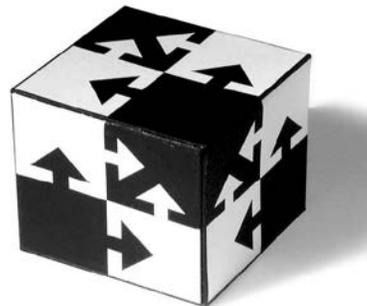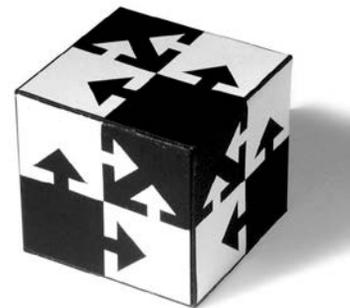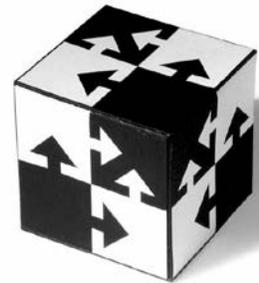# Making Data Work

**Iowa Department of Education
& Iowa School Counselor
Association Conference
March 30, 2012**

Anita Young, Ph.D.
Assistant Professor, Johns Hopkins University

Carol J. Kaffenberger, Ph.D.
Faculty Associate, Johns Hopkins University
ASCA Counselor Educator VP 2007-2010

Categorical Brainstorming:
Assessing My School Counseling Services, Activities, and Programs

ACADEMIC	PERSONAL/SOCIAL	CAREER

Duties/responsibilities that do not align with academic, personal/social and career domains:
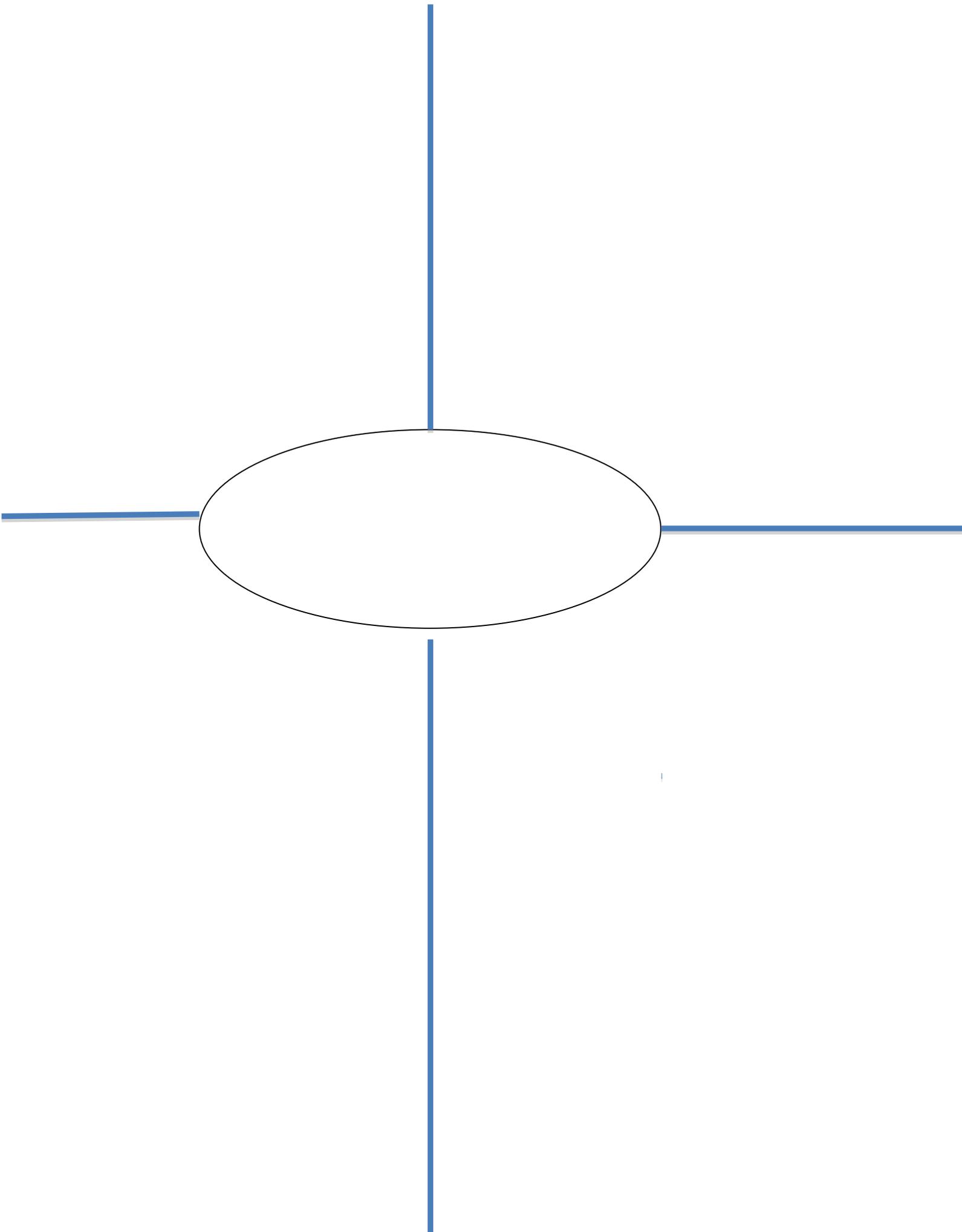
Data Literacy

Take this Self-Assessment

Give yourself a score of 1 - 5

1=never; 2=not usually; 3=sometimes; 4=most of the time; 5=always

_____1. Do you examine school data regularly to make decisions about your programs and interventions?

_____ 2. Are your school counseling interventions aligned with your school and school counseling mission statements?

_____3. Do you consider the school improvement plan when making decisions about your program and interventions?

_____4. Do you collect pre- and post-test data for all programs and guidance activities your conduct?

_____5. Do you conduct a program assessment/audit?

_____6. Do you identify measurable, attainable program goals_____

TOTAL Score

The *Making DATA Work* Process

DESIGN

What is your question or goal?
        a) What is to be evaluated and why?
        b) What do you want to know?
        c) What do you want to understand better?
        d) Does your question align with the school's mission?

ASK

How will you answer your question or reach your goal?
        a) What information or data will be needed to answer the question?
        b) Does the data or information already exist?
        c) What procedures will you follow?
        d) Do data collection instruments need to be created?
        e) What are the steps you need to consider before collecting data?
        f) What is your timeline for planning, data collection, making sense of the data and sharing it?

TRACK

How will you make sense of the data?
        a) What can you learn from the data?
        b) How will you collate or disaggregate the data to make it useful?
        c) How can you organize the data so that you can answer your questions and others can understand it?
        d) How will you present your data?
        e) Would charts be useful?

ANNOUNCE

How will you use your findings?
        a) So what do these results mean?
        b) What are the recommendations?
        c) How will you use your findings?
        d) How will you present your findings and recommendations?
        e) Who will you share them with?
        f) What are the implications?

Iowa School Counseling Program Goal

School:_____ School Counselor(s):_____

DESIGN		ASK			TRACK	ANNOUNCE
SMART Goal	ASCA/State National Standards	Data	Action Steps	Timeline	Measure Effectiveness	Share Data With Stake
					Process: Perception: Results:	

Track: How Will You Make Sense of the Data?

FINDING THE AVERAGE: Using a 1-5 scale

Question 1:

10 responders: 2 circled 1

3 circled 2

4 circled 3

1 circled 4

0 circled 5

What is the total? _____

Divide the total by the number of respondents

(10) to get the average score _____

	gPre-test	Post-test
1. Mission statement aligned with school's	2.4	4.5
2. Uses accountability strategies	1.6	4.2
3. Designs data collection projects	2.0	4.6
4. Collect and Organize Data	1.4	4.2
5. Share Results Data	2.6	4.8

FINDING THE % OF CHANGE

First Question: If Pretest average is 2.4 and Post Test Score is 4.5

Formula for **Percent Change**:   Final # (b) - Beginning # (a) = Change (c)

Change(c)/beginning # (a) = (d) X 100= %of change

Example: Post-test (b) 4.5 – Pre-test (a) 2.4 = (c) 2.1

Change (c) 2.1/ (a) 2.4 = (d) .87 X 100 = 87% change

What is the percent change in this example?   _____

In other words this mean that as a result of this workshop participants believed that they had increased their mission statement alignment by _____%

TIPS: Use **Percents** when you want to know what part of a group did or did not accomplish something.

Formula: Part of the group (a)/total group (b) = fraction X 100 = %

Example: 175 students out of 214 graduated

175/214 = .82 X 100 = 82%

Use **Averages** when you want to know how the group as whole did.

Formula: Part of the group (a)/total group (b) = fraction X 100 = %

Example: Ten students responded to a question about feeling safe at school using 4-point scale (1-strongly disagree; 2-disagree; 3-agree; 4-strongly agree). Two students (1); three students (2); one student (3); four students (4).

2X1 + 3X2 + 1X3 + 4X4 = 28/10(number of students) = 2.8 (close to 3 agree)

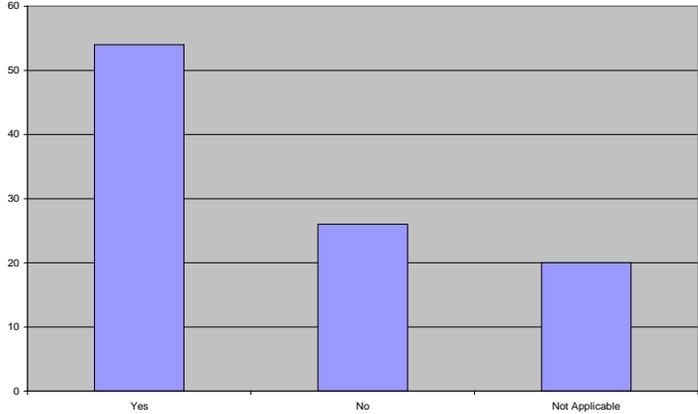SOL SUPPORT GROUP FOR 4TH GRADE STUDENTS – DATA REPORT

DESIGN	**Purpose**: Fourth grade students with low SOL scores are the target population since they generally receive no special services. This program seeks to find out how to best support these students. Teacher perceptions can affect student expectations and creating and using a "learning plan" could impact teacher perceptions. **Question**: Will the use of "learning plans' with identified students increase 4th grade achievement and impact teacher perception of students.
ASK	• Records were reviewed to find out grade, testing, and demographic information about the population group to identify 4th graders who would receive the intervention. • Surveys were administered to all 4th grade students and their teachers before group sessions were conducted with the sample group. • After individual "learning plans" were created, distributed, and implemented with all sample students, a post-intervention survey was administered to 4th grade teachers. The surveys measured changes in teacher perceptions based on the implementation of the "learning plan."

TRACK

Teacher Perceptions of Sample Students

Legend: PreIntervention Teacher Survey; PostIntervention Teacher Survey

Categories: turns in homework, is organized, follows directions, pays attention, uses time wisely, asks for help, is confident in abilities, is bright, has supportive parents, is distracting, nervous before tests, is confused, personal life interferes

Population Demographics (N = 22): Gender – 50% Female, 50% Male; Ethnicity – 31% White, 14% Black, 5% Latino/a, 26% Asian; Language – 63% speak English at home.
Average Test Scores: Cogat Verbal 92; CogAt Nonverbal 104; CogAt Quantitative 95; NNAT 99.
Average Grades: Reading Achievement 2.6; Reading Effort 2.8; Math Achievement 2.4; Math Effort 3.0.
Examples of Student-Created Learning Plan Items: Need help finding quiet place to do my homework, need help getting work from mom's house to dad's house and back to school, need to pay more attention.
Improvement in Teacher Perceptions of Sample Group (n=4): 75% of sample students improved in the following categories – turning in homework, dealing with stress, being confused, getting support from parents, being identified by teacher as "bright." 50% of sample students saw improvement in their organization, paying attention, and asking for help. Categories that saw the largest improvement – 20% decrease in level of confusion; 16% increase in turning in homework, asking for help, and identification of student as "bright."
Examples of Teacher Comments Post-Intervention: Student seems more directed and test scores have improved; has helped student to set a goal for her homework; student seems more focused and work habits have improved; student rarely forgets her homework.

ANNOUNCE

Implications & Recommendations
1. Results for the group intervention will be shared with the counseling department and administration with the following suggestions and learning plan implementation should be considered.
2. Counselors will collaborate with faculty (e.g., special education, ESOL teachers, and general education teachers to create and implement "learning plans."
3. Grades and test scores for all students will be reviewed to determine which students are in need of intervention.
4. A learning plan could be created for all students who are not academically successful, or are in danger of failing the SOL test.
5. Grades and SOL scores will be monitored to determine learning plan effectiveness.

Created by K Teague Crump – school counseling intern

Rocket Team Stress/Anxiety Lesson

Name of School: Anywhere Middle   Date: School Counselor:

DESIGN	Purpose: To address the stress and anxiety needs of the students on the Rocket team. Question: Do Rocket students have a better sense of how to manage stress and anxiety after a classroom guidance lesson addressing the topic?
ASK	After administering a brief getting to know you handout to all Rocket students at the start of the school year, 92% of the students reported some form of stress or anxiety as their biggest worry or challenge for the 2007-08 school year. With support from the core classroom teachers, a brief 30 minute classroom guidance lesson was designed to provide resources, techniques, and strategies to manage stress and anxiety.
TRACK	 Was today helpful in addressing your stress and anxiety concerns? • 54% of students felt that the lesson was helpful and addressed their stress and anxiety concerns. • 20% of students either felt no stress or were not present for the lesson. Students listed the following things learned as a result of the lesson: 1. Do something for yourself and it will make you feel good. 2. That I need balance in my life 3. Take 10 minutes for myself a day. 4. I learned most of the things I'm stressed about shouldn't stress me at all because the worst thing that could happen isn't that bad. 5. That we need 8-12 hours of sleep. I need to go to BED!!!
ANNOUNCE	While a majority of Rocket team students found this lesson useful the time allotted was not enough. We addressed issues of stress and many of the discussions led to issues of time management as well. Finding time to address all of the issues involving stress with the Rocket team will be a challenge as many of the students are over-committed after school and have tremendous worry missing instruction. Consideration should be made at the start of the school year to doing this lesson within the first weeks of school as the academic burden is not as significant with the students. Additionally, a time management component should be added to assist students in developing time allotment skills before the year gets eventful.

School Counseling Program DATA Report

Name of School: Anywhere High School   **Date:**

DESIGN	**State your research question and purpose.** Does a 30-minute guidance lesson using a Holland survey as well as the *Family Connection* computer platform help increase 10th grade students' knowledge of career and post-secondary tools and options?
ASK	**Describe the data collection strategies.** • 505 10th grade students took part in a two-question pre and post test. 375 (74%) of the students' data is represented in the final tally. The other 130 students' data was lost due to a technology issue. • Question 1—I have taken a career assessment (a kind of ungraded test) and can name careers that match my personality. • Question 2—I know how to log into *Family Connection* and use the career information. • Students were able to answer "Yes," "Not sure," or "No."
TRACK	**Summarize the results and use graphs and charts to capture key findings.** **10th Grade Career Unit** • An increase of 68.9% for Question 1 • An increase of 69.4% for Question 2 • 100% of students took the Holland Survey and logged into *Family Connection*
ANNOUNCE	•

Ten Tips for Increasing Your Data Competency

- **Review school data reports over time to observe trends, changes and gaps.**

- **Attend professional development to continue to build data competence.**

- **Review the school improvement plan and consider how the school counseling program is contributing school wide goals.**

- **Collect pre- and post-test data from guidance lessons, and group counseling.**

- **Evaluate school-wide counseling programs to determine how they are helping students and/or how they can be improved or phased out.**

- **Conduct a program assessment once a year.**

- **Set one to three measurable attainable school counseling (SMART) goals in August/September.**

- **Share the data you collect with stakeholders.**

- **Consider applying for RAMP.**

- **Consider how the data you are examining, collecting, and sharing is serving students!**

Directions for Using DATA Report Form

The DATA Report Form can be used to share results with stakeholders. The Report Form provides a brief overview of the purpose of the data-gathering project, the methods used to examine or collect data, the findings, and the implications or recommendations that can be made based on the findings.

Formatting the DATA Report Form (using Microsoft Office 2003 or 2007):
1. Open a new Word document.
2. Type the following title information in Arial font, 12 pt., bold:
   School Counseling Program DATA Report
   School Name   School Counselor's Name   Date
3. To insert the DATA table in Word 2007, click on the "Insert" tab on the menu bar and click on "Table." Create a table with 2 columns and 4 rows. To insert the DATA table in Word 2003, select "Table" on the menu tool bar, scroll to "Insert", and select "Table." Create a table with 2 columns and 4 rows.
4. Adjust the width of the columns by highlighting the center vertical line and dragging it to the left so that the first column is approximately ½ inch wide. Adjust the height of the rows by highlighting each horizontal line and dragging to an appropriate height.
5. In bold, capital letters type the headers DESIGN, ASK, TRACK, and ANNOUNCE in first cell of each row. Highlight the header text in the first column and right click. Scroll to select "Text Direction."   Select the orientation that aligns the text to read vertically from bottom to top. Click "OK."
6. With the text in the first column still highlighted, right click and select "Borders and Shading." Select the "Shading" Tab. Select your preferred "Fill" color for header cells. Click "OK."
7. Now you are ready to input the information below in each row that corresponds with the appropriate headers. Work toward fitting everything into one page.

Complete the four-step DATA Report Form:

DESIGN
Briefly state the purpose of the data-gathering project and the question that is being investigated.

ASK
Provide a brief description of the procedures. Who provided the data and how was the data gathered? List the questions (or some of the questions) from any questionnaire that was created.

TRACK
Provide the findings or results. Use charts and descriptive statements to summarize the findings. Copy charts from EXCEL data and fit to TRACK box. If qualitative data has been collected provide quotes or representative statements.

ANNOUNCE
Who will you share this data with? Consider the audience when reporting recommendations and implications. List the implications that result from the data as well as recommendations or next steps.