



Outcome-Based Evaluation for Technology Training Projects

Developed for:

The New York State Library

Division of Library
Development

Based on materials
developed by
Performance
Results, Inc.
for the Institute
of Museum and
Library Services



Outcome-Based Evaluation a Practical, Smart Evaluation Choice 2

- Stakeholders (local, state, federal) require visible results for customers—OBE specializes in user outcomes
- Funding agencies are seeking outcomes information as a condition of funding
- OBE offers side benefits of improved planning, decision-making, and reporting
- Consistency of data among libraries improves ability of state and federal agencies to advocate for library appropriations.
- OBE objectively identifies services that benefit customers the most

Rationale



Outcome-Based Evaluation ³ Program Evaluation Benefits

- Examines the need for data before the program begins—important user impact data is planned versus an afterthought
- Organizes the collection of data
- Focuses on what the user not the librarian does
- Strengthens proposals when the process is competitive

Rationale



Outcome-Based Evaluation 4

Management Benefits

- Helps make the argument for change when change is resisted
- Justifies choices internally and externally
- Supports decisions about staffing needs and assignments and provides staffing justifications
- Enables comparison to other libraries with similar programs to make management decisions

Rationale



Outcome-Based Evaluation

Advocacy Benefits

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- Shifts focus from the activities of librarians to the benefits to patrons
- Results make the library look good in the community; helps articulate the benefits of technology and other programs to the community
- Proof of impact generally improves customer relations

Rationale



Select OBE to Evaluate Your Project When the Project: 6

- Is designed for a clearly defined audience
- Addresses specific needs of that audience
- Provides a variety of activities to address the need
- Provides for repeated contacts or follow-up with the target audience
- Is designed for the target audience to acquire new or improved skills, knowledge, attitudes or behaviors that are predictable and measurable

OBE Project Selection

Based on
materials from
the Maryland
State Library



OBE Projects Must Be Predictable and Measurable

- What you predict and measure:
 - A change in skill, attitude, knowledge or behavior
- Examples:
 - Specific skills librarians learn in a training program
 - Specific skills patrons learn in a training program

OBE
Project
Selection
Based on
materials from
the Maryland
State Library



Select Another Evaluation Method:

- When you can't predict user benefits
- When you are evaluating something other than user benefits

Alternate
Project
Selection

Based on
materials from
the Maryland
State Library



Outcome-Based Evaluation ⁹

- Defined as a systematic way to assess the extent to which a program has achieved its intended (predicted) results
- Asks the key questions:
 - How has the program changed the knowledge, skills, attitudes, or behaviors of program participants
 - How are the lives of the program participants better as a result of the program?

OBE
Distinguishing
Features



Outcomes

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- Defined as a target audience's changed or improved skills, attitudes, knowledge, behaviors, status, or life condition brought about (partly or wholly) by experiencing a program.
- What your customer can do and does as a result of the program

OBE
Distinguishing
Features

Outcomes Customers



- A targeted group of library staff if you are teaching/training them to do something and you can predict and measure the results
- A targeted group of library patrons when you can predict the resulting behavior and you can measure the results

OBE
Distinguishing
Features



Outcomes: Examples ¹²

- Immediate—A librarian learns how to do advanced health database searching
- Intermediate—A librarian uses advanced health databases to help patrons
- Long-term—A librarian teaches X adults in the community how to find advanced health information
- Impact—More adults in X community will report successful use of advanced health databases

OBE
Distinguishing
Features

Outcomes “Lite” Examples



- Access—More adults in the community will have access to health databases (usage/outputs; impact unknown)
- Satisfaction—Adults in the community will like the library’s health-related databases (can be present with no real results)
- Benefits to the Institution—More adults in the community will use health-related databases (usage/outputs; impact unknown)

OBE
Distinguishing
Features



OBE Definition of a Program

- Activities and services leading toward intended (predictable) outcomes
- Generally has a definite beginning and end
- Designed to change attitudes, behaviors, knowledge, or increase skills and abilities based on assumed need

OBE
Distinguishing
Features



OBE Plan Overview

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- Step One: Identify assumptions
- Step Two: Include purpose statement
- Step Three: List inputs, activities, and outputs
- Step Four: Write measurable outcomes

OBE
Process



Assumptions About Program Need

- Programs are developed as a result of assumptions about people's needs
- Assumptions can be drawn from:
 - Experience of your institution
 - A program partner's experiences
 - Formal or informal research

OBE
Process
Step 1-
Assumptions
(Framework)



Assumptions: Three Parts ¹⁷

- Part 1: Need: A need identified among a group of individuals based on their common characteristics.
- Part 2: Solution: A program that will change or improve behaviors, knowledge, skills, attitudes, life condition or status related to the need.
- Part 3: Desired results: The change or improvement you intend (or predict) to achieve.

OBE
Process
Step 1-
Assumptions
(Framework)



Assumptions Part 1: Example

Assumption--Need

Based on a survey of the state's library systems, many library professionals lack the ability to help library patrons find information they seek using electronic resources. Further, there is little time available for them to learn these new skills.

OBE
Process
Step 1-
Assumptions
(Framework)



Assumptions Part 2: Example

Assumption—Solution

Provide goal-directed learning opportunities to help library staff learn to use electronic information resources effectively.

OBE
Process
Step 1-
Assumptions
(Framework)



Assumptions Part 3: Example

Assumption—Desired Results

Library staff throughout the state will have develop ability to:

- Help patrons find desired information from electronic sources
- Teach targeted community groups to use electronic sources

OBE
Process
Step 1-
Assumptions
(Framework)



Step 1 Checklist

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Did you



Identify a common need of a target group?



Describe the solution?



Consider the desired results?



Transfer to OBE Plan-Evaluation Framework

OBE
Process
Step 1-
Assumptions
(Framework)



Program Purpose

Program purpose is driven by assumptions about need. It relates to the organization's mission statement and program stakeholders. It defines audience, services, and benefits.

Translation: Who does what, for whom, for what benefit?

OBE
Process
Step 2-
Purpose



Program Purpose 23

Before you write the purpose statement:

- Consider the program stakeholders (who needs to know the results? Boards? Legislators? Managers?)
 - ▶ Who are the program influencers?
 - ▶ What do they want to know?
 - ▶ How will the results be used?
- Consider your organization's mission

OBE
Process
Step 2-
Purpose



Purpose Statement 24

- Who does what? Identify the service provider(s) and the service to be offered.
- For whom? Identify the target audience(s). What specific group will be served?
- For what benefit? State in terms of changed, improved or demonstrated knowledge, skills, behaviors, or attitudes.

OBE
Process
Step 2-
Purpose



Program Purpose—Example of a Program Purpose Statement

System-wide Electronic Resources Training provides training in Internet technology (who does what) for library professionals (for whom) in order for them to:

- Search electronic genealogy resources
- Help patrons use electronic genealogy resources
- Teach targeted community groups to use electronic genealogy resources (for what benefits) in order for community members to search electronic genealogy resources independently. (for what benefits)

OBE
Process
Step 2-
Purpose



Step 2 Checklist

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Did you

- Consider the stakeholders?
- Communicate the mission?
- Identify the service provider(s) and services
- Identify the target audience?
- Describe the program benefits?
- Put it all together in a program purpose statement?
- Transfer to OBE Plan-Outcomes Evaluation

OBE
Process
Step 2-
Purpose



Typical Examples Inputs, Activities and Services, and Outputs

Inputs: Resources dedicated to or consumed by the program.	Activities: Program actions that are management related.	Services: Program actions that directly involve end users.	Outputs: numbers of direct program products
Staff, computers, facilities, materials, money(source), consultants, web site, software, Internet, instructors	Recruiting, coordinating, promotional, curriculum development, purchasing, scheduling, and evaluating activities.	Conducting workshops, mentoring, online offerings, following up with customers.	Participants served; participants completed; materials develop and used; workshops, web hits.

OBE
Process
Step 3-
Inputs,
Activities,
Outputs



Caution-Outputs are not Outcomes

- **Outputs:** A direct program product, typically measured in numbers (participants served, workshops given, web-site hits, etc.)
- **Outcomes:** A target audience's changed or improved skills, attitudes, knowledge, behaviors, status or life condition brought about (partly or wholly) by experiencing a program. These changes are intentional and measured from the beginning.

OBE
Process
Step 4-
Outputs



Step 3 Checklist

Did you

- Identify all inputs
(consumable resources)?
- List activities and services?
- Identify all outputs?
- Transfer to OBE Plan-
Outcomes Evaluation

OBE
Process
Step 3-
Inputs,
Activities,
Outputs



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OBE
Process
Step 4-
Outcomes



Outcomes: Six Parts

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- Part 1: Outcomes: Identify specific intended or predicted changes in participants and pick a few important ones to measure (What the customer can do)
- Part 2: Indicators: Measurable conditions or behaviors that show an outcome was achieved
- Part 3: Data Sources about conditions being measured
- Part 4: Data Intervals: when will you collect data?
- Part 5: Target audience: the population to be measured
- Part 6: Target or Achievement Level: the amount of impact desired

OBE
Process
Step 4-
Outcomes

Before You Write Outcomes



- Name each group that will learn a skill or change a behavior; Start at the top with what the system does. Who learns from what the system does? Who learns from those the system taught? Who receives help from those the system taught? Keep going to the last group of end users. Write predictions for the specific action each group will take with what they learned.
- Avoid added verbiage; Use action verbs
- Avoid increase and improve unless you have baseline data

OBE
Process
Step4-
Outcomes

Part 1: Outcomes



Outcomes: Target audience's changed or improved skills, attitudes, knowledge, behaviors, status, or life condition brought about (partly or wholly) by experiencing a program

Examples specific to Electronic Genealogy Resources Training (EGR)

- Outcome # 1: Library staff search EGR
- Outcome # 2: Library staff help patrons use EGR
- Outcome # 3: Library staff teach targeted community groups to use EGR
- Outcome #4: Patrons report successful use of EGR

OBE
Process
Step4-
Outcomes



Part 2: Indicators for Each Outcome

Measurable conditions or behaviors that show an outcome was achieved:

↳ What you hoped (intended, predicted) to see or know

↳ Observable evidence of accomplishment, changes, gains

Indicator Format:

and % of _____
(target audience) who
_____ (will be
able to do what?) as
assessed by _____
(the measurement that
will show results).

Note: # and % symbols are placeholders for values to fill in later.

OBE
Process
Step4-
Outcomes



Before You Write Indicators 35

- For each outcome write as many indicators are needed to show the outcome was achieved.
- Typical indicators are:
 - # and % of learners (librarians, library staff, teachers, agency personnel, etc.) who will perform X amount of specific skills as assessed by trained observer, or quiz, or final independent activity during training
 - # and % of learners who will report X amount of help given others after training because of what they learned
 - # and % of learners who will report training others and how many others were successful during training
 - # and % of end-users (patrons, students, agency clients) who received help and or training who report X amount of independent use of new knowledge.

OBE
Process
Step4-
Outcomes



Part 2: Examples of Outcome 1 Indicators System-wide EGR Training

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Outcome	Indicator(s)
1. Library staff search electronic genealogy resources	<ul style="list-style-type: none"> •# and % staff who can describe how to conduct an effective electronic search for genealogy information assessed by a trained observer during a workshop •# and % of staff who score 80 or better on 3 searches prescribed in a quiz •# and % staff who can identify 3 effective search engines assessed by a trained observer during a workshop

OBE
Process
Step 4-
Outcomes



Part 2: Examples of Outcome ³⁷ 2 Indicators: System-wide Electronic Resources Training

OBE
Process
Step 4-
Outcomes

Outcome	Indicator(s)
2. Library staff help patrons using electronic genealogy resources	•# and % staff who report X number of successful searches with patrons using electronic genealogy resources as assessed by a rubric



Part 2: Examples of Outcome 3 Indicators EGR Training

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Outcome	Indicator(s)
<p>3. Library staff teach targeted community groups to use electronic genealogy resources</p>	<ul style="list-style-type: none"> •# and % staff who report training X number of community groups to use EGR •# and % of targeted community patrons who can identify 3 effective genealogy search engines assessed by a trained observer during a workshop •# and % community patrons who can describe how to conduct an effective EGR search as assessed by a trained observer during a workshop •# and % of community patrons who score 80 or better on 3 searches prescribed in a quiz

OBE
Process
Step 4-
Outcomes



Part 2: Examples of Outcome 4 Indicators EGR Training

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Outcome	Indicator(s)
4. Patrons report successful use of EGR	<ul style="list-style-type: none">•# and % of patrons helped by a librarian who report X number of successful uses of EGR as assessed by a rubric applied to a survey•# and % of patrons who received community training who report X number of successful uses of EGR as assessed by a rubric applied to a survey.

OBE
Process
Step 4-
Outcomes



Parts 3-4: Data Sources and Intervals

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Sources: Tools, documents, and locations for information that will show what happened to your target audience, e.g. pre- and posttest scores, assessment reports, observations, anecdotal self reports, surveys

Intervals: The points in time when data are collected

- Outcome information can be collected at specific intervals, for example, every 6 months
- Data can also be collected at the end of an activity or phase and at follow-up
- Data are usually collected at program start and end for comparison when “increase” data are needed

See page of manual for greater depth on data sources

OBE
Process
Step 4-
Outcomes



Parts 3-4: Examples of Data Sources and Intervals for EGR Training 41

OBE
Process
Step 4-
Outcomes

Indicator(s) Outcome 1	Data Source	Data Intervals
<ul style="list-style-type: none"> • # and % staff who can describe how to conduct an effective EGR search as assessed by a trained observer during a workshop • # and % of staff who score 80 or better on 3 searches prescribed in a quiz • # and % staff who can identify 3 effective search engines assessed by a trained observer during a workshop 	<ul style="list-style-type: none"> • Observation • Quiz • Observation 	<ul style="list-style-type: none"> • At end of course • At end of course • At end of course



Parts 3-4: Examples of Data Sources and Intervals for EGR Training 42

Indicator(s) Outcome 2	Data Source	Data Intervals
<ul style="list-style-type: none"> • # and % staff who report X number of successful searches with patrons using electronic genealogy resources as assessed by a rubric 	<ul style="list-style-type: none"> •Participant Reports 	<ul style="list-style-type: none"> •After 6 months/annual

OBE
Process
Step 4-
Outcomes



Parts 3-4: Examples of Data Sources and Intervals for EGR Training 43

OBE
Process
Step 4-
Outcomes

Indicator(s) Outcome 3	Data Source	Data Intervals
<ul style="list-style-type: none"> • # and % staff who report EGR training of community groups • # and % of targeted community patrons who can identify 3 effective genealogy search engines ... • The # and % community patrons who can describe how to conduct an effective EGR search ... • # and % of community patrons who score 80 or better on 3 searches prescribed in a quiz 	<ul style="list-style-type: none"> • Participant Reports • Observation & participant reports • Observation & participant reports • Quiz & participant reports 	<ul style="list-style-type: none"> • After 6 months/annual • At end of course • At end of course • At end of course

Parts 3-4: Examples of Data Sources and Intervals for EGR Training



OBE
Process
Step 4-
Outcomes

Indicator(s) Outcome 4	Data Source	Data Intervals
<ul style="list-style-type: none"> • # and % of patrons helped by a librarian who report X number of successful uses of EGR as assessed by a rubric applied to a survey 	<ul style="list-style-type: none"> •Survey/ Rubric 	<ul style="list-style-type: none"> •After 6 months/ annual
<ul style="list-style-type: none"> •# and % of patrons who received community training who report X number of successful uses of EGR as assessed by a rubric applied to a survey. 	<ul style="list-style-type: none"> •Survey/ Rubric 	<ul style="list-style-type: none"> •After 6 months/ annual



Parts 5-6: Outcomes Target Audience and Achievement Levels (Goal) 45

Targets: The population to whom the indicator applies

- Decide if you will measure all participants, completers of the program, or another subgroup
- Special characteristics of the target audience can further clarify the group to be measured

Achievement Levels: the stated expectations for the performance of outcomes

- Stated in terms of a number and/or percent
- Meets influencers' expectations
- May be estimated by the program's past performance

OBE
Process
Step 4-
Outcomes



Target and Achievement Levels- Filling in the Placeholders in the Indicators

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OBE
Process
Step 4-
Outcomes

Indicator Example:
and % library staff
who report helping at
least X number of
patrons to use a
particular resource.

Target= number of
library staff who were
successfully trained to
help
Target achievement= %
who will report helping
at least X number
X=minimum
achievement level



Parts 5-6: Examples of Targets and Achievement Levels for EGR Training 47

Indicator(s) Outcome 1	Target/Level
<ul style="list-style-type: none"> • # and % staff who can describe how to conduct an effective EGR search as assessed by a trained observer during a workshop • The # and % of staff who score 80 or better on 3 searches prescribed in a quiz • The # and % staff who can identify 3 effective search engines assessed by a trained observer during a workshop 	<p>All library staff who complete the course</p> <p>N=445</p> <p>Level = 356 (80%)</p> <p>Note: same for all three indicators</p>

OBE
Process
Step 4-
Outcomes



Parts 5-6: Examples of Targets and Achievement Levels for EGR Training

Indicator(s) Outcome 2	Target/Level
<p># and % staff who report X number of successful searches with patrons using electronic genealogy resources as assessed by a rubric.</p>	<p>All library staff who complete the course N=445 Level = 222 (50%) of staff who report at least 5 successful searches (X=5)</p>

OBE
Process
Step 4-
Outcomes



Parts 5-6: Examples of Targets and Achievement Levels for EGR Training 49

OBE
Process
Step 4-
Outcomes

Indicator(s) Outcome 3	Target/Level
<ul style="list-style-type: none"> • # and % staff who report training community groups to use EGR • # and % of targeted community patrons who can identify 3 effective genealogy search engines assessed by a trained observer during a workshop • # and % community patrons who can describe how to conduct an effective EGR search as assessed by a trained observer during a workshop • # and % of community patrons who score 80 or better on 3 searches prescribed in a quiz 	<p>Completers N=445 Level = 222 (50%)</p> <p>Patrons who complete N=2220 Level # = 1776 (80%)</p> <p>Level # = 1776 (80%)</p> <p>Level # = 1776 (80%)</p>



Parts 5-6: Examples of Targets and 50 Achievement Levels for EGR Training

OBE
Process
Step 4-
Outcomes

Indicator(s) Outcome 4	Target
<ul style="list-style-type: none"> • # and % of patrons helped by a librarian who report X number of successful uses of EGR as assessed by a rubric applied to a survey • # and % of patrons who received community training who report X number of successful uses of EGR as assessed by a rubric applied to a survey. 	<p>222 library staff report 5 help incidents; Patron N=1110 Level # = 111 (10%)</p> <p>Patrons successful during training N= 1776 Level #=177 (10%)</p>



Step 4 Checklist

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Did you

- Write a few important, measurable outcomes?
- Identify all the indicators for each outcome?
- Identify data sources for each indicator?
- Identify the number and characteristics of the target audience?
- Note the data interval for each data source?
- Decide the target achievement level (goal) for each indicator?
- Transfer to OBE Plan-Outputs Evaluation

OBE
Process
Step 4-
Outcomes



Post-planning Step: Reports

Summarize the results of outcome data and include?

- Participant characteristics
- Inputs, activities and services, outputs, and outcomes
- Elements requested by stakeholders
- Comparisons of previous periods
- Interpretation of the data

OBE
Process:
Management

Post-planning Step: Reports



Outcomes	What did target audience achieve?
Inputs	What did we use? How much did we spend? How much did we consume?
Activities and Services	What did we do?
Outputs	How many units did we deliver? To whom (Audience characteristics)

OBE
Process:
Management



Post-planning Step: Reports

Bottom line of reports
management:

- We wanted to do what?
- We did what?
- **So what? (Outcomes)**

OBE
Process:
Management



Post-planning Step: Reports

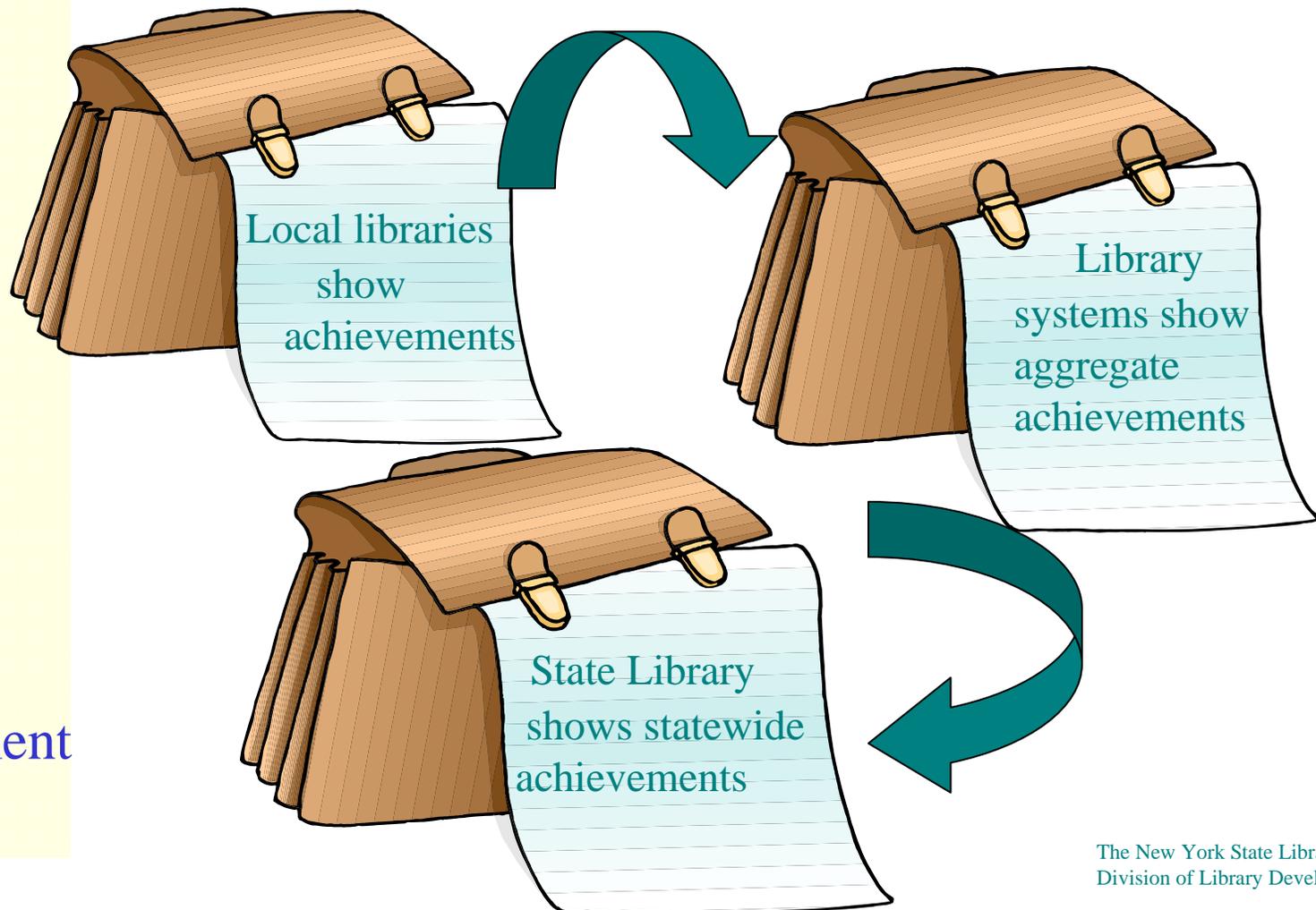
Reporting for State Purposes

- Relates to needs of target audiences identified in the state LSTA plan
- Shows relationship to goals
- Identifies the outcomes achieved by people served in programs

OBE
Process:
Management

Post-planning Step: Reports

Showing relationships



OBE
Process:
Management



OBE Evaluation for New ⁵⁷ York's Libraries

Staff in all libraries can use OBE to:

- Evaluate true audience impact
- Plan programs
- Seek funding
- Increase advocacy for programs
- Submit consistent applications, plans, and reports

Goal of
OBE
Statewide
Training