AHSIE GRANTSMANSHIP INSTITUTE 2019 THEORY OF CHANGE & LOGIC MODELS

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DIFFERENCES?

Theory of Change

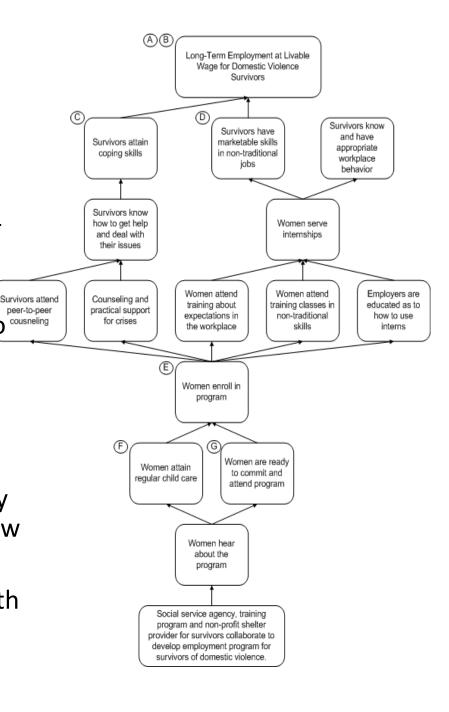
- Links outcomes and activities to explain HOW and WHY the desired change is expected to come about
- Graphically depicted
- Informs program evaluation
- May have elements of LM
- Causal model driven by hypotheses for change

Logic Model

- Identifies inputs (resources), activities, outputs, and measurable outcomes specifically
- Linear model
- Blueprint for program evaluation
- May include assumptions and context
- Evaluative model

THEORY OF CHANGE

- Begin with the end in mind (Covey) –
 work backwards to understand the
 road to where you might begin
- What are the conditions that need to be in place in order for success to occur?
- Develop an Outcomes Framework (flowchart)
- Consider any pre-conditions that may also need to exist in order for this flow to occur and modify accordingly
- Explore and identify assumptions both explicit and implicit in conditions



THEORY OF CHANGE/LOGIC MODEL

- Outcome = Outcome
- Indicator = Measurement/Instrument
- Population = Participant
- Threshold = Measurable Objective
- Then Develop/Identify Interventions that will create this outcome for this population

- TOC Example
- Outcome 1: Long-term employment at a livable wage for domestic violence survivors
- Indicator: Employment
- **Population:** Program Graduates
- Threshold: Remain in job at least 6 months and earn at least \$12 per hour

Cybersecurity
(M.A.)

Systems
Engineering
(M.S.)

Parent & Family
Education

• Care
Industrial
Design (B.S.)

• Care
Industrial
• Finat
• Wha
• Drea

ACTIVITIES

- Careers in Computer Technology & Industrial Engineering
- Financing College
- · What it takes to succeed in college
- Dream Seminar (UNV 101)
- Design Your Life Capstone
- · Just-In-Time Tutoring
- Summer Intensives
- Students
- Teachers
- Faculty
- Industry Partners
- Young Scholars Program
- Project Lead the Way Curriculum
- · Project-Based Curricula
- · Active-Learning Pedagogy-Based
- Content Expertise
- Student Development

Transition Supports

Leader Development

Dual Credit Courses

- · Growth Mindset
- Leadership Skills
- Applied Knowledge

Curriculum Alignment & Articulation - HHSME & CSUDH

Center for Creative Leadership Training & Development

Integrated & Holistic Bridging

Parent & Family Workshops

Outputs:

- 13 fully developed & articulated courses for dual credit between HHSME & CSUDH's CT & IE degrees
- 26 H.S. & Univ faculty & industry mentors trained in growth mindset strategies
- 52 H.S. & Univ faculty & industry mentors trained in CCL Beyond Boundaries Leadership curriculum
- 250 students receive growth mindset interventions
- 100 students participate in Project MARS complete program
- 100 Parents attend Parent workshops

Measurable Outcomes

- 90% of students maintain a 3.0 GPA or above in high school courses
- 90% of students participate in summer intensives
- 100% of students graduate from high school
- 20% increase in growth mindset year over year
- 50% increase in number of students applying to and enrolling in a STEM major at CSUDH as compared to control group
- 25% higher first to second year retention rate (after full matriculation to CSUDH) than control group
- 25% higher second to third year retention rate (after full matriculation to CSUDH) than control group
- 70% increase in students' social network capacity
- 80% growth in leader development pre to post experience for students
- 50% of student internship applicants successful in securing internship

Inputs:

- HHSME 17 years of experience w/PLTW; New campus & labs
- CVUHSD District w/record of innovative curriculum & creativity
- · CSUDH Student-focused, innovative-oriented campus

WHY EVALUATION?

- 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.

C. Mindel, University of Texas at Arlington
Center for Research, Evaluation & Technology

WHY CREATE A LOGIC MODEL?

- Shows the 'chain of events' that link inputs to results.
- Helps bring detail to broad, fuzzy goals.
- Summarizes the key elements of the program.
- Clarifies difference between activities and outcomes.
- Brings to light assumptions, values and context.
- Signals what to evaluate.
- Builds consensus around what the program is and what it is not.

INPUTS

(Available Resources)

Physical

- Existing Materials
- Physical Space (Labs, New STEM Center)
- Funding

Programmatic

- Existing Programs
- Existing Workshops

Human

- Individual expertise
- Champions or executives
- Staff
- Pending hires
- Leveraging of Partnerships

Institutional

- Organizational position
- Industry, public/private partnerships
- Political position

OUTPUTS

ACTIVITIES

(What we do)

Number of:

- Workshops
- Counseling sessions
- Facilitation
- Product development
- Meals served
- Trainings
- Conferences
- Media

PARTICIPATION

(Who we reach)

Number of:

- Participants
- Clients
- Customers
- Users
- Faculty
- Students
- Partners
- Staff

OUTCOMES

What results for individuals, businesses, communities.....

| SHORT | • |
|----------|---|
| Learning | |

- Awareness
- Knowledge
- Attitudes
- Skills
- Opinion
- Aspirations
- Motivation

MEDIUM Action

- Behavior
- Practice
- Decisions
- Policies
- Social action

LONG-TERM Conditions

- Human
- Economic
- Civic
- Environment
- Institutional

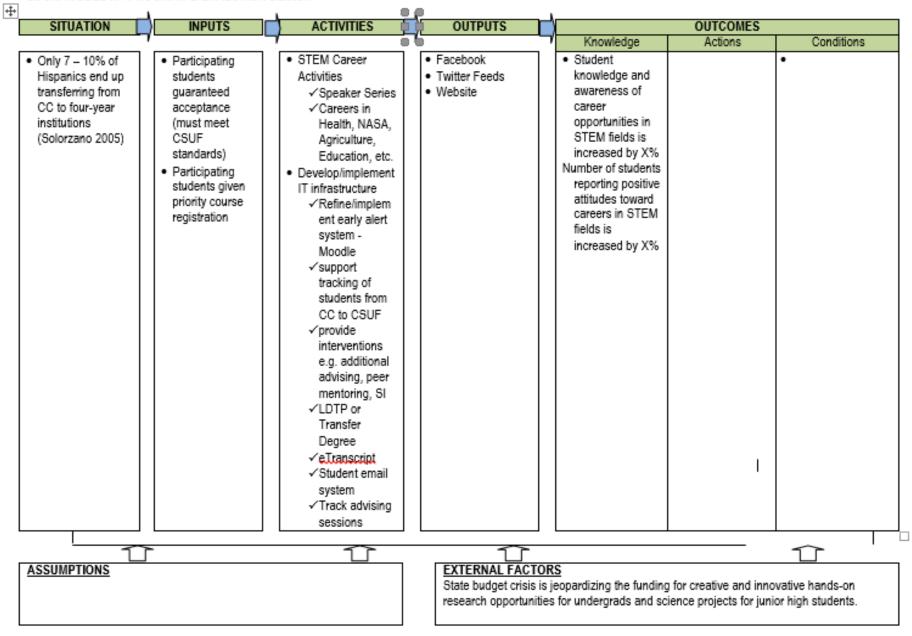
LIMITATIONS OF LOGIC MODEL

- Represents reality, but it is not reality
 - Programs are not linear
- Focuses on expected outcomes
- Challenge of causal attribution
 - Many factors influence outcomes
- Doesn't address: Are we doing the right thing?

CSUF HSI STEM - INDIVIDUAL PROPOSAL - LOGIC MODEL for PROGRAM & EVALUTION DESIGN - 3,29,2011 - DRAFT

| SITUATION | INPUTS | ACTIVITIES | | OUTPUTS | | | OUTCOMES | | |
|---|--|--|---|---|--------|---|--|--|--|
| | | 7 | 7 | | \neg | Knowledge/Attitude | Actions | Conditions | |
| Hispanics take fewer credits in STEM courses (Laird 2009) Hispanics have highest dropout rate at each step of education process (Solorzano 2007) SES – 1 in 4 Hispanics live in poverty in comparison to Whites & Asians (1 in 10) (DeNavas 2010) Cultural alienation and pressures – need of role models (Museus 2011) SB 1440 Legislation | Faculty Staff Students Community Colleges ✓ Fullerton ✓ Santa Ana ✓ Orange Coast ✓ Golden West ✓ Rio Hondo ✓ Chaffey ✓ Cerritos ✓ Mt. Sac CSU College Education Planner Test-Up Project Results Freshman Programs Peer Mentoring Program Internal Advisory Board External Advisory Board e | Develop/implement summer research experience (Malcom 2006) Undergraduate Research Opportunity Program (yearround) (Barlow 2004) On-going structured advising In All Core Courses (60 sections) If Templement Communities (Cohorts) (Fullilove 1990) Peer Mentoring Program Faculty-Student Mentoring Program Family Orientation to CSUF Mandatory Inperson Transfer Orientation Program NSM Family Day | | # of students participating in summer research experience # of students participating in year-round research experience # of structured advising sessions # of SI sections offered # of STEM Preparation workshops offered # of Peer Mentors # of Faculty Mentors # of people attending family orientation # of students participating in transfer student orientation # of participants in Family Day activities | | Increase in knowledge of students regarding services that are available to support them in attaining their degrees Increase in # of family members who indicate they support their students in educational endeavor Increase in # of students who understand STEM preparation – i.e. course selection & sequencing • | Student performance in SI and subsequent courses increases by X% as measured by grade change in comparison to non-SI students increase of graduates receiving STEM related degrees (RFA Goal) Increase in # of students transferring from CC to CSUF (RFA Goal) | Broadened studen experiences in STEM fields via research experiences IT Infrastructure is built and maintained to support students in graduating in 60/6 and 2+2(3) mode | |

LOGIC MODEL for PROGRAM & EVALUTION DESIGN



| SITUATION | | INPUTS | 🖣 | ACTIVITIES . | OUTPUTS | 4 | OUTCOMES | | |
|--------------|---|--------|---|--------------|------------------|---|-----------|--------------|-----------|
| | | | | | | | Immediate | Intermediate | Long-Term |
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| ASSUMPTIONS | | | T | | EXTERNAL FACTORS | Ū | | Û | |
| AGGUNIFTIONG | | | | | EXTERNAL PACTORS | | | | |
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Resources for Theory Of Change & Logic Models

- University of Wisconsin Extension
 http://www.uwex.edu/ces/pdande/evaluation/evallogicmodel.html
- Claremont Graduate University
 http://www.cgu.edu/pages/670.asp
- Kellogg Foundation http://www.wkkf.org

Theory of Change

http://www.theoryofchange.org/

CONTACT INFORMATION

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