians with accurate and up-to-date information about the world of work.	3.37	1.032	133
The education and career planning process helps students create meaningful college and career plans.	3.77	0.852	133
School counselors help all students identify their interests and abilities.	3.78	0.958	133
School counselors help all students to create schedules that reflected their individual abilities, interests, and future goals.	4.12	0.944	133
The School Counseling program ensures that all students receive career development education, including career awareness, exploration, planning and application.	3.91	0.967	131
The career development process includes instruction on the 16 Career Clusters.	3.90	1.105	131
My school is implementing the Nebraska Career Education (NCE) model for student career development.	3.76	1.175	129
The School Counseling program teaches the standards outlined in the Nebraska School Counseling Career Development Guide: Skills for Learning, Earning and Living.	3.16	1.220	129
My school uses the online C4C-Curriculum for Careers which aligns career exploration with the Nebraska Career Education Model.	2.41	1.363	129
Sample Personal Learning Plans with recommended programs of coursework and school and community extended learning activities (with content already filled in) are used to inform students and parents of the most effective learning plan for clusters/pathways.	2.93	1.290	128
The school counseling program includes specific activities designed to address dropout prevention.	2.82	1.305	129
School counselors provide opportunities for all students and parents to learn about financial aid.	4.50	0.717	131
School counselors help students learn about a variety of postsecondary options including: on-the-job training, certificates, licenses, associates degrees, and bachelor's degrees.	4.10	0.903	130
School counselors ensure that all families receive support in filling out the FAFSA (Free Application for Federal Student Aid Form).	4.12	1.025	131
School counselors collaborate with cross-curriculum faculty in developing programs of study to prepare students to be postsecondary and career ready.	3.30	1.124	130
For how many years has the Nebraska Comprehensive School Counseling Program been implemented in your school?	4.84	2.751	123

Table 4 contains descriptive statistics for the survey items in dichotomous (yes/no) format. These include one item related to post-secondary credit, five items concerning Perkins Program Implementation and ten items related to use of Nebraska Career Connections.

Table 4. School Counseling Survey: Descriptive Statistics for Dichotomous Response Format Items

Item	Number No	Number Yes	% No	% Yes
Postsecondary credit courses are available for programs of study at your school.	124	4	96.9	03.1
The Perkins Programs of Study at my school are aligned with the Nebraska Career Education clusters or pathways.	98	1	99.0	01.0
The Perkins Programs of Study at my school are introduced to students and parents before the transition to high school for informed academic and career planning.	74	54	56.1	43.9
The Perkins Programs of Study at my school include a coherent, articulated sequence of rigorous academic and career/technical education while in school.	59	72	45.0	55.0
The Perkins Programs of Study at my school include postseconday credit.	72	58	55.4	44.6
The Perkins Programs of Study at my school lead to an associate's degree, baccalaureate or beyond, or certificate or license.	96	35	73.3	26.7
Nebraska Career Connections is being used to teach about the NCE model.	38	92	29.2	70.8
Nebraska Career Connections is being used for career information searching.	19	113	14.4	85.6
Nebraska Career Connections is being used to search/select high school and postsecondary programs of study.	30	102	22.7	77.3
Nebraska Career Connections is being used to find postsecondary education options.	31	101	23.5	76.5
Nebraska Career Connections is being used for interests, skills, and values assessments.	19	113	14.4	85.6
Nebraska Career Connections is being used to set goals for Learning, Earning, Living.	59	72	45.0	55.0

Nebraska Career Connections is being used to develop and update Personal Learning Plans.	44	88	33.3	66.7
Nebraska Career Connections is being used to learn about financial aid options.	65	66	49.6	50.4
Nebraska Career Connections is being used to develop resumes.	65	66	49.6	50.4
Nebraska Career Connections is being used to create a portfolio that will store a student's information about academic career development.	52	80	39.4	60.6

Hierarchical Linear Regression (Student Outcomes, Demographics, SCPIS & Ratios)

Hierarchical linear regression was used to determine if there was a significant contribution of the school counseling program to student educational outcomes *after controlling for the variability in outcomes that is related to demographic differences among schools*. Separate analyses were conducted for each of the 12 student outcome measures. In step one of each analysis, per pupil expenditures, percentage of students eligible for free or reduced lunch and percentage of minority group students were entered into the predictive equation. In step two, student-to-counselor ratio, SCPIS Program subscale, SCPIS Data Use subscale, and the SCPIS Services subscale were entered stepwise into the equation. This allowed for the identification of all variables that contributed to student outcomes after controlling for demographic differences. Results are contained in Table 5.

Table 5. Summary of Hierarchical Linear Regression Results for School Counseling Programs in Rural and Suburban School: Contributions of SCPIS Subscales (Counselor Ratings) and Student-Counselor Ratios to Student Educational Outcomes

Student Outcome	*Predictor variable*	*R*	*Adjusted R2*	*R2 Change*	*Sig.*
Suspension Rate	SCPIS (Services)	.585	.319	.032	p. < .020
Discipline Rate	SCPIS (Services)	.394	.126	.031	p. < .041
Attendance Rate	SCPIS (Services)	.684	.450	.032	p. < .010
	Student/Counselor	.701	.492	.023	p. < .041

Dropout Rate					ns
Graduation rate					ns
ACT Average					ns
% Math Proficient	SCPIS (Services)	.365	.103	.059	p. < .008
% Reading Proficient	SCPIS (Services)	.526	.251	.029	p. < .033
% Technical Proficient	Student/Counselor	.316	.065	.045	p. < .024
% Program Completion	Student/Counselor	.319	.068	.045	p. < .040
Nontrad. Participation					ns
Nontrad Completion					ns

After controlling for demographic differences amongst schools, the SCPIS Services subscale accounted for a significant amount of variability in suspension rates, discipline rates, attendance rates, Math proficiency, and Reading proficiency. School Counselor ratios accounted for a significant amount of variability in attendance rates, Technical Proficiency (Perkins), and Program Completion (Perkins).

These findings demonstrate that more effective delivery systems for school counseling services and more favorable student-to-counselor ratios can be expected to result in better student educational outcomes.

Further analyses of subscales and individual items are needed to better understand effective services.

Correlations Student Educational Outcomes, SCPIS Scales

The Pearson correlations between SCPIS items, student/counselor ratios and student outcomes are summarized in Table 6.

Consistent with the hierarchical linear regression analysis, the strongest relationships were found between the SCPIS services subscale and student outcomes and between student/counselor ratios and student outcomes. Schools with higher school counseling program implementation scores on the SCPIS services subscale had

significantly lower suspension rates, lower disciplinary incident rates, higher attendance rates, higher percentages of math proficiency, and higher percentages of reading proficiency. Similarly, schools with more favorable student-to-counselor ratios had significantly lower suspension rates, lower disciplinary incident rates, and higher graduation rates. The one anomalous finding in these results is that more favorable student-to-counselor ratios were associated with significantly lower average ACT scores. It is likely that this results from a greater number of students taking the ACT in schools with more favorable student-to-counselor ratios; however this supposition cannot be verified with this data set because school-level data is not available on the percentages of students who take the ACT.

These results strongly suggest that the implementation of better school counseling program delivery systems and the presence of student to counselor ratios that permit effective practice contribute to several important education outcomes for students

Table 6. Summary of Pearson Correlations for School Counseling Programs in Rural and Suburban Schools: Relationships of SCPIS Subscales (Counselor Ratings) to Student Educational Outcomes.

Student Outcomes	*SCPIS Program*	*SCPIS Data*	*SCPIS Services*	*Student/Counselor Ratio*
Suspension Rate			-.218 p.< .013 n = 129	.184 p. < .004 n = 248
Discipline Rate			-.184 p. < 040 n = 129	.175 p. < .006 n = 248
Attendance Rate			.277 p. < .001 n=129	
Dropout Rate				
Graduation Rate				-.241 p. < .001 n = 245
ACT Average				.265 ** p < .001 n = 209

% Math Proficient	.184 p. < .040 n = 126		.242 p. < .006 n = 129	
% Reading Proficient			.223 p. < .011 n = 129	
% Technical Proficient				
% Program Completion				
Nontrad, Participation				
Nontrad Completion				

Correlation Student Educational Outcomes and SCPIS Items

Correlations between specific SCPIS items and Student Educational Outcome was undertaken in order to better characterize effective practice. Table 7 contains the significant Pearson correlations.

Table 7. Summary of Pearson Correlations for School Counseling Programs in Rural and Suburban School: Relationships of SCPIS Items (Counselor Ratings) to Student Educational Outcomes.

SCPIS Item	*Student Outcome*	*Pearson r*	*N*	*P*
A written mission statement exists and is used as a foundation by all counselors.				
Services are organized so that all students are well served and have access to them.				
The program operates from a plan for closing the achievement gap for minority and lower income students.	Nontraditional Participation	-.219 **	129	p. < .013
The program has a set of clear measurable student learning objectives and goals are established for academics, social/personal skills, and career development.				
Needs Assessments are completed regularly and guide planning.	Attendance Rate	.171	133	p. < .048
All students receive classroom guidance lessons designed to promote academic, social/personal, and career development.				

The program ensures that all students have academic plans that include testing, individual advisement, long-term planning, and placement				
The program has an effective referral and follow-up system for handling student crises.	Nontrad. Completion	-.199 **	122	p. <.028
School counselors use student performance data to decide how to meet student needs.	Attendance Rate	.242	133	p. < .005
School counselors analyze student data by ethnicity, gender, and socioeconomic level to identify interventions to close achievement gaps.	ACT Average	-.190 **	117	p. <.040
School counselor job descriptions match actual duties.	Attendance Rate	.198	133	p. < .022
School counselors spend at least 80% of their time in activities that directly benefit students.	Suspension Rate	-.269	135	p. < .002
	Discipline Rate	-.187	135	p. < .030
	Attendance Rate	.202	135	p. < .019
The school counseling program includes interventions designed to improve the school's ability to educate all students to high standards.	% Math Proficient	.211	134	p. < .014
	Nontrad. Participation	-.185 **	128	p. <.037
	Nontrad. Completion	-.186 **	122	p. < .040
An annual review is conducted to get information for improving next year's programs.	% Math Proficient	.222	131	p. < .011
School counselors use computer software to access student data.	ACT Average	-.203 **	115	p. < .115
School counselors use computer software to analyze student data.				
School counselors use computer software to use data for school improvement.				
The school counseling program has the resources to allow counselors to complete appropriate professional development activities.	Suspension Rate	-.202	133	p. < .020
	Discipline Rate	-. 261	133	p. < .002

School counseling priorities are represented on curriculum and education committees.	Suspension Rate	-.189	133	p. < .030
	Attendance Rate	.214	133	p. < .014
	% Math Proficient	.293	133	p. < .001
	% Reading Proficient	.283	133	p. < .001
School counselors communicate with parents to coordinate student achievement and gain feedback for program improvement.	Attendance	.222	133	p. < .010
	% Math Proficient	.250	133	p. < .004
	% Reading Proficient	.257	133	p. < .003

From this table several aspects of effective practice can be discerned. **Positive student education outcomes can be expected to result when school programs are structured so that:**

- Needs Assessments are completed regularly and guide program planning.
- School counselors use student performance data to decide how to meet student needs.
- An annual review is conducted to get information for improving next year's programs.
- School counselor job descriptions match actual duties.
- School counselors spend most of their time in activities that directly benefit students.
- The program includes interventions designed to improve the school's ability to educate all students to high standards.
- The program has the resources to allow counselors to complete appropriate professional development activities.
- School counseling priorities are represented on curriculum and education committees
- School counselors communicate with parents to coordinate student achievement and gain feedback for program improvement.

Essentially, school counseling programs that engage in systematic planning and evaluation, focus school counselor efforts on the professional work of school counseling,

enable counselors to spend most of their time in work that directly benefits students, intentionally address educational attainment for all students, possess resources to support professional development, are integrated into the academic work of the school, and coordinate with parents, are more effective in helping to achieve important student educational outcomes.

These results for a second time contain some anomalous findings that would seem to indicate that better elaborated school counseling programs are related to lower average ACT scores and lower completion rates in non-traditional Perkins programs. Again it is likely that these results occur because better elaborated programs result in more students taking the ACT and being included in nontraditional programs. This possibility should be investigated in subsequent evaluation when more complete data sets are available.

Correlations of Student Educational Outcomes and Time Use Items

In order to investigate the relationships between different categories of time use by school counselors, the five time use items were correlated with the twelve student educational outcomes using Pearson correlation procedures.

Table 8. Summary of Pearson Correlations for School Counseling Programs in Rural and Suburban School: Relationships of School Counselor Time Use to Student Educational Outcomes.

Student Outcomes	*Percent Guidance Curriculum*	*Percent Responsive Services*	*Percent Individual Planning*	*Percent System Support*	*Percent Role Inappropriate*
Suspension Rate		r = .273 ** n = 128 p. < .002			
Discipline Rate		r = .177 ** n = 128 p. < .046			

Attendance Rate					
Dropout Rate					
Graduation Rate	r = .183 n = 127 p. < .039	r = -.190 ** n = 126 p. < .033			
ACT Average					
% Proficient Math					
% Proficient Reading					
% Technical Proficient					
% Program Completion					
Nontrad. Participation					
Nontrad. Completion					

The proportion of time spent in Guidance Curriculum activities (i.e., delivering preventative and developmental curricular interventions) were significantly and positively correlated with graduation rate. Although the proportion of time spent in Responsive Services (i.e., delivering counseling services related to emerging problems) was correlated significantly with suspension rate, discipline incident rate and graduation rate, these correlations were in the opposite direction than expected. Schools where counselors spent more time in Responsive Services had higher suspension rates, higher disciplinary incident rates and lower graduation rates. This finding is difficult to interpret. It may be that in schools that have high rates of disciplinary issues (and correspondingly lower graduation rates) counselors are more frequently called to respond

to crises and student problems. It could be that in schools where counselors are oriented toward the delivery of one-on-one services, inadequate time is allotted to the prevention of disciplinary problems. **A more targeted follow-up to evaluation of school counseling practice in schools with high disciplinary rates is warranted.**

Correlations Student Educational Outcomes and Other Survey Items

Correlations between all survey items and student educational outcomes was undertaken in order to better characterize effective practice.

Table 9 contains the significant Pearson correlations between the school counselor survey items in continuous response format and student educational outcome measures. Many individual items proved to be associated with student outcomes.

Table 9. Summary of Pearson Correlations for School Counseling Programs in Rural and Suburban School: Relationships of Survey Items in Continuous Response Format to Student Educational Outcomes.

Item	*Student Outcome*	*R*	*N*	*P*
All students experiencing problems that might interfere with their school success can easily receive help from a school counselor.				
School counselors effectively consult with administrators concerning students experiencing problems that interfere with school success.	% Math Proficient	.287	133	p. < .001
School counselors effectively consult with community- based mental health professionals concerning students experiencing problems that interfere with school success.	ACT Average	-.207 **	113	p. < .028
School counselors provide appropriate referral services for all students experiencing problems that interfere with school success.	ACT Average	-.239 **	114	p. < .010
School counselors provide effective consultation to other school-based personnel concerning all students experiencing problems that interfere with school success.				

Counselors provide effective college counseling services to all students.	% Math Proficient	.204	133	p. < .018
	%Reading Proficient	.174	133	p. < .045
Counselors implement and assist students in developing effective career and educational plans.	% Math Proficient	.217	133	p. < .012
Education and career planning activities include individual and group guidance sessions that assist all students and parents/guardians in effectively using standardized test results.				
The education and career planning process involves collaboration with students and parents/guardians to assist students in developing a four-year plan.	% Math Proficient	.187	132	p. < .032
Counselors provide all students and parents/guardians with accurate and up-to-date information about the world of work.	% Math Proficient	.199	133	p. < .022
The education and career planning process helps students create meaningful college and career plans.				
School counselors help all students identify their interests and abilities.	% Math Proficient	.183	133	p. < .035
School counselors help all students to create schedules that reflected their individual abilities, interests, and future goals.				
The School Counseling program ensures that all students receive career development education, including career awareness, exploration, planning and application.	ACT Average	-.208 **	112	p. < .028
The career development process includes instruction on the 16 Career Clusters.	ACT Average	-.262 **	112	p. < .005
	% Math Proficient	.235	131	p. < .007
	% Reading Proficient	.208	131	p. < .017
My school is implementing the Nebraska Career Education (NCE) model for student career development.	ACT Average	-.257 **	110	p. < .007
The School Counseling program teaches the standards outlined in the Nebraska School Counseling Career Development				

Guide: Skills for Learning, Earning and Living.				
My school uses the online C4C-Curriculum for Careers, which aligns career exploration with the Nebraska Career Education Model.	ACT Average	-.214 **	111	p. < .024
	% Reading Proficient	.215	129	p. < .015
Sample Personal Learning Plans with recommended programs of coursework and school and community extended learning activities (with content already filled in) are used to inform students and parents of the most effective learning plan for clusters/pathways.	Suspension Rate	.202	128	p. < .022
The school counseling program includes specific activities designed to address dropout prevention.				
School counselors provide opportunities for all students and parents to learn about financial aid.				
School counselors help students learn about a variety of postsecondary options including: on-the-job training, certificates, licenses, associates degrees, and bachelor's degrees.				
School counselors ensure that all families receive support in filling out the FAFSA (Free Application for Federal Student Aid Form).	% Technologically Proficient	.205	121	p. < .024
School counselors collaborate with cross-curriculum faculty in developing programs of study to prepare students to be postsecondary and career ready.	ACT Average	-.249 **	111	p. < .008
	% Math Proficient	.285	130	p. < .001
For how many years has the Nebraska Comprehensive School Counseling Program been implemented in your school?				

Since this correlational analysis is based on single items rather than scales (which consist of several items) it is likely that there was insufficient statistical power to detect

all the items associated with student outcomes. It is likely that this analysis detected the items that are most strongly associated with effective practice.

Thus, at present, effective practices (i.e. those which impact student educational outcomes) can be considered to include:

- School counselors effectively consult with administrators concerning students experiencing problems that interfere with school success.
- School counselors collaborate with cross-curriculum faculty in developing programs of study to prepare students to be postsecondary and career ready.
- My school uses the online C4C-Curriculum for Careers, which aligns career exploration with the Nebraska Career Education Model.
- Counselors provide effective college counseling services to all students.
- Counselors implement and assist students in developing effective career and educational plans.
- Sample Personal Learning Plans with recommended programs of coursework and school and community extended learning activities (with content already filled in) are used to inform students and parents of the most effective learning plan for clusters/pathways.
- The career development process includes instruction on the 16 Career Clusters.
- The education and career planning process involves collaboration with students and parents/guardians to assist students in developing a four-year plan.
- Counselors provide all students and parents/guardians with accurate and up-to-date information about the world of work.
- School counselors ensure that all families receive support in filling out the FAFSA (Free Application for Federal Student Aid Form).

If these practices were fully implemented in a school, significant improvements in student learning outcomes would be expected to result.

As noted previously, several items were found to be significantly associated with average ACT scores but in the opposite direction than would be expected. It is likely that

the practices reflected in these items are associated with more students taking the ACT (and consequently lower average scores). However, since building-level data on the percentages of students who take the ACT is not available it was impossible to test this hypothesis. If these practices are indeed associated with greater inclusivity as reflected by a broader range of students attempting the ACT, they should be included in a list of effective practices. A targeted follow-up evaluation is warranted once building-level data on percentages of student taking the ACT is available.

The items noted above were assembled into an *Effective Practice Scale* to be used in later investigations (reported below) of school counseling practices in urban schools and in non-AYP schools.

Table 10 contains the significant Point-Biserial correlations between the school counselor survey items in dichotomous (yes/no) response format and student educational outcome measures. These items include one item related to postsecondary credit, five items related to Perkins implementation and ten items related to use of Nebraska Career Connections.

Table 10. Summary of Point Biserial Correlations for School Counseling Programs in Rural and Suburban School: Relationships of Survey Items in Dichotomous Response Format to Student Educational Outcomes.

Item	*Outcome*	*r*	*n*	*p*
Postsecondary credit courses are available for programs of study at your school.				
The Perkins Programs of Study at my school are aligned with the Nebraska Career Education clusters or pathways.				
The Perkins Programs of Study at my school are introduced to students and parents before the transition to				

high school for informed academic and career planning.				
The Perkins Programs of Study at my school include a coherent, articulated sequence of rigorous academic and career/technical education while in school.	Suspension Rate	-.181	131	p. < .039
	Discipline Rate	-.187	131	p. < .033
	Attendance Rate	.224	131	p. < .010
	% Math Proficient	.185	131	p. < .034
	% Reading Proficient	.210	131	p. < .210
The Perkins Programs of Study at my school include post-secondary credit.				
The Perkins Programs of Study at my school lead to an associate's degree, baccalaureate or beyond, or certificate or license.	% Math Proficient	.193	131	p. < .027
Nebraska Career Connections is being used to teach the NCE model.	Nontrad. Completion	-2.24 **	118	p. < .035
Nebraska Career Connections is being used for career information searching.	% Reading Proficient	.237	132	p. < .006
Nebraska Career Connections is being used to search/select high school and postsecondary programs of study.				
Nebraska Career Connections is being used to find postsecondary education options.				
Nebraska Career Connections is being used for interests, skills, and values assessments.				
Nebraska Career Connections is being used to set goals for Learning, Earning, Living.	ACT Average	-.204 **	115	p. < .030
Nebraska Career Connections is being used to develop and update Personal Learning Plans.				
Nebraska Career Connections is being used to learn about financial aid options.				
Nebraska Career Connections is being used to develop resumes.	% Math Proficient	.175	131	p. < .046

Nebraska Career Connections is being used to create a portfolio that will store a student's information about academic career development.				

The most striking result was that the item "The Perkins Programs of Study at my school include a coherent, articulated sequence of rigorous academic and career/technical education while in school" was significantly related to a number of important student educational outcome measures including: suspension rate, disciplinary incidence rate, attendance rate, percentage of students Math proficient, and percentage of students Reading proficient. **Full implementation of a rigorous Perkins program of study can reasonably be expected to reduce disciplinary problems, increase attendance and improve academic achievement.**

The five Perkins program items and the 10 Nebraska Career Connections (NCC) use items were assembled into a *Perkins Implementation Scale* and a *NCC Use Scale* to be used in later investigations (reported below) of school counseling practices in urban schools and in non-AYP schools.

Hierarchical Linear Regression (Student Outcomes, Demographics, Perkins Program and NCC Use)

The dichotomous Perkins Program items and NCC Use items were summed to create two scales. Both scales were correlated with the 12 outcome variables. The Perkins Program Implementation scale was found to be significantly correlated with both the *percent Math proficient* ($r = .215$; $n = 97$; $p. < .034$) and *percent Reading proficient* ($r = .231$; $n = 97$; $p. < .023$) student outcome measures.

As above, hierarchical linear regression was used to determine if the Perkins Program Scale predicted schools' percent Math proficient and percent Reading proficient students after controlling for the influence of demographic difference among schools (percent minority students, percent free and reduced lunch, and per pupil expenditures). (See Table 11).

Table 11. Summary of Hierarchical Linear Regression Results for School Counseling Programs in Rural and Suburban Schools: Contributions of SCPIS Subscales (Counselor Ratings) and Student-Counselor Ratios to Student Educational Outcomes

Student Outcome	*Predictor*	*R*	*R2*	*R2 change*	*P*
Percent Math Proficient	Perkins Implementation	.586	.315	.060	p. < .005
Percent Reading Proficient	Perkins Implementation	.410	.132	.060	p. < .010

These results suggest that more completely implemented Perkins programs are associated with higher student achievement level as measured by standardized state achievement tests**. Implementing Perkins programs can be expected to boost student achievement.**

Correlations Outcomes and Student- to-Counselor Ratios

Pearson correlation procedures were also used to examine the relationships between student/counselor ratios and student outcome measures. Results are shown in Table 12.

Table 12. Summary of Pearson Correlations for School Counseling Programs in Rural and Suburban Schools: Relationships of Student-to-Counselor Ratio to Student Educational Outcomes.			
Student Outcomes	*r*	*n*	*p*
Suspension Rate	.184	248	.004
Discipline Rate	.175	248	.006
Attendance Rate			
Dropout Rate			
Graduation Rate	-.241	245	.001
ACT Average	.276 **	209	.001
% Proficient Math			
% Proficient Reading			
% Technical Proficient	-.147 **	230	.026
% Program Completion			
Nontraditional Participation			
Nontraditional Completion			

More favorable student-to-counselor ratios were found to be associated with lower suspension rates, lower disciplinary incident rates, and higher graduation rates. Lower student-to-counselor ratios were also found to be associated with lower average ACT scores and lower rates of Technical Proficiency in Perkins programs (probably related to higher rates of participation as discussed above).

Improving student-to-counselor ratios can reasonably be expected to improve both disciplinary issues and graduation rates.

AYP Status and School Counseling Practice

Rural and suburban schools that had failed to achieve Adequate Yearly Progress (AYP) were compared with their counterparts who had achieved this status in order to determine whether there were any important differences in school counseling practice in

these schools. T-tests were used for this analysis. It was discovered that schools that had failed to achieve AYP status had significantly higher student-to-counselor ratios ($p. < .001$).

In terms of school counseling practice, however the non-AYP status schools failed to differ significantly from the AYP school on school counselor time use or on in any of the measures of school counseling practice including: the SCPIS subscales, the Perkins Implementation scale, the NCC Use scale or on the Effective Practice scale (a 9-item scale we constructed from the continuous response items that were found to correlate significantly with student educational outcomes).

These results are based on a relatively low number of non-AYP status (for some contrasts as few as five) and must be generalized cautiously. That said, **this evaluation found the major differences in non-AYP school counseling programs was that they were likely to have higher student-to-counselor ratios.** Time use and the use of specific counseling practices associated with effective practices appear equivalent between AYP and non-AYP schools.

Urban Schools and School Counseling Practice

Nebraska's urban schools were compared to rural and suburban schools to determine if there were any important differences in school counseling practice. A One-way Analysis of Variance was used, followed by planned comparisons that compared data from the urban Schools with that of pooled suburban and rural schools. This procedure was used to generate the most powerful test possible given the low number of urban schools.

The urban schools proved to differ on many student outcome and demographic variables. They had significantly higher disciplinary incident rates ($p. < .001$), lower attendance rates ($p. < .001$), higher dropout rates ($p. < .001$), lower graduation rates ($p. < .001$), lower average ACT scores ($p/ < .009$), lower percentages of technically proficient students (Perkins data) ($p. < .001$), and lower percentages of Perkins program completers ($p. < .001$). In addition, the urban schools had significantly lower per pupil expenditures ($p. < .001$), higher percentages of students eligible for free and reduced lunch ($p. < .001$) and higher percentages of minority group students ($p. < .001$).

The urban schools showed significantly higher student-to-counselor ratios ($p. < .001$) but did not differ significantly on how school counselors use their time.

In terms of school counseling practice, the urban schools only not differed significantly from the Rural and Suburban Schools on in the extent to which they used the NCC ($p. < .005$). The urban schools reported less use on the NCC Use scale. The urban schools did not differ from their suburban or rural counterparts on the SCPIS scale, the Perkins Implementation scale, or the Effective Practice scale (a 9-item scale constructed from the continuous response items that were found to correlate significantly with student educational outcomes).

These results are based on a relatively low number of urban schools (for some contrasts as few as 5) and must be generalized cautiously. That said, **this evaluation found the major differences between urban school counseling programs was that they were likely to have higher student-to-counselor ratios and to make less use of the NCC.** Time use and the use of specific counseling practices associated with effective practices seem equivalent among urban, suburban, and rural schools.

ACT Test Results

As noted above, several anomalous finding were associated with ACT test averages. School counselor activities in many instances were associated with lower ACT averages in schools. In some cases school counselor activities were associated with both increased student performance on state achievement tests and decreased performance on the ACT.

It is likely that school counseling activities decrease the average ACT score by increasing the number of students who take the test. If counselors are working to raise all students' expectations and awareness of career paths, it would reasonably be expected that more students would aspire to college and would therefore take the ACT. This premise could not be evaluated in this data set because school-level data for the percentage of students who take the ACT is not available. **A targeted follow-up evaluation should be conducted once these school level data are available.**

Perkins Results

It is surprising that so few school counseling program and practice items were associated with Perkins-program outcome data. It is particularly surprising that the Perkins implementation items were for the most part unrelated to Perkins outcome data. **A targeted follow up evaluation should be conducted with Perkins outcome data from subsequent years to see whether there are some anomalies in this particular data set that are responsible for these findings.**