LOGIC MODEL PATTERNS

A logic model is a tool that describes and/or illustrates the theory of change underlying an intervention, product, or policy.

1. ASTIN'S EDUCATION MODEL (1975, 1991)

Inputs ⟶ Environment ⟶ Outputs

Applicable definitions:
   a. Environment: the characteristics of the setting in which the activity will occur and the nature of the activity.
   b. Inputs: resources, persons, patterns brought into a project.
   c. Outputs: products of the project activities.

2. REVISED AND EXPANDED ASTIN MODEL

| Inputs	Outputs		Outcome- Impact		
	Activity	Participation	Short-term	Medium-term	Long-term
Fiscal inputs Personnel inputs Programmatic inputs Facilities Policies/procedures Circumstances (when not part of one of above)	Things that will be done/accomplished like… …150 students will… …50 consultations a week… …Publish XX in… …Perform/ demonstrate…	Who will be involved or has to become involved (staff, faculty, participants, community members)	What results in the 1st year or less	What results as substantial changes, notable products, sizable populations served, etc.	What can become permanent or a foundation for further activity

Applicable definitions for the expanded Astin model or Frechtling's adaptation of the Kellogg Foundation pattern (which follows) –

   a. Activities: components of the treatments/intervention that a project is providing.
   b. Context: characteristics of the setting to be considered based on their influence on or potential to influence the activity/intervention.

c. Impacts: broad changes in a system or set of systems that can be linked to the activities or interventions that are part of the project.
d. Inputs: resources, persons, patterns brought into a project.
e. Outcomes: results or changes in behavior, learning, setting, etc. which reflect the objectives and goals of the project.
f. Outputs: products of the project activities like the number of participants (bean counting) to document that the activity was completed.

### 3. FRECHTLING'S ADAPTATION OF THE KELLOGG FOUNDATION PATTERN
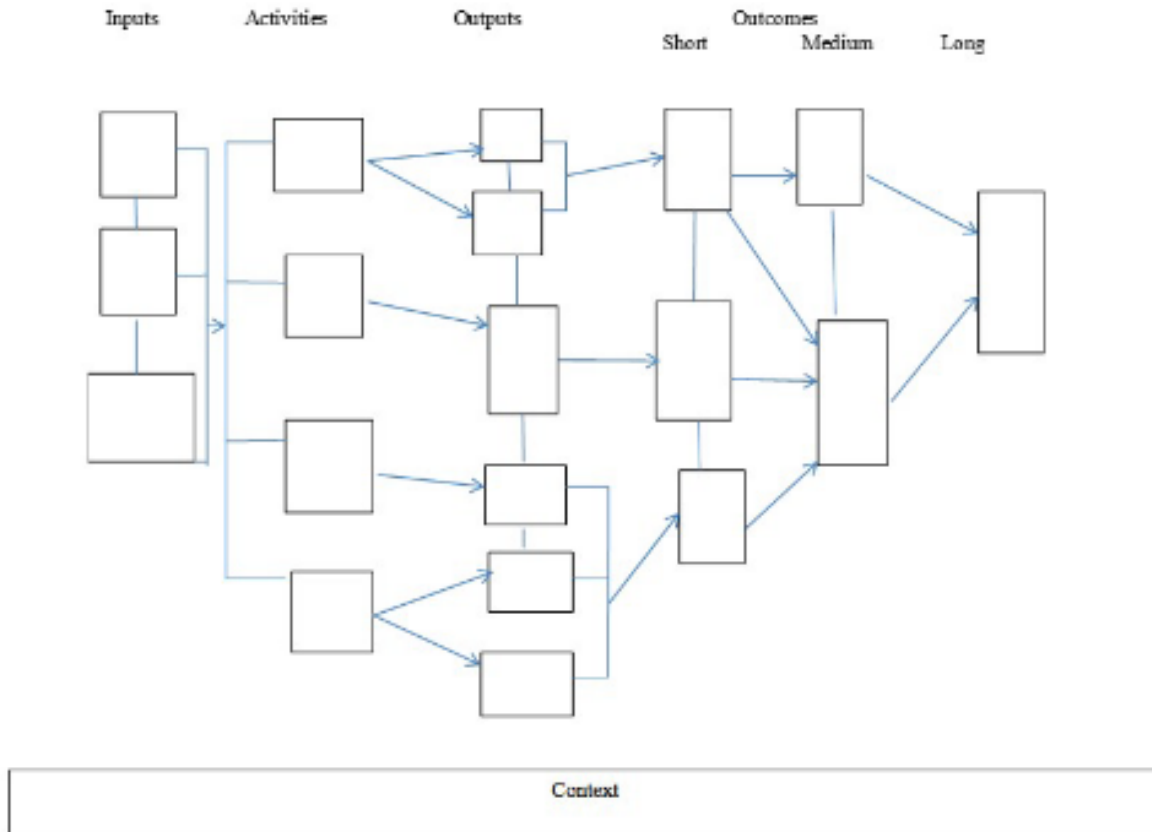
Source: Frechtling, J. (2013). Regional Education Laboratory (REL) Webinar: Developing Evaluation Questions and Measurable Outcomes.

4. ACTION RESEARCH PATTERN (STRINGER, 1999) – A PATTERN THAT FITS EXPERIENTIAL ACTIVITIES AND COMMUNITY-BASED RESEARCH.

Applicable definitions:
- a. Act: resolving issues and problems.
- b. Look: building a picture and gathering information.
- c. Think: interpreting and explaining.

Look

Think

Project

Act
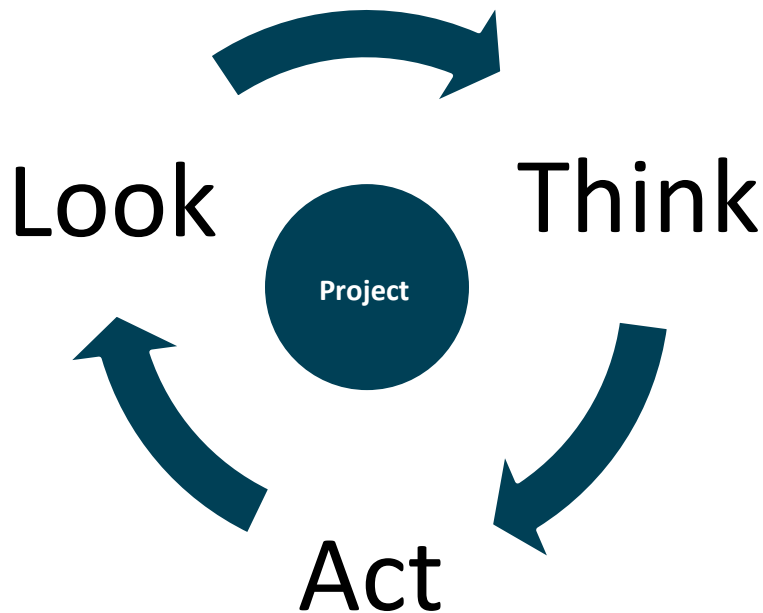
Look: building the picture**
- I. Purpose – to assist stakeholders to build a picture that leads to:
  - a. Understanding what events occur and how they occur.
  - b. Clarifying the context.
  - c. Providing insight as an extended description of the issue.
- II. Process
  - a. Gather information as interviews, observations, reviews.
  - b. Record information as notes, audiotapes, videotapes, photographs, illustrations.
  - c. Analyze information to identify key elements, formulate categories, and formulate themes.
  - d. Construct reports – using themes as headings, categories as subheadings, and key elements as content, construct an account for each stakeholding group that describes research activities, the situation/context, and the issue.
  - e. Communicate – inform people of the research activities.

Think: interpreting and analyzing
I. Purpose – to use interpretive processes to extend and clarify peoples' understanding of the issue and to identify priorities for action.
II. Process
    a. Extend participants' understanding through frameworks for interpretation like:
        i. Interpretive questions: Why, what, how, who, where, when.
        ii. Organizational review: vision, mission, structure, operation, problems.
        iii. Concept mapping: issue, concepts/influences, links.
        iv. Problem analysis: problem, antecedents, consequences.
    b. Group processes for interpreting issues
        i. Meet with representatives of all stakeholding groups.
        ii. Set the agenda by clarifying purposes.
        iii. Review descriptive information to identify key elements of experience.
        iv. Distill the information by sorting elements into categories.
        v. Extend the understanding of the issue(s) by enacting interpretive activities.
    c. Identifying priorities for action by identifying next steps and establishing a work team.
    d. Constructing joint reports.

Act: resolving issues and problems, addressing the matter or circumstance
I. Purpose: to enact procedures for organizing and managing research, intervention or performance processes.
II. Process
    a. Manage
        i. Plan: develop a vision statement, an operational plan, and action plans.
        ii. Review: examine strengths, weaknesses, opportunities, and threats.
        iii. Political processes: build cooperative links with interested individuals and groups.
        iv. Financial plan: construct budgets to account for the developmental costs and recurrent expenses.
    b. Organize
        i. Organizational base: a new or existing organization that provides a base of operations.
        ii. Organizational structure: a structure for coordinating and monitoring people and activities.
    c. Guide
        i. Leadership: provided information and maintain participatory, supportive relationships.
        ii. Language: clear verbiage that reflects the values of community-based activity.
        iii. Decision making: engage participatory decision-making processes.
        iv. Support: act as a resource to monitor and support people's activities.
    d. Evaluate
        i. Purposes: define purposes of the evaluation.
        ii. Audience: decide which people will be informed of the results of the evaluation.
        iii. Procedures: describe the processes for evaluating activities.
        iv. Evaluation: describe what was done, what was achieved, what is still to be done, and issues and/or agendas to be resolved.

**Source: Stringer, E. T. (1999). *Action Research* (2nd Edition). Thousand Oaks, CA: Sage Publications.

PROJECT PLANNING TABLE ADAPTED FROM BAUER, D., *THE "HOW TO" GRANTS MANUAL.*

Project objective (A, B, C…) plus methods (A.1, A.2, B.1…)	Time	Title, role	Personnel Costs			Consultant, contractual (includes facility rental)			Resources (equipment, material and supplies)				Activity subtt'l	Milestone, progress indicators	
			Salary/ stipend/ wages	Fringe	Total cost	Period	Cost/ unit	Total cost	Item	Cost/ unit	# of units and years	Total cost	Total of C, F, and J	Description	Date
			A	B	C	D	E	F	G	H	I	J	K		
A. Increase retention of Hispanic students by 10 percentage points	Each year	Coordinator	50,000	17500	67,500								67,500	10% higher at end of funding	10/17
A.1 Establish summer bridge	Each year	Faculty (stipends)	10,000	3,500	13,500								13,500	1. Curr. complete 2. 1st cohort 3. Transition to 1st year exp.	1. 5/14 2. 7/14 3. 9/14
A.2 Start first year experience	Each year	GA facilitators	15,000	450	15,450								15,450	1. Curr. complete 2. 1st cohort 3. Transition to mentoring program	1. 5/14 2. 9/14 3. 9/15
A.2 1st year experience backpacks	Each year								Backpack for each participant	50	100 (3 yrs)	5,000	5,000		
A.2 Improved performance incentives	Each year								$100 bookstore voucher for GPA above institutional average	100	35 (3 yrs)	3,500	3,500		
A.3 Create mentoring initiative	Each year	GA facilitators	22,250	675	22,925								22,925	50% or greater participation by 1st year exp. Students by end of funding	10/17
A.4 Mentoring software update						1st year	10,000	10000					10,000	1. Installed 2. Tested 3. PD for users 4. Live	1. 5/14 2. 7/14 3. 8/14 4. 9/14
A.4 Mentoring software installation contract						1st year	1,500	1,500					1,500		
A.4 Mentoring software maintenance, updates						Annual	2,000	2,000					2,000	Updates completed in the summer	7 or 8 of each year as applicable
A. Subtotal													141375		
B. Increase Hispanic student identification with institution by 10%														10% higher at end of funding	10/17

Activity	Freq	Responsible	Match								Item	Qty	Unit	Total	Subtotal	Milestones	Dates
B.1 Hispanic cultural identity group	Each year	Multi-cultural Affairs Office (assign to one coordinator)	¼ time as match [10,000]	[3500]	[13500]											Assignment made, activity begun	5/14
											Fliers	1,000	.10	100		1. Mocked up and approved 2. Printed	1. 5/14 2. 8/14
											Curriculum planned	N/A	N/A	N/A		1. Series and topics approved 2. Meeting plans generated	1. 5/14 2. 8/14
											Meeting "fun" conversation-leading items	400	2	800		1. Selected 2. Purchased	1. 5/14 2. 8/14
B.2 Hispanic cultural outreach activities	Each year	Same Multi-cultural Affairs officer as above									2 large events each year	750	2	1500		1. Series and topics approved 2. Meeting plans generated	1. 5/14 2. 8/14
B. Subtotal		Matching			[13500]										15900		
C. Develop targeted recruiting material and events for the project	Each year	Will be added to existing recruiting efforts															
C.1 Program-specific recruiting materials											Brochure	2500	.50	1250		1. Mocked up and approved 2. Printed	1. 5/14 2. 8/14
								In house consult	Webpage (in house devel. cost)	2500						1. Mocked up and approved 2. Beta tested 3. Live	1. 5/14 2. 7/14 3. 8/14
C.2 Program-specific recruiting events											Family-friendly recruiting events in community locations	200	12	2400		1. Events planned and approved 2. Organize team and materials 3. Active	1. 5/14 2. 7/14 3. 10/14
C. Subtotal															3,650		
												Sum of subtotals			160925		
												Matching total			[13500]		
												Funds to be requested			147425		