Using Logic Models to Develop and Assess Prevention Programming

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Who Are We

• Who are you and what institution do you represent?
• My prior experiences with logic modeling include:
• Today, I am hoping to take away from this training?
• I am excited to be here because...
• The aspect about logic modeling that I am most apprehensive about is:_________________________
Why have you chosen your current job/career/profession in higher education?
We Have a Problem

• Dr. Indiana Jones, President of UR University calls in a crisis.
  • The goonies are no longer good enough, and as one of your social organizations are wreaking havoc in Mr. Roger’s neighborhood.
  • He was gonna call the Ghostbusters, but they are unavailable because they’re throwing parties for children
  • The goonies’ parties are just out of control
  • CHiPs and the Emergency 51 crew have responded to several alcohol related emergencies at the House.
  • Dr. Green from the nearby hospital is livid, and “tired of treating intoxicated drunk students”
  • You mission, being that you will accept it (you have no choice) is to “fix it”, especially before a student dies, and UR gets negative national media attention.
GROUP ACTIVITY
How do you go about resolving the problem?
How we often create programs and interventions

• A problem develops/need is seen
  • “We prioritize by crisis”
• Knee jerk reaction – develop programming
  • “Is it really a problem? Have we gotten any data to determine the magnitude of the situation?”
• Implement programming
  • “Are we really addressing the issue, or attempting to address showing that we’re trying to do something?”
• If we’re lucky, evaluation shows program works.
  • “Will our assessments be biased because we developed them as an afterthought?”
What problems/challenges do we have with this model?
How we should create programs and interventions

- A problem develops/need is seen
- Determine ultimate vision and impact
- Determine what actions/behaviors will get target population to ultimate vision
- Determine what data exists to show what actions/behaviors are actually occurring
- Determine what learning needs to occur in the target population
- Develop program interventions that connect to outcomes
- Determine what is needed to carry out program interventions
- Evaluation occurs from end to beginning, and then beginning to end
Benefits and Advantages to this Process?
Our Changing World
What factors are driving a need to infuse assessment/evaluation into our program planning
“If you don’t know where you are going, how are you gonna know when you get there?”

-Yogi Berra

- Where are you going?
- How will you get there?
- What will tell you that you’ve arrived?
- Most importantly, how will your Trustees, Senior Level Administration, students, & other constituents know when you get there?
Accountability

- What gets measured gets done
- If you don’t measure results, you can’t tell success from failure
- If you can’t see success, you can’t reward it
- If you can’t reward success, you’re probably rewarding failure
- If you can’t see success, you can’t learn from it
- If you can’t recognize failure, you can’t correct it.
- If you can demonstrate results, you can win public support.

Re-inventing government, Osborne and Gaebler, 1992
Factors leading to increased assessment in higher education

- Accountability Emphasis
  - Commission of the Secretary of Education, “student learning outcomes needs to be central in the process of accountability.” (US. Dept of Ed, 2006)

- Focus on Student Learning
  - The Student Learning Imperative (ACPA, 1996)
  - Learning Reconsidered (Keeling, 2004)
Factors leading to increased assessment in higher education

- Retention
- Political Pressure
  - No Child Left Behind Legislation
  - Costs of attending higher education scrutinized
  - Concern regarding public accountability/stewardship
- Accreditation
  - Regional accreditors are stressing that institutions provide solid, empirical data on what students are learning both in and outside of the classroom
Assessment does not Exist for the Sake of Assessment

• Assessment should be an organic part of on-going processes and activities
• Assessment is taking what many of us already do, and making it formalized and systematic
Ultimately, the purpose of assessment is to REFLECT on the end outcomes (Bresciani, 2006)

- What are we doing and why?
- What are we supposed to be accomplishing?
- What do I want my students to be able to do and or know as a result of this health promotion program?
- Are we being successful in accomplishing what we say we will accomplish?
- How do we honestly know?
- How is this information then used to improve or celebrate successes?
- Do our improvements lead to greater success?
Outcome-Based Assessment & Your Alcohol Program

• What decision did you make about your alcohol program within the last year?
• What decisions are you considering to make?
• What data or evidence did you use in making your decision?
• What was it that you were trying to alter or change about your program?
• What were the results
The Difference Between What We Do and What Our Target Populations Do
GROUP ACTIVITY/DISCUSSSION

YOU ARE PLANNING TO IMPLEMENT AN ALCOHOL PROGRAM AND ARE ASKED TO ASSESS IT –

WHAT DATA DO YOU COLLECT?
Traditional Performance Indicators Vs. Outcome Indicators

- Performance Indicators (Typically what we do)
  - Metric & Process Indicators
    - Number of Participants/Heads
    - Demographic data of participants
    - Number of Sessions We Delivered
    - Number of Sessions attended
    - Content delivered vs. Content Planned
    - Satisfaction with program
    - Staffing to participant ratio
    - Cost of program
Traditional Performance Indicators Vs. Outcome Indicators

• Outcome Indicators
  • Knowledge
  • Attitudes
  • Behaviors
  • Perceptions
  • Skills
## Outcomes Vs. Process Indicators (Keeling 2009)

<table>
<thead>
<tr>
<th>Student Learning Outcomes</th>
<th>Performance/Process Indicators</th>
</tr>
</thead>
<tbody>
<tr>
<td>Originate from institutional, divisional, departmental/unit mission statement and purpose</td>
<td>Originate from the description and type of work/program/activities provided</td>
</tr>
<tr>
<td>Measure transformation students experience – learning that was acquired</td>
<td>Measure performance of a task that is completed</td>
</tr>
<tr>
<td>Achievement = Effectiveness in learning; students are different</td>
<td>Achievement = Productivity, Satisfaction or Accomplishment – Did we do what we said we were going to do</td>
</tr>
<tr>
<td>Requires criteria to define effectiveness</td>
<td>Requires criteria to define performance</td>
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Outcomes Vs. Process Indicators (Keeling 2009)

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<td>Ind &amp; collective feedback to shape dept./unit programs and divisional activities and priorities</td>
<td>Individual feedback to shape dept/unit systems</td>
</tr>
<tr>
<td>Assessment: How effective were we in creating change in our students</td>
<td>Assessment: How well did we perform our tasks</td>
</tr>
<tr>
<td>Are students learning something</td>
<td>Are students happy and satisfied with our programs and services</td>
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</table>
Both Outcomes and Process Indicators Need to Be Assessed?

- Riding the Amtrak to New Orleans for a Conference?
- What factors will determine if I take the train again or fly to NOLA?
- Which factors are outcome driven?
- Which factors are process driven?
What is a Logic Model
Why we should use logic models:

- Provides a common language
- Enhances communication between practitioners, administrators, participants, stakeholders
- Helps us manage the project, carrying our activities in a timely fashion
- Helps us differentiate between “what we do” and “results” --- outcomes
- Helps us determine what questions need to be addressed
- Increases understanding about program
- Guides and helps focus work
- Leads to improved planning and management
- Increases intentionality and purpose
- Provides coherence across complex tasks, diverse environments
- Helps us document the project and how it works
- Allows us to examine individual or groupings of projects
Logic Models Help with Assessment & Evaluation

• Helps focus on the important matters
• Helps identify what should be measured, both in terms of outcomes and processes
• Helps match evaluation processes to program
• Helps match program content/curriculum to what is being evaluated and what matters
A logic model

• is a picture indicating what your program or intervention will accomplish, and how your will do it!
• shows if-then relationships, that when implemented as indicated, should lead to the desired outcomes
• provides a map for planning AND evaluation
Habit 2: Begin with the End in Mind
Generic logic model

A graphic depiction of relationships between activities and results
Terms Commonly Used When Developing Logic Models

- Outcomes
  - Long-term, intermediate-term, short-term
  - Impact, activity, learning
- Outcome Indicators
- Outputs (Process Indicators)
  - Quantity
  - Quality
- Activities
- Inputs
Logic model and reporting
Why measure outcomes

• We want to make sure that we make a difference in our students’ lives
• We want to improve our campuses
• We want to improve the programs and services we offer
• To meet standards of accountability
• Justify budget allocations and requests
• To meet standards of accreditation
PLANNING: start with the end in mind

Program Action

- Inputs
- Outputs: Activities, Participation
- Outcomes - Impact: Short Term, Medium Term, Long Term

Situation
- Needs and assets
- Symptoms versus problems
- Stakeholder engagement

Priorities
- Consider: Mission, Vision, Values, Mandates, Resources, Local dynamics, Collaborators, Competitors, Intended outcomes

What we invest
- Staff
- Volunteers
- Time
- Money
- Research base
- Materials
- Equipment
- Technology
- Partners

What we do
- Conduct workshops, meetings
- Deliver services
- Develop products, curriculum, resources
- Train
- Provide counseling
- Assess
- Facilitate
- Partner
- Work with media

Who we reach
- Participants
- Clients
- Agencies
- Decision-makers
- Customers

What the short term results are
- Learning
- Awareness
- Knowledge
- Attitudes
- Skills
- Opinions
- Aspirations
- Motivations

What the medium term results are
- Action
- Behavior
- Practice
- Decision-making
- Policies
- Social Action

What the ultimate impact(s) is
- Conditions
- Social
- Economic
- Civic
- Environmental

Assumptions

External Factors

Evaluation

EVALUATION: check and verify
Looking at What Our Students Do As a Result of Our Program/Intervention
Outcomes – The Actual Results

• How participants have been transformed as a result of the program

• States a CHANGE in knowledge, attitude, behavior, beliefs, policies, etc. that result from the program intervention

• Must be measurable and realistic

• How are students and/or campus different as a result of the work that was done
Long-term or Impact Outcomes

• Changes that occur at the institutional, organizational, environmental and systemic level which create:
  • Improved learning and academic success
  • Improved health
  • Increased capacity
  • Changes in social situations
  • Economic changes
  • Environmental changes
  • Changes in actual social norms

• These occur after intermediate and immediate changes are achieved
Intermediate or Action Outcomes

• Changes that typically occur in:
  • One’s behavior
  • One’s practices
  • One’s decisions
  • Procedures
  • Policies

• These typically occur after immediate changed are achieved, may take several months to several years
Immediate or Learning Outcomes

- Changes in
  - Beliefs
  - Attitudes
  - Values
  - Perceptions
  - Awareness
  - Motivations
  - Knowledge
  - Skills
Outcome Indicators

• Assessment and evaluation methods used to measure immediate, intermediate and/or long term outcomes.
  • Indirect Assessment Methods
    • Standardized Surveys (self-report)
    • Focus groups
    • Interviews
    • Surveys
  • Direct Assessment Methods
    • Scoring Rubrics
    • Standardized Testing
    • Observations
    • Reflection – Essays or Verbal
Writing Outcomes

• Make them Smart
  • Specific
  • Measurable
  • Attainable
  • Realistic
  • Time Oriented
Format for Writing Outcomes

• Describe your target audience
• Indicate program and intervention students will be participating in/exposed to
• Indicate the changes that should occur/learning that should occur
• Indicate the time frame/frequency or accuracy expected
Examples

• Increase in the % of First year students attending Six Pack who will be able to list 4 of the 6 alcohol protective behaviors
• Increase in the % of student completing an Electronic Check-Up to Go will be able to explain their familial risk factors
• Increase in the % of students attending the Expectancy Challenge Alcohol Literacy Curriculum who can differentiate between pharmacological and expectancy effects of alcohol
• Increase in the % of students reporting drinking once a week or less
• Decrease in the average number of negative alcohol-related consequences experienced by incoming freshmen after taking the pre-matriculation on-line alcohol education program.
Determining Outcome Indicators

- Important to determine outcome first
- Important to clearly write outcome
- Often how you write your outcome will determine indicator/assessment process you will use
Determining What We Do & Who We Reach
Connecting outputs to outcomes is a challenge

“I think you should be more explicit here in Step Two.”
PLANNING: start with the end in mind

Program Action

Inputs
- What we invest
  - Staff
  - Volunteers
  - Time
  - Money
  - Research base
  - Materials
  - Equipment
  - Technology
  - Partners

What we do
- Conduct workshops, meetings
- Deliver services
- Develop products, curriculum, resources
- Train
- Provide counseling
- Assess
- Facilitate
- Partner
- Work with media

Who we reach
- Participants
- Clients
- Agencies
- Decision-makers
- Customers

Outcomes - Impact
- Short Term
- Medium Term
- Long Term
- What the short term results are
  - Learning
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  - Social Action
- What the ultimate impact(s) is
  - Conditions
  - Social
  - Economic
  - Civic
  - Environmental

Assumptions

External Factors

Evaluation

EVALUATION: check and verify
Outputs - Participation

- Who We Target/Reach
- The “consumers” of a program
- Usually results of our processes that indicate quantity and quality
  - Quantity
    - # of programs
    - # of participants
    - # of brochures distributed
  - Quality
    - Satisfaction survey ratings/results
    - Reduction of wait time
Activities – What We Do

• Actual programs and services provided
  • Providing one-on-ones
  • Delivering a social marketing campaign
  • Information tabling
  • Educational Presentations and Programs
Inputs – What We Invest

- Resources used to support and carry out activities
  - Personnel
  - Budget
  - Facilities and equipment
  - Community/Institutional Assets
    - Collaborative relationships
    - Allies
- Barriers
  - Local and institutional norms
Prioritization of What is the Ideal vs. What is the Realistic

• What resources are actually available
• What staffing is actually available
• How does model actually fit with mission
• How does model fit with institutional/departmental priorities, goals
• Does model fit with desired outcomes of administration/funder
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<td>• Increase in knowledge, attitudes and skills</td>
<td>• # of participants who attended</td>
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<tr>
<td>• Reduction in negative behaviors</td>
<td>• # of sessions delivered</td>
</tr>
<tr>
<td>• Increased % of students who</td>
<td>• Reasons for attending</td>
</tr>
<tr>
<td></td>
<td>• Demographic breakdowns</td>
</tr>
<tr>
<td></td>
<td>• Compared content planned vs. content actually</td>
</tr>
<tr>
<td></td>
<td>delivered</td>
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PLANNING: start with the end in mind

EVALUATION: check and verify
EXAMPLE LOGIC MODELS
**Example:** Financial management program

**Situation:** Individuals with limited knowledge and skills in basic financial management are unable to meet their financial goals and manage money to meet their needs.

**INPUTS**
- Extension invests time and resources

**OUTPUTS**
- We conduct a variety of educational activities targeted to individuals who participate

**OUTCOMES**
- Participants gain knowledge, change practices and have improved financial well-being

**WHAT WE INVEST**

**WHAT WE DO**

**WHAT RESULTS**
SPF SIG New Mexico Community Logic Model
Reducing alcohol-related youth traffic fatalities

Substance-Related Consequences ↔ Substance Use ↔ Intervening Variables ↔ Strategies (Examples)

High rate of alcohol-related crash mortality Among 15 to 24 year olds

- Underage BINGE DRINKING
- Underage DRINKING AND DRIVING
- Young Adult BINGE DRINKING
- Young Adult DRINKING AND DRIVING

Easy RETAIL ACCESS to Alcohol for youth
- Low ENFORCEMENT of alcohol laws
- Easy SOCIAL ACCESS to Alcohol
- Low PERCEIVED RISK of alcohol use
- SOCIAL NORMS accepting and/or encouraging youth drinking
- PROMOTION of alcohol use (advertising, movies, music, etc)
- Low or discount PRICING of alcohol

Enforce underage retail sales laws

- Social Event Monitoring and Enforcement
- Media Advocacy to Increase Community Concern about Underage Drinking
- Restrictions on alcohol advertising in youth markets
- Bans on alcohol price promotions and happy hours
Logic Model – UAlbany Sexual Assault Prevention & Response

Goal: The University at Albany will be a community that is resistant to sexual assault, including all non-consensual sexual contact.

Assumptions
- High sexual assault prevalence/incidence rates on US campuses and at UAlbany
- Opportunity for UAlbany to be a leader in development, enhancement, and implementation of a Comprehensive Sexual Assault Prevention and Intervention Program especially reculturing the campus around prevention and response strategies
- Need to advance capacity building and associated data-driven documentation of progress
- Entire UA community needs to share responsibility for preventing sexual assault
- Students are key partners in these efforts

Campus Resources
- Sexual Assault Task Force
- University Counseling Center
- Clinical Services
- Prevention Programs
- SAPEP – Men REACH Peer Services – Middle Earth & Project SHAPE
- University Health Center
- University Police Dept
- Administration
- Office of Student Success
- Off of Conflict Res & Comm Responsibility
- Counselor’s Office
- Off of Undergrad Studies
- Dept of Residence Life
- Faculty Experts
- Dept of Athletics
- Student Association
- Student Organizations
- Fire Quad

Community Resources
- NYS Coalition Against Sexual Assault
- Albany County Crime Victim and Sexual Violence Center
- Albany Med SAFE (Sexual Assault Forensic Examiner Program)
- Albany Police Department
- Albany DA’s Office

National Resources
- Alan D. Berkowitz, Ph.D.
- Amer College Health Assoc
- Higher Education Center on Alcohol and Other Drug Abuse and Violence Prevention

Assessment/Policy
- Ongoing assessment of magnitude of problem
- Office of Student Success and SAPEP tracking all reports from first responders
- ULP tracking police-reported cases
- Student surveys about knowledge, attitudes, behavior and behavioral intent related to sexual assault, as well as about perceptions about pressures & barriers to intervening
- Enhanced coordination of sexual assault prevention efforts through Sexual Assault Task Force or similar group
- Counseling Center coordination of program evaluation/outcome assessment
- Development of integrated and synergetic sexual assault on policy and education

University-wide shared paradigm for addressing sexual assault
- Annual report produced on incidence of sexual assault, student survey results
- Ongoing oversight group in place and empowered to make needed changes
- Number of sexual assault presentations given & number of students attending in each of the settings listed
- Ratings of program satisfaction
- Student survey scores reflecting:
  - knowledge about laws & university policies
  - understanding of sexual assault and consent definitions
  - behavioral intent re consent and bystander intervention

Number of students who complete RAD or similar course
- Number of posters disseminated and PSAs broadcast
- Number of articles about sexual assault in student newspaper and other campus and community media
- Number of parents informed about sexual assault through in-person forums, letters, & other means of communication
- Number of individuals trained in sexual assault response protocol:
  - counseling & health centers staff
  - University Police Department
  - Students staff – RA’s
  - faculty & administration
- Number of community partners engaged in campus SA initiatives

Short Term Outcomes
- Increase the percentage of students and faculty who consider sexual assault to be a serious issue on campus
- Reduce the percentage of students who overestimate the prevalence of heavy drinking on campus
- Increase the number and visibility of trained first responders
- Increase the number of students who have discussed sexual assault prevention with a parent or other trusted adult
- Increase reporting by students who experience sexual assault

Long Term Outcomes
- Reduce the number of sexual assaults in the UAlbany community
- Increase the percentage of sexual assault victims that are reported
- Increase the percentage of sexual assault victims who receive prompt, appropriate care
- Increase the percentage of sexual assaults that result in investigation and follow-up
- Close the gap between anonymous survey reports of sexual assault and reports to the University
Lets Practice & Build a Logic Model
Contact Information

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