

## How to Develop Key Performance Indicators

The means of evaluating objectives should be stated as explicitly as possible. These measurements, or assessment procedures, should be matched to the strategies as a valid way for concluding whether individual objectives have been accomplished. Not all strategies can be “measured”. Some may only be judged or appraised. Qualitative measures may be as important as quantitative ones to some units. Whether numbers, judgments, or appraisals, these measures are the only way a unit can truly answer the question, “What are the specific results I want?”

**Key Performance Indicators (KPI)** are statements of something observable or measurable that indicate whether an objective has occurred, or not.

- Other Terminology for KPI: Measurement Tool / Evaluation Method/  
Assessment Method
- KPIs provide us with data that allows us to evaluate progress towards an objective/strategic direction

When we identify KPI, it’s a good idea to identify more than one for each objective/strategic direction, if at all possible. Three KPIs for each objective/strategic direction is probably a good number in most instances.

Why?

Measurement in education is not an exact science. It is difficult to set up situations in education where only one thing has an effect on objectives and eliminate any other factor that might possibly be involved.

So, what’s an educator to do?

One possibility is to evaluate the objective in different ways or from different perspectives. If we use different perspectives and different sources of data in trying to answer the question, “Is it working the way we want it to?” we can see whether the KPI are in agreement as to whether an objective has occurred and how well.

For example?

If we have an objective with only one KPI, then we only know what that one KPI has to tell us. What if it’s wrong? What if it is a weak measure of what we want to know? How would we tell if it was misleading us?

But, if we have more than one KPI—each relying on different data—then we can be a little better informed. If they all tend to agree or move in the same direction, then we can feel a little more comfortable about the accuracy of our conclusions.

**TIP:** When developing KPI and performance standards (criterion), it is a good idea to consider how long it will be before data about specific results will be available and select both long-term and short-term indicators whenever possible. Both can be important.

**Long-term indicators:** provide a more holistic view of objectives, but it may be years before data about objectives are available

**Short-term indicators:** can provide nearly immediate feedback about how things are going. This may be especially important if you are trying something new or developing something through incremental steps and want to know if it's working as expected

Examples of Long-term KPIs	Length of time required for data development	Examples of Short-term KPIs	Length of time required for data development
Number of graduates	At least 1 ½ times expected program length	Number of students successfully completing a course	1 semester
Employer satisfaction	At least 1 ½ times expected program length + 12 to 18 months following graduation	Pre- to post-test gains as a measure of learning	1 semester
Number of years required to graduate	Probably 1 ½ times expected program length	Cohort progress from term-to-term	1 fiscal year

### Developing Performance Standards (AKA: Criterion)

Once you have identified an objective/strategic direction and decided what will serve as a key performance indicator for that objective/strategic direction, it is necessary to establish some level of accomplishment for which you are aiming. This is the **Performance Standard (criterion)**.

This is often overlooked step in the process of establishing KPI. Establishing a level identifies in the eyes of the unit how well they “ought” to do on the objective/strategic direction. If a level or “criteria for success” is not established prior to the reporting of the assessment results, everyone simply says, “That is about what I thought the results should be,” and they go about their business with little or no stretch for improvement. Establishing a specific indicator for accomplishment of the planning/educational objective creates a cohesive target for the faculty/staff and an interest and excitement in the assessment process. There is no stronger motivational tool to get faculty/staff to use the results of the assessment activities for improvement than their setting a “criteria for success” or benchmark.

There are several means through which a unit can establish realistic criteria for success. First, the unit can use an alternative scenario approach. With this approach, an administrative unit may select a percentage of improvement that they would like to see. Next, the staff discuss what they would think of their services if the services reached that level. The staff then chooses two other percentages usually one higher and one lower than the original and discusses these choices. Discussions of this type lead the staff to select a percentage of improvement with which they are comfortable and believe realistic given the resources and personnel available to the unit.

Second, looking to one's peers can help identify realistic criteria in some instances. What are other similar institutions doing, at what level?

Many people prefer to use Key Performance Indicators with Performance Standards that measure the objective from both *quantitative* and *qualitative* perspectives. This is an excellent practice and is encouraged in the EKU strategic planning process.

Examples of Quantitative Performance Standards	Examples of Qualitative Performance Standards
90% of students master 90% of course competencies	Students' artistic products will be evaluated as meaningful by visiting "judge"
Random checks of data entry will reveal less than 3% error for any operator	Observation of data entry operators will indicate that each is free of environmental distractions during data entry periods
85% of classified staff indicate they feel they are recognized and valued by faculty and technical staff	Observation of classified staff, faculty and technical staff commingling in seating and activities at professional development day activity
All campuses will be 100% ADA compliant by the end of the fiscal year	Documentary evidence will indicate that reports generated were used in planning improvement

There are two ways to win and two ways to lose when you set criteria for success. The first "win" is, of course, to meet your criteria for success. At this point, celebrate your accomplishments! The second way to win occurs when you do not meet your criteria for success, but instead implement procedures for further improvements to meet your criteria at the end of the next cycle. The first way to lose is not to do the assessment plan; failing to carry through with their plans for assessment activities. The second type of loss is even more troubling and occurs when units accomplish the assessment planned, but fail to use assessment information as a basis for improvement.

**TIP:** Break down the process and set key performance indicators and standards for each year so that implementation is incremental.

One of the nice things about strategic planning is that everything doesn't have to happen at once. It is expected that things will evolve toward better and better outcomes (continuous improvement) over time.

### **Example KPI for Academic Units (educational objectives):**

- 1) Direct Indicators of learning (the preferred type for measuring outcomes)
  - a. Capstone course evaluation
  - b. Course-embedded assessment
  - c. Portfolio Evaluation
  - d. Pre-test/Post-test evaluation
  - e. Thesis evaluation
  - f. Videotape evaluation of performance
  - g. Licensure exams (if taken by all graduates of a program)
- 2) Indirect Indicators of learning (not as useful as direct measures)
  - a. External reviewers
  - b. Student surveying and exit interviewing
  - c. Alumni surveying
  - d. Employer surveying
  - e. Curriculum and syllabus analysis
- 3) Measures that are not indicators of learning (should not be used at all)
  - a. GPA
  - b. Course or program completion
  - c. Rates/times of completion
  - d. Course grade of individual students
- 4) Relevant Existing Information:
  - a. Existing exams, assignments, or projects common to a group of students in the major
  - b. Writing samples completed for the UWR
  - c. Senior assignments accomplished as a part of a capstone experience
  - d. Faculty teaching evaluations
  - e. Graduating senior surveys
- 5) Relevant New information:
  - a. Student internships or performance
  - b. Capstone courses for graduating seniors
  - c. Portfolio analysis
  - d. Standardized tests
  - e. Surveys, interviews, or focus groups of students at entrance and exit, alumni, faculty, employers or related to course content

## **Example KPI for Administrative Services (planning objectives):**

### **Enrollment Services Office:**

- Methods and successes in recruiting students
- Manner of delivering admissions information to prospective students
- Turnaround time required to process admissions and financial aid applicants
- Methods of maximizing funding for students

### **Registrar Office:**

- Accuracy and timeliness of information given to students
- Utility of its processing procedures and staffing patterns
- Services provided to faculty in distributing academic calendar, course, and grading information

### **Disability Services:**

- Student satisfaction with range and quality of assistance offered
- Student perception that academic success was enhanced with assistance of DS
- Faculty perceptions of disability services

### **Student Life:**

- Measured impact of SL on creating campus climate that supports retention
- Student satisfaction with co-curriculum
- Student connectedness to campus

### **Multicultural Student Affairs Office:**

- Measured its support for the educational needs of multicultural students
- Measured success in increasing applications of scholarships

### **Career Services:**

- Measured rates of career interest testing
- Rates of students counseled
- Rates of participation in career days
- Completion rates for graduate survey

### **Advising and Placement Testing:**

- Student satisfaction with placement testing experience
- Effectiveness in minimizing student anxiety, helping students matriculate into college

### **Financial Aid and Business Office:**

- Measured student satisfaction
- Measured effectiveness in sharing information on financial payments and aid
- Measured effectiveness in distribution of financial aid and scholarships
- Measured time required for students to complete financial transactions.

### **Network/information Services:**

- Measured % of time that network servers were kept online
- Measured response time for technical assistance
- Measured addition of new equipment and services

### **Marketing/Public Relations, recruiting, institutional development:**

- Measured effectiveness in delivering accurate and timely information to students
- Measured attendance rates at open house events in relation to number of inquiries
- Measure response time to student inquiries
- Reviewed publications for clarity and comprehensiveness
- Level of satisfaction with campus facilities by community visitors using facilities
- Measured increases in revenues from contribution campaigns
- Measured community views of the college

### **Facilities Management:**

- Measured satisfaction (annual survey) with cleanliness, comfort, appearance
- Measured safety record for employees and users of campus facilities

### **Institutional Research:**

- Measured satisfaction with the timeliness and accuracy of reports requested
- Measured users' perceptions of quality of service

### **Example Goal, Strategic Direction, & KPI Sequence:**

- GOAL: To continuously improve the programs, services, and infrastructure of the university through the use of inclusive and innovative processes.
  - Strategic Direction: Enhance faculty and staff use of technology
  - KPI: Percentage of smart classrooms
- GOAL: To enhance customer satisfaction.
  - Strategic Direction: Reduce the number of complaints from customers.
  - KPI: Percentage of complaints in the comments box.

In transition from planning objectives to the identification of the specific means of assessment (KPI) and criteria for success (performance standards), previously acceptable generalities such as “increase”, “enhance satisfaction” etc., must become *operationalized* to the point of measurement. An **operational definition** is the concrete measurement of a concept (Grimm, 1993); key performance indicators and their corresponding criterion serve as the operational definition of an objective. It is in this process of identifying KPI that the “when”, “how,” and “how well,” of assessment are addressed:

- “When” will assessment activities take place?
- Where will we find information that will reflect accomplishment of our objectives/strategic directions
- Exactly “How” will the assessment be accomplished?

- “How well” should the unit perform on the means of assessment identified, if the unit is functioning the way it should?

### **Example:**

Objective: Increase customer satisfaction

Key Performance Indicator: Customer Feedback Form

Criterion: 80% of the customer feedback forms will indicate a satisfaction rating of 4 out of 5.

In this example, customer satisfaction has been operationalized as a customer feedback form, with a criterion for success set at 80%.

### **Identifying Appropriate KPI**

The means of assessment (KPI) should flow from and remain directly related to the specific objective/strategic direction which it is designed to measure. A well-formulated objective/strategic direction will automatically dictate the means of assessment to be used. When reading the objective/strategic direction, ask the questions:

- ▶ “How will we know if this is being accomplished?”
- ▶ “What will provide us this information?”

The answer to the question, “What will provide us this information?” leads the unit to identify the KPI.

It is important to have multiple means of assessment whenever possible. Most assessment activities can be categorized as: client satisfaction measures, direct counts, results of external evaluation, and outcome measures.

Description of Measures:

- 1) Attitudinal Assessment
  - a. Client Satisfaction Measures
- 2) Direct Measures of unit accomplishments
  - a. Simple count of unit activities
- 3) External Evaluation
  - a. Examples: Auditor’s report concerning institution’s financial conditions; Fire Marshal’s report following inspection of facilities; Health Department’s report after inspection of food service facility, etc.
- 4) Student Outcome Assessment for “Outcome Oriented” objectives (for educational support units)
  - a. Ex: Students will write an acceptable resume
  - b. Ex: Graduates will gain an appreciation of fine arts
  - c. Ex: Graduates will conduct themselves “professionally” during job interviews.

<b>Examples of Direct Measures of Unit Effectiveness</b>	
Admissions	Application Response Timing
Admissions	Telephone Response Timing
Food Services	Cafeteria Service
Human Resources	Selection Processes
Facilities Services	Work Order Response
Facilities Services	Remodeling Process
Printing Services	Bulk Mail Distribution
Printing Services	Reduction of Pre-Press Time
Registrar's Office	Grade Posting
Registrar's Office	Clearing Transcript Holds

### **Assessment Methods & Strategies:**

- By what measure(s) will you know that students are meeting program learning objectives?
- From whom, and at what points, will you gather data?
- How will the information be collected, analyzed, and used to improve the program?

Make sure your assessment methods:

- Answer questions that are important to you
- Are manageable, given available resources (including time & money)
  - Comprehensive does not mean assessing everything
- Result in useful feedback that highlights accomplishments and identifies areas requiring attention.
- Use Multiple methods
- Use multiple raters (where possible)
- Include direct & indirect measures
  - **Direct Methods:** require students to display their knowledge and skills as they respond to the instrument itself. Objective tests, essays, presentations, and classroom assignments all meet this criterion.
  - **Indirect Methods:** Such as surveys and interviews ask students to reflect on their learning rather than to demonstrate it.
- Assess strengths and weaknesses
- Include qualitative as well as quantitative measures

### **Framework for Good Assessment Practice:**

#### **Learning Objectives:**

*Edward Keeley, Eastern Kentucky University*

1. Each academic program must have end-of-program learning objectives with the following characteristics:
  - a. Linked to EKU's statement of mission and strategic directions
  - b. Developed by faculty

- c. Measurable
  - d. Actionable
  - e. Built on existing course-specific outcome
2. Each program must employ direct measures of student learning objectives with the following characteristics:
    - a. A one-to-one relationship to each program learning objective
    - b. Developed and used by faculty and other appropriate persons (e.g., internship/practicum supervisor)
    - c. Must relate to one or more of the following: cognitive learning (knowledge acquisition), behavioral learning (skill acquisition), and affective learning (attitudinal development)
    - d. Must make sense vis-à-vis the outcome being measured
    - e. Must include multiple raters/evaluator
  3. Each program must employ multiple measures of student learning objectives with the following characteristics:
    - a. Both direct and indirect measures are used in concert to “triangulate” and corroborate the findings
    - b. Each measure can be related back to program learning objectives and be used to improve teaching and learning
    - c. Multiple raters are used where possible
    - d. New measures are introduced periodically to determine efficacy and relationship to other measures so as to keep assessment program relevant and up-to-date
  4. Each program must analyze the results of its assessment measures, and the analysis must have the following characteristics:
    - a. Faculty-driven and faculty-owned
    - b. Relates results back to specific program learning objectives
    - c. Thoroughly and thoughtfully documented
    - d. Evaluative as well as descriptive
    - e. Criteria for success are developed and used
    - f. Needs to be able to result in corrective action
  5. Feedback from the assessment process is used to improve the program and the teaching and learning processes within the program. This feedback has the following characteristics:
    - a. Developed by faculty and department head
    - b. Relates back to specific program learning objectives
    - c. Relates both to “what we teach” (curriculum) and “how we teach” (pedagogy)
    - d. Maps feedback on outcomes back to specific courses
    - e. Actions taken based on feedback are reflected in program planning and budgeting processes

## **Framework for Good Assessment Practice: Planning Objectives:**

1. Each office must have planning objectives with the following characteristics:
  - a. Linked to EKU's statement of mission and strategic directions and the unit goals and strategic directions
  - b. Developed by office staff
  - c. Measurable, actionable and time-bound
  - d. Related to the services the office provides
  - e. Focused on quality of services and administrative processes
  
2. Each office must employ measures of planning objectives with the following characteristics:
  - a. Developed and used by staff and office stakeholders
  - b. Must relate to one or more of the following: processes (volume of activity, efficiency, compliance with external standards), client outcomes (ability of clients after services have been provided), satisfaction (overall client satisfaction or service specific)
  - c. Must make sense vis-à-vis the outcome being measured
  - d. Must measure something realistic, useful and meaningful.
  
3. Each office must employ multiple measures of planning objectives with the following characteristics:
  - a. Both direct and indirect measures are used in concert to “triangulate” and corroborate the findings. *Direct Measure:* Turn-around time and process completion rates; data error/accuracy rates/ participation rates in special events; % of time that network server were kept online, etc. *Indirect Measure:* survey of satisfaction with services
  - b. Each measure can be related back to planning objectives and be used to improve operations and services
  - c. New measures are introduced periodically to determine efficacy and relationship to other measures so as to keep assessment program relevant and up-to-date
  
4. Each office must analyze the results of its assessment measures, and the analysis must have the following characteristics:
  - a. Developed and conducted by office staff and stakeholders
  - b. Relates results back to planning objectives
  - c. Thoroughly and thoughtfully documented
  - d. Evaluative as well as descriptive
  - e. Criteria for success are developed and used
  - f. Needs to be able to result in corrective action
  
5. Feedback from the assessment process is used to improve the office and administrative processes within the office. This feedback has the following characteristics:
  - a. Developed by staff and office stakeholders
  - b. Relates back to specific planning objectives
  - c. Relates both to “what we do” and “how we do it”
  - d. Maps feedback on outcomes back to specific activities and functions
  - e. Actions taken based on feedback are reflected in office planning and budgeting processes

### **How many KPI should I have?**

Minimum of 1 KPI per objective/strategic direction

ALTHOUGH...

Multiple measures is better!

(3 is a good estimate)

### **Where do I enter my KPI into TracDat?**

*Access the TracDat Manual Online:*

[www.oie.eku.edu](http://www.oie.eku.edu)

## Identifying KPI Worksheet

**Purpose:** The purpose of this worksheet is to identify key performance indicators for each of the objectives/strategic directions that you have identified in your strategic planning process. Additionally, questions regarding the process of collecting data, analyzing data, and revising your strategic plan are also provided.

**Instructions:** Complete this worksheet by answering the following questions, as you are identifying KPI for your objectives.

**Your Objective/Strategic Direction:**

**NOTE:** If your objective doesn't have an action word in it, refer to page \_\_\_\_\_. Add the appropriate action word to the objective/strategic direction so that what you intend is clear.

1. Who are the stakeholders who will be affected by this objective/strategic direction?

<input type="checkbox"/> Faculty	<input type="checkbox"/> Department Chair	<input type="checkbox"/> Others
<input type="checkbox"/> Staff	<input type="checkbox"/> Other Academic Departments	
<input type="checkbox"/> Students	<input type="checkbox"/> Other Administrative Departments	

2. What is this objective/strategic direction primarily aimed at?

<input type="checkbox"/> Improving efficiency	<input type="checkbox"/> Monitoring progress
<input type="checkbox"/> Improving effectiveness	<input type="checkbox"/> Other
<input type="checkbox"/> Improving quality	

3. In your own words, what would tell you that you have successfully achieved this objective/strategic direction?

4. Re-state/refine your answer(s) to question 3 so your measure of success (KPI):

- a. Is clearly defined (so another person in your department/office would understand it)
- b. Can be measured
- c. Can be compared over time
- d. Tells you (or will tell you) whether the effort made any difference, had any impact

5. Are the data to answer question 4 (your KPI) available now? If yes, how are you doing right now? If not, how can you get this data? Who will be in charge of collecting it?

Data to be collected or to continue being collected	Baseline (How are we doing right now?)	Who is collecting it (or will be) and how?

**6. At Check Points Throughout the Year**

- a. Are we collecting the data we will need to evaluate at the end of the year?
- b. What do the data tell us right now? Are things going as planned? Do we need to adjust our plan?
- c. Questions this information raises?

**7. At the End of the Year**

- a. How do the results compare with what we expected would happen?
- b. What have we learned?
- c. What do we know about the needs of our stakeholders now? What should we do differently in the future?
- d. Will the objective/strategic direction and/or KPI stay the same or change based on this past year's experience?