Writing Outcomes/Objectives: A Guide

Measurable Objectives:

This guide is intended to assist you in writing measurable objectives for your Institutional Effectiveness Plan (IEP).
Measurable objectives are specific statements expressing the desired qualities of key services; and the expected results of the services/experience. Objectives should state:

- **Who** is involved:
  The people whose behaviors, knowledge and/or skills are to be changed as a result of the program.
- **What** are the desired outcomes:
  The intended behavior, knowledge and/or skill changes that should result from the program or activities.
- **How** progress is measured:
  What tool or device (surveys, tests, data from other sources) will be used to measure the expected changes. Ensure that your department has the resources/capacity (time, staff, funding, etc.) to perform the measurement.
- **Proficiency level:**
  Identify the criteria for success.
- **When** will the outcome occur:
  Identify the time-frame for success.

Example: By August 2014, IEP noncompliance will decrease by 90% amongst planning unit managers (PUMs) at TCCD as captured by IRPE's Quality Audit.

Who: PUMs
What: Decrease of IEP noncompliance
When: By August 2014
How measured: As captured on an IRPE's Quality Audit
Proficiency level: To 90%

Measurable objectives can relate to student learning outcomes (SLO) or operational outcomes (OO):

Faculty (SLO)
What is the **outcome**?
- Change in achievement
- Change in behavior
- Change in attitude
- Pedagogy

How is it **measured**?
- Assessment
- Incidence of behavior
- Student log
- Survey

Staff (OO)
What is the **outcome?**
- Knowledge
- Skill
- Attitude
- Achievement/production

How is it **measured**?
- Observation
- Logs
- Assessment
- Surveys
- Output

Use concrete terms that can form the basis of specific outcomes/objectives.

The following concrete terms should be CONSIDERED when writing outcomes to:

Produce	Apply	Predict
Identify	Employ	Evaluate
Increase	Illustrate	Defend
Integrate	Use	Assess
Reduce	Interpret	Distinguish
Improve	Categorize	Diagram
Solve	Formulate	Report
Relate	Restate	
Recall	Prepare	Review
List	Arrange	Classify
Enhance	Construct	Translate
Recognize	Create	Discriminate

General terms such as those listed below are inadequate, as they are open to many interpretations and are not quantifiable. Therefore, AVOID the following general terms when writing objectives, to:

- Know
- Organize
- Understand
- Really understand
- Fully appreciate
- Internalize
- Grasp the significance OF
- Have an awareness OF

Objective Writing Tips:

Step 1: Determine the following:

- What is the object of your study/work as a planning unit?
- What is the purpose of your study/work as a planning unit?
- What ideas/thoughts are representative of your discipline/profession?
- What words are associated with specific knowledge/skills in your discipline/profession?

Step 2: Most objectives need to have the following three components:

- A measurable verb (also known as performance)
- The important conditions (if any) under which the performance is to occur and
- The criterion for acceptable performance

Objectives can be written in a manner that implicitly or explicitly outlines important conditions/criterion.

Example 1:
An objective might be stated as follows:
-*The department will be able to efficiently process ad hoc data requests.*
A more appropriate objective can be explicitly expressed to meet criterion requirements as follows:
-*The department will correctly (criterion) process ad hoc data requests within 2 weeks (criterion).*

Example 2:
An instructor might write an objective with a general (implicit) statement such as:
-*The learner will be able to prepare appropriate new patient workups.*
However, this objective may be too general to be instructional to the student. To make it explicit so that the students know what they are expected to learn, the objective could be written as follows:

-The learner will be able to prepare legible, comprehensive and focused new patient workups that include the following:

- *Present illness organized chronologically without repetition, omission or extraneous information;*
- *A comprehensive physical examination with details pertinent to the patient's problem;*
- *A succinct and, where appropriate, unified list of all problems identified in the history and physical examination;*
- *A differential diagnosis for each problem (appropriate to level of training) and*
- *A diagnosis/treatment plan for each problem (appropriate to level of training.*

SLO Examples:

Three examples of SLOs that are general and not easily measurable are presented below, followed by examples that make these outcomes specific and measurable.

SLO Example 1:

General:
The learner will be able to orally present a new patient's case
More Specific:

The learner will be able to: (a) orally present a new patient's case in a logical manner, (b) chronologically develop the present illness and (c) summarize the pertinent positive and negative findings, as well as the differential diagnosis and plans for further testing and treatment.

SLO Example 2:

General:

The learner will be able to prepare appropriate new patient workups.

More Specific:

The learner will be able to prepare legible, comprehensive, and focused new patient workups that include the following features:

- *Present illness organized chronologically, without repetition, omission or extraneous information.*
- *A comprehensive physical examination with details pertinent to the patient's problem.*
- *A succinct and, where appropriate, unified list of all problems identified in the history and physical examination.*

SLO Example 3:

General:

The learner will be able to retrieve medical information using a computer.

More Specific:

The learner will be able to: (a) retrieve information, demonstrating the ability to perform database searches using logical operators, in a manner that reflects understanding of medical language, terminology and the relationship among medical terms and concepts; (b) refine search strategies to improve relevance and completeness of retrieved items; (c) use standard bibliographic applications to download citations from a search and organize them into a personal database and Identify and (d) identify and acquire full-text electronic documents available from the Internet.

OO Examples

The following are three examples of operational outcomes that are general and not easily measurable followed by an effort to make these outcomes specific and measurable.

OO Example 1:

General:

The Admission's office will be able to process more student applications.

More Specific:

The Admissions office will be able to systematically process more student applications by: (a) categorizing the applications by majors, (b) documenting rejected applications, and (c) advising applicants on incomplete applications.

OO Example 2:

General:

The IRPE office will be able to respond to ad hoc data requests.

More Specific:

The IRPE office will be able to: (a) efficiently respond to data requests by ensuring all timelines are met, (b) proof all data prior to sending to the data requestor and (c) send satisfaction surveys to data requestors after the requestors have had time to review the provided data.

OO Example 3:

General:

The human resource department will expedite new hire process.

More Specific:

The human resource department will be able to: (a) reduce hire time from 8 to 4 weeks, (b) process rejection letters 2 days after interviews and (c) complete background checks in 24 hours.

Outcomes/Objectives Worksheet

Directions: Write your goal and objectives for each goal in the space provide below. Include: (a) **who** is involved, (b) **what** the desired outcomes are, (c) **how** progress will be measured, (d) **when** the outcome will occur and (e) the **proficiency level**. Then, put the pieces together into a sentence. Finally, use the provided checklist to ensure that the objectives contain all necessary components. Use a new worksheet for each goal.

Goa1 l: _____

_____

_____

Objective 1:

Who: _____ What: _____

How: _____When:_____

Proficiency level:_____

Written objective:_____

_____

Objective 2:

Who: _____ What: _____

How: _____When:_____

Proficiency level:_____

Written objective:_____

_____

Objectives Checklist

Objectives contain all elements:

- ☐ Who
- ☐ What
- ☐ How
- ☐ When
- ☐ Proficiency Level
- ☐ Redundancy has been eliminated
- ☐ Objectives relate to needs assessment findings
- ☐ Objectives can really be measured
- ☐ Capacity to perform measurement?
- ☐ Instrument or data source has been identified

Sample Education Performance Measures

Number and percentage of programs closing achievement gaps between all students and subgroup students meeting or exceeding state performance standards, disaggregated by subgroup	Number and percentage of minority students taking advanced courses compared to state average, disaggregated by subgroup and course type
Number and percentage of modified diplomas given to special education students	Number and percentage of courses that maintain a 92% average student attendance rate, disaggregated by grade level and Title I status
Number of suspension, expulsion and truancy incidents by type, and number and percentage of students involved, disaggregated by grade level and student subgroup	Number of students on time to degree as measured by the number of graduates who completed their degrees with 72 hours or fewer
Number and percentage of highly qualified faculty, disaggregated by programs.	Number of job placement at a certain salary level or transfer to a state university
Number and percentage of low-performing programs that improve over time based on THECB guidelines.	Number of graduates in a category of emphasis (e.g., economically disadvantaged).
Number of students graduating within 150% of normal times	Percent in passing college preparatory programs with a higher weighting for math

Sample Accounting Performance Measures

Percent of late reports	Percent of errors in reports
Errors in input to Information Services	Errors reported by outside auditors
Percent of input errors detected	Number of complaints by users
Number of hours per week correcting or changing documents	Number of complaints about inefficiencies or excessive paper
Amount of time spent appraising/correcting input errors	Payroll processing time
Percent of errors in payroll	Length of time to prepare and send a bill
Length of time billed and not received	Number of final accounting jobs rerun
Number of equipment sales miscoded	Amount of intra-Company accounting bill-back activity
Time spent correcting erroneous inputs	Number of open items
Percent of deviations from cash plan	Percent discrepancy in material review boards (MRB) and line scrap reports
Travel expense accounts processed in three days	Percent of advances outstanding
Percent data entry errors in accounts payable and general ledger	Credit turnaround time
Machine billing turnaround time	Percent of shipments requiring more than one attempt to invoice
Number of untimely supplier invoices processed	Average number of days from receipt to processing

Sample Human Resources Performance Measures

Percent of employees who leave during the first year	Number of days to answer suggestions
Number of suggestions resubmitted and approved	Turnover rate due to poor performance
Number of grievances per month	Percent of employment requests filled on schedule
Number of days to fill an employment request	Time to process an applicant
Average time a visitor spends in lobby	Time to get security clearance
Time to process insurance claims	Percent of employees participating in company-sponsored activities
Percent of complaints about salary	Percent of personnel problems handled by employees' managers
Percent of employees participating in voluntary health screening	Percent of offers accepted
Percent of retirees contacted yearly by phone	Percent of training classes evaluated excellent
Percent deviation to resource plan	Wait time in medical department
Number of days to respond to applicant	Percent of promotions and management changes publicized
Percent of error-free newsletters	Personnel cost per employee
Cost per new employee	Management evaluation of management education courses
Opinion survey ratings	

Sample Procurement/Purchasing Performance Measures

Percent of discount orders by consolidating	Errors per purchase order
Number of orders received with no purchase order	Routing and trace errors per shipment
Percent of supplies delivered on schedule	Percent decrease in parts cost
Expediters per direct employees	Number of items on the hot list
Percent of suppliers with 100 percent lot acceptance for one year	Labor hours per $10,000 purchases
Purchase order cycle time	Number of times per year line is stopped due to lack of supplier parts
Percent of parts with two or more suppliers	Average time to fill emergency orders
Average time to replace rejected lots with good parts	Percent of lots received online late
Time to answer customer complaints	Percent of phone calls dialed correctly
Percent of purchase orders returned due to errors or incomplete description	Percent of defect-free supplier model parts
Percent projected cost reductions missed	Time required to process equipment purchase orders
Number of items billed but not received	Stock costs
Supplier parts scrapped due to engineering changes	Parts costs per total costs
Actual purchased materials cost per budgeted cost	Cost of rush implants

Sample Information Systems Performance Measures

Keypunch errors per day	Input correction on data entry
Reruns caused by operator error	Percent of reports delivered on schedule
Errors per thousand lines of code	Number of changes after the program is coded
Percent of time required to debug programs	Number of cost estimates revised
Percent error in forecast	Percent error in lines of code required
Number of coding errors found during formal testing	Number of test case errors
Number of test case runs before success	Number of revisions to plan
Number of documentation errors	Number of revisions to program objectives
Number of errors found after formal test	Number of error-free programs delivered to customer
Number of process step errors before a correct package is ready	Number of revisions to checkpoint plan
Number of changes to customer requirements	Percent of programs not flow-diagrammed
Percent of customer problems not corrected per schedule	Percent of problems uncovered before design release
Percent change in customer satisfaction survey	Percent of defect-free artwork
System availability	Terminal response time
Mean time between system Initial Program Loads	Mean time between system repairs