4-2014

Utilizing Data to Write Meaningful SLO’s that Pertain to School Counseling

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Recommended Citation
Keller, Thomas; Oliver, Brandie M.; and Abel, Nick R., "Utilizing Data to Write Meaningful SLO’s that Pertain to School Counseling" (2014). Scholarship and Professional Work – Education. 35.
http://digitalcommons.butler.edu/coe_papers/35
Using Data to Write Meaningful SLO’s

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Assessment is a systematic and on-going process of collecting, interpreting, and acting on information relating to the goals and outcomes developed to support the institution’s mission and purpose. It answers the questions:

• (1) What we are trying to do?
• (2) How well are we doing it? And
• (3) How can we improve what we are doing?

Assessment begins with the articulation of outcomes. Writing measurable outcomes involves describing the first three components: outcome, assessment method, criteria for success, in the assessment cycle.
Broadly speaking, there are two types of outcomes: learning outcomes and program outcomes. Learning outcomes describe what students are expected to demonstrate and program outcomes describe what a program is expected to accomplish.
SLO: What is that?

• SLO: Student Learning Learning Outcome
  - "Learning outcome: A statement describing the knowledge, skills, values, dispositions, attitudes, and/or experiences that students should acquire through completion of a course or program of study. Intended learning objectives should be stated in measurable terms (e.g. The student will be able to discriminate among various cultural mores)." (Loyola Learning Technologies & Assessment)
A learning outcome defines what the student will be able to do or know at the end of the lesson, module, class or program. Well-written learning outcomes should be student-centered, measurable, and clear. According to the Penn State Learning Design Community Hub (n.d.), clear course outcomes are important because:

- Objectives guide the content materials and the teaching methods.
- You can use objectives to make sure you reach your goals.
- Students will understand expectations.
- Assessment is based on the objectives.
The Components of a Measurable Learning Outcome. Essential components of a measurable learning outcome are:

✓ Student learning behaviors
  ✓ What is the student expected to be able to know?
  ✓ What is a student expected to be able to do?
  ✓ How is a student expected to be able to think?

✓ Appropriate assessment methods

✓ Use simple, specific action verbs

✓ Specific student performance criteria / criteria for success

✓ Include a timeframe when outcomes will be measured
Formulas

- **SWiBAT** (Student Will Be Able To) + **Active verb** (from Bloom’s taxonomy) + **Condition** (as a result of) + **Measurement** (as measured by or as demonstrated by ...) + **When** (at what timeline).

- **Condition** (As a result ....; from participating in ...) + **Audience** (selected population being assessed) + **Behavior** (active verb) + **Degree of Achievement**
<table>
<thead>
<tr>
<th>Bloom’s Level</th>
<th>Action Verbs</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Knowledge</strong> (to know specific facts, terms, concepts, principles, or theories)</td>
<td>define, identify, indicate, know, label, list, name, recall, select</td>
</tr>
<tr>
<td><strong>Comprehension</strong> (to understand, interpret, compare and contrast, explain)</td>
<td>classify, compare, contrast, describe, discuss, explain, locate, paraphrase, report, review, summarize</td>
</tr>
<tr>
<td><strong>Application</strong> (to apply knowledge to new situations, to solve problems)</td>
<td>apply, compute, construct, demonstrate, dramatize, give examples, investigate, predict, use</td>
</tr>
<tr>
<td><strong>Analysis</strong> (to identify the organizational structure of something; to identify parts, relationships, and organizing principles)</td>
<td>analyze, appraise, categorize, determine, diagram, differentiate, experiment, question, relate, solve, test</td>
</tr>
<tr>
<td><strong>Synthesis</strong> (to create something, to integrate ideas into a solution, to propose an action plan, to formulate a new classification scheme)</td>
<td>arrange, assemble, collect, compose, construct, create, design, formulate, manage, organize, perform, plan, prepare, produce, propose</td>
</tr>
<tr>
<td><strong>Evaluation</strong> (to judge the quality of something based on its adequacy, value, logic, or use)</td>
<td>appraise, assess, choose, decide, estimate, evaluate, judge, rate, revise, select</td>
</tr>
</tbody>
</table>
Evaluate Your SLO

After you have written a learning outcome, check every learning outcome by asking:

• Does the learning outcome describe what your program intends for students to know (cognitive), think (affective) or do (behavioral)?
• Is the outcome detailed and specific?
• Is it measurable?
• Can you count it, observe it, or identify it?
• Is it meaningful?
• Is it manageable?
• Can you create an activity to enable students to learn the desired outcome?
• Who will be gathering evidence to know the outcome has been met?
• Who would know if my outcome has been met?
• How will I know if it has been met?
• Will it provide me with evidence that will lead me to make a decision for continuous improvement?
Now What?

• Choosing SLOs & Indicators
• Planning & Implementation
• Collecting & Analyzing Data
• Adjusting SLOs (assessment cycle)
Choosing SLOs & Indicators
Effective SLOs/Indicators

• Promote academic achievement, attendance, student choice, behavior, or school safety

• Address academic, career, and/or personal/social development

• Are based on school data

• Address policies and practices to close the achievement gap

• Are SMART: Specific, Measurable, Attainable, Results-Oriented, Time Bound
SMART Goals

• **Specific issue**: What is the problem based on our school’s data?

• **Measurable**: How will we measure the effectiveness of the intervention?

• **Attainable**: What outcome would stretch us, but still be attainable?

• **Results-oriented**: Is the goal reported in results-oriented data? (Process, perception, outcome)

• **Time bound**: When will our goal be accomplished?
How SMART?

**Goal 1:** Increase academic achievement for all students.

**Goal 2:** Increase graduation rate from 89% to 92% by June 2013.

**Goal 3:** Establish safe, secure, and respectful schools.

**Goal 4:** Decrease the gap between African American and White students in terms of ACT composite scores by 2% by June 2013.
Choosing Outcomes

- School Improvement Plan
- Student Standards (ASCA, Indiana)
- Needs Assessments
- Stakeholders (admin, students, parents, etc)
- DATA, DATA, DATA 😊
  - ASCA School Data Profile Template
Planning & Implementation
How to Meet Goals?

- Large group education
- Classroom guidance
- Small groups
- Individual counseling/planning
- Parent education
Action Plans

- ASCA Action Plans:
  - Small Group
  - Curriculum (Guidance)
  - Closing the Gap

- Link to standards (ASCA, Indiana)
Collecting & Analyzing Data
Types of Data

• **Process**: Number of students impacted

• **Perception**: Changes in knowledge, attitudes, beliefs (Pre/Post Test, Surveys)

• **Outcome**: Evidence students have utilized knowledge, attitudes, beliefs; changes in achievement, student choice, school safety
Types of Data

Process, Perception, or Outcome?

• 75% of 9th graders completed a career assessment via Naviance.

• After 6 group sessions, 90% of group participants indicated that they use a planner “everyday”, as opposed to 25% at the start of group.

• Following intervention, the mean GPA of the targeted 10th graders increased from 1.5 to 2.1.
Adjusting SLOs
Collect Data

Analyze Data

Implement Plan

Action Plan

Analyze

Implement

Collect

Action
“In God We Trust… Everybody Else Bring Data”
Pat Martin, College Board
Why do we need data?

• Helps us figure out what we should do more of, and less of

• Helps us target limited resources more effectively

• Helps us show other people how what we do makes a difference
D.A.T.A.

- **Design-**
  - What do you want to evaluate and why?
  - What do you want to know?
  - What do you want to understand better?

- **Ask-**
  - Does the information already exist?
  - What information or data do you need to answer the question?
  - Do you need to create data collection instrument?
  - What are your procedures?
  - What is your timeline?
D.A.T.A.

- **Track-**
  - How will you make sense of the data?
  - How will you collate or disaggregate the data?
  - How will you organize your data and present your data?

- **Announce-**
  - What do the results mean?
  - How will you use your findings?
  - Who will you share them with?
  - What are the recommendations?
Keys to Data Collection

• Will you use existing data (school improvement data)?
  – Attendance, GPA, grad rates, suspension rates, discipline referrals, standardized test scores

• Will you collect new data?
  – Observations
  – Interviews
  – Focus groups
  – Surveys
What makes a good survey?

• Gives you important information and has high face validity
• Only collect data you need.
• Created with participants in mind in terms of language and clarity of directions.
• Consider Likert Scales
  ► Two-point (yes, no or smiley faces)
  ► Three-point (yes, sometimes, no or not true, somewhat, often true)
  ► Four-point (SD, D, A, SA or almost never, hardly ever, sometimes, most of the time)
  ► Five-point (SD, D, Unsure, A, SA)
“Good” Questions

• Use parallel language so all are either positive or negative.
  ► New students do not feel welcome at our school.

• Limit “socially desirable” responding
  ► Counselors are good people to go to for help

• Each question is a single question
  ► My counselor is approachable, helpful, and is always available

• Each question is answerable by respondents
  ► What is your household income?
Paper vs. Online Surveys

• Paper Surveys
  – Easily distributed, no computer necessary
  – Each question is technically ‘optional’
  – Anonymity harder to guarantee
  – Data can be hand-tallied, or put into a data analysis program

• Online Surveys
  – Computer access
  – Email invite, easier to reach parents
  – Questions can be “required”
  – Data ready for analysis
Data Collection Designs

- Posttest only- one group
- Posttest only with control group
- Pretest-Posttest- one group
- Pretest-Posttest with control group
- True Experimental
Using Technology for Data Needs

• Web-based tools that can help you create surveys that can be completed online
  – http://www.counselingtechnology.net/
  – http://www.surveymonkey.com/
  – https://www.google.com/accounts

• EZAnalyze is a free ‘add in’ for Excel that does basic and advanced statistical analysis
  • Video tutorials are on-line
  • http://www.ezanalyze.com/index.htm
Excel Add-in

1. Percentages
2. Descriptive (mean, median, mode, SD, range)
   - By variable (gender, ethnicity, grade level)
   - Histogram, pie charts

Summary and difference variables
- Correlation, t-test, ANOVA, Chi Square
References


• PowerPoint Information from Tim Baker & Tim Poynton
Questions?