Defining Actions and Values: Participatory Logic Modeling by Alternative School Teachers *RESEARCH*

Tara Shepperson, Eastern Kentucky University
Lynn Hemmer, Texas A & M University, Corpus Christi

Abstract

As part of ongoing evaluations of an alternative school for 7-12 graders, teachers were asked as a group to develop a logic model listing the activities, short-term outcomes, and long-term impact on attending students. Logic models provide visual displays of causal links from actions to outcomes, and are used as tools for program participants to reflect and clarify priorities and expectations. Responses from over a dozen teachers and staff were prompted during an hour-long faculty meeting and organized on a white board into three columns: actions, short-term outcomes, and long-term impacts. Coding for heuristics, evaluators found teachers held firm and widespread beliefs that building relationships with students was an essential first step to learning engagement. Foci on socio-emotional support and developing the whole child for adult life were more clearly articulated than standard academic measurements of achievement. Besides general outcomes such as graduating high school, going to technical school or college, or getting a job, the teachers rarely expressed defined career goals for students. When compared with other descriptive data about the school, it was concluded that teachers were cohesive in their focus on building supportive relationships with students, but the connection from relationship building to engaged learning to academic performance had not yet been realized.

Keywords: actions, values, participatory logic modeling, alternative school, teachers

Introduction

Attempts to decrease high school dropout rates have led to a recent expansion of alternative education programs, with nearly 80% of districts reporting programs in 2010 (Carver, Lewis, & Tice, 2010). Through individualized instruction, remedial curricula, nontraditional scheduling, and increased counseling, these programs seek to ensure students finish high school prepared for adult life (Hoyle & Collier, 2006). Periodically popular for over a century, modern alternative education emerged with the 1920's progressive education movement, which focused on flexible, individualized learning as opposed to the increasingly uniform, teacher-center learning of standard classrooms (Tyack & Tobin, 1974). A form of alternative education resurged in the 1960s, and in the 1990s, alternative education was often associated with charter schools (Raywood, 1999). Currently, policies to increase academic performance and reduce dropouts have led alternative programs to be championed as means for credit recovery, remediation, and graduation (Beken, Williams, Combs, & Slate, 2008; McKee & Conner, 2007).

In central city and rural locations, individual schools may report up to 50% of students leaving high school before graduating, with the problem most acute among poor and marginalized groups (Laird, Lew, DeBell, & Chapman, 2006; Swanson, 2008). Students who fail to graduate often suffer long-term financial and social consequences, including low lifetime earnings, health and marital problems, and reduced professional and personal fulfillment (Bowen, 2009). Three out of four prisoners do not have high school diplomas. Dropout parents are more likely to have children who do not finish school, setting up the potential for generational poverty and community problems (Christle, Jolivette, & Nelson, 2007).

Tardiness, truancy, and poor grades are early warning signs of school disengagement (Suh, Suh, & Houston, 2007). Failing students are more likely to live in impoverished neighborhoods, be members of a minority group, support their

own children or tend to siblings, live with non-parent relatives, or reside in foster care (Beken, Williams, Combs, and Slate, 2010). Without special attention from teachers, these students are more likely to miss classes, get behind, and eventually leave (Bridgeland, Dilulio, & Morison, 2006). This process often begins in middle school, during a time of delicate self-image, leading students to emotionally disengage from an unsatisfying environment (Berliner, 2010; Hernandez Josefowicz-Simbini, 2008).

Most dropout prevention programs are short-term endeavors. Districts purchase computer applications that provide speedy completion of course credits, allowing students to either quickly return to their regular school or obtain a diploma (Smink & Reimer, 2005). Research indicates that quick credit recovery results in no improvement in grades, test scores, or attendance, and does not meaningfully reduce dropout rates (Yerrick & Beatty-Alder, 2011). Good alternative programs offer a continuum of counseling and tutoring services, and are characterized by small enrollments, interactive learning, flexible schedules, and inclusive school climates (D'Angelo & Zemanick, 2009; Leithwood, Harris, & Hopkins, 2008).

Some alternative programs organize learning around project-based, thematic, interdisciplinary, and hands-on learning. Proponents argue that this style of learning more closely mirrors the adult world, constructs deeper conceptual knowledge, and connects students with their community and outside organizations (Boaler, 1998). There is some evidence that well-designed projects may increase performance on standardized assessments, but coherent research is lacking (Thomas, 2000). Current college- and career-readiness requirements have led some states to require increasingly stringent academic measurements of progress, but nationally, data on alternative programs are often subsumed within school and district reporting (Jobs for the Future, 2009).

The Alternative School Teacher Study

Purpose. As part of ongoing evaluations of an alternative school for 7-12th graders, teachers and staff were asked as a group to develop a logic model listing the activities, short-term outcomes, and long-term impact on attending students. By articulating their assumptions and discussing their priorities, it was anticipated that participants would reflect on their instructional goals and methods and consider to what extent current strategies were successful, whether adjustments were in order, and how specific actions impacted student outcomes.

The Setting and Students. The School for Success (pseudonym) is considered by district officials as an exemplary pilot program targeting students who show potential for success, but were failing classes, often truant, and disengaged in their home school. Located in a mixed urban and suburban Kentucky district, this public alternative program opened its doors in a renovated elementary school. It initially began instruction with 50 students, growing to 100 the year this study was undertaken. As if in agreement with Baker (1992) and Achilles and Finn (2000), who contend that students disengage long before they actually leave school, the district sought to provide a safety net for disenfranchised and unsuccessful students as early as 7th grade.

Students arrive at School for Success with learning deficits and a history of failure in the classroom. For many, this is amplified by difficult home situations that required them to hold jobs, care for siblings, parent their own children, and support family members. All students are substantially behind in school, missing foundational knowledge, and lack the academic and

emotional skills needed to take responsibility for their learning. The students' demographic profiles largely matches that of the district overall, with a majority of students designated as White, about 25% of the student population African American, and nearly 10% designated Hispanic or other. A free and reduced lunch program is available to the majority of students, and nearly 25% participate in special education.

Instruction and Staff. Instruction at the school is reported to be student-centered and cross-disciplinary to allow for "different avenues of learning through project-based teaching" (District, n.d.). Instruction is organized around four core content areas (language arts, mathematics, science, and social studies) alongside physical education and art. Out of the ordinary classes are available—for example, a thrice-weekly preschool class is held where students bring their children and learn early childhood behavior and education. The museum is the former library where classes build semi-permanent exhibits related to course topics, ranging from mummies to stream ecology. Other projects include gardening, fencing team, and a male student group who tutors disadvantaged African-American elementary school boys.

Flexible block scheduling, cross-teaching, and special projects are facilitated by a mixed group of teachers – many are new and first-year, some are veterans accustomed to working with vulnerable students, and others are non-traditional teachers, some with advanced degrees and former careers in science. The principal had earned a master's degree in Education at a prestigious university, and was known in the district for teaching science through hands-on experiments that encourage students otherwise considered disengaged. He had recently received administrator certification at a nearby regional university.

Logic Models. Logic models are graphical ways to organize information, represent thinking, visualize strategies, and display actions believed to lead to intended outcomes. Logic models have been popular since the 1970s when first adopted by federal agencies, and later became standard elements in reports analyzing processes of change in education and public programs (Chen & Rossi, 1992; Fullan, 2001: Weiss, 1997), especially when the United Way of America and W. K. Kellogg Foundation required them for grants (Knowlton & Phillips, 2012). Many formats exist, but all logic models visualize a linear causal chain from activities to short-term outcomes to long-term impacts.

Teacher Participant Logic Modeling. Modern evaluation emphasizes participant involvement in order to (1) ensure different perspectives; (2) provide reflection on priorities and processes; and (3) build internal capacities for monitoring and improvement (Donaldson, 2007; Donaldson, Christie, & Mark, 2009). Rarely do evaluation budgets or time constraints allow for expansive inclusion of all stakeholders, but involvement by primary participants who have greatest ownership and feel most accountable is essential (Patton, 2008). The group construction of a logic model was anticipated to reveal teachers' priorities and expectations and give back to them a means to reflect whether current strategies are successful.

Research Questions. Research questions guiding this investigation included:

1. What are teachers' primary short-term goals for their students?
2. How do teachers perceive they motivate students to reach these short-term goals?
3. What are teachers' primary long-term goals for their students?

4. How do teachers perceive they help students to move from short- to long-term goals?
5. How does descriptive school data support or refute the teachers' logic model?

Data Collection and Analysis

Teachers participated in the logic model exercise during a faculty meeting at the school in April, 2011. Questions and discussion took just over one hour and involved 12 participants: teachers, counselors, and the principal. Teacher responses were listed on a white board, in three columns (activities, short-term outcomes, long-term impact), and the evaluator asked follow-up questions in order to expand discussion and target information about what goals and specific outcomes teachers sought for their students. At the conclusion of the session, photographs were taken of the lists of responses on the white board, transcribed into a Word document, coded in two cycles, both categorically and for heuristics that showed shared viewpoints (Saldana, 2013).

Interestingly, teachers responded quickly with items for inclusion within the short-term student outcomes column. Initial items were organized around socio-emotional outcomes with some discussion of initiatives undertaken by the school to involve students with service learning and community outreach activities. Instruction was the third category added after additional prompting. Socio-emotion, instruction, and school initiatives remained relevant categories and are used to summarize responses in each of the three columns.

Findings

Short-Term Goals for Students.

Teachers quickly chimed in with items for the short-term outcomes. Responses fell into three categories: socio-emotional, instructional, and school initiatives & community. Most discussion centered on social and emotional development of students, indicating that was the central issue for teachers. Answers fitting into the instructional and school initiatives and community categories were both volunteered and prompted. Responses of teacher short-term student outcomes are synopsized below:

Socio-emotional Outcomes:

- For students to have well-being
- For students to communicate with teachers & staff
- For students to improve behaviors (learning to be a human first; tolerance of others; learning how to develop friendships; finding safe ways to release emotions and refresh; listening; trusting; being kind)
- New ways to focus/see themselves (be more than street smart; see themselves in new light; validate their own worthiness; see themselves taking new positions [labeled as leader, not failure]; breaking the referral pattern)

Instructional Outcomes:

- For students to be engaged
- An example is having students call for a ride to school if they miss the bus, or be willing to walk rather than miss a day
- Growing 2-3 grade levels in school work
- Relating to school work – interested and talking about it

School Initiatives & Community:

- Interacting with the community
- Having students learn what possibilities are out there for them, visiting training center, learning about careers

Teacher Actions. Teacher discussion of their actions and activities were oriented primarily around how they sought to motivate students to feel safe and engage in school. When prompted, the teachers aligned their actions with short-term student outcomes, and within the same categories as outcomes: socio-emotional, instruction, and school initiatives. Summary of teacher responses about their actions and priorities are listed below:

Socio-emotional Outcomes:

- Listening, responding to person, not crisis
- Seeing students as human first, but as potential, not a product of their problems
- Helping them develop their emotional quotient
- Ensuring basic Maslow needs
- Seeing them as half-full, not half-empty – recognizing improvement
- Being aware of the distance traveled

Instructional Outcomes:

- Knowing their interests – and using those to motivate
- Engaging students in relevant learning
- Making sure they complete work to high expectations
- Teaching with a goal-oriented approach
- Going to where they are and moving from there

School Initiatives & Community:

- Meeting and building together (with other teachers & community organizations)
- Developing systems to ensure support (emotional & instructional)

Long-Term Impact on Students. When asked to list long-term impacts of students' alternative school experience, several teachers appeared flummoxed and even stated they had not previously considered the question, being focused on day-to-day achievements. Once discussion began, however, nearly all teachers replied with hopes for students' useful and happy future. Several agreed that a few students would make outstanding contributions to society. All indicated a belief that the alternative school experience helped students be emotionally stronger and more likely to succeed. A few teachers mentioned college and technical training as future options for students, but no one specifically spoke in detail about future prospects in terms of academic accomplishments. Teacher responses about long-term goals and impact on students attending the alternative school are listed below:

Socio-emotional Outcomes:

- Emotionally and spiritually rich life – full benefits of work, family, and friends
- Maturity
- Pride, confidence, and courage

Instructional Outcomes:

- College and careers – many to trade or professional schools, some to 4-year colleges and beyond
- Holding a job, having a career, & supporting a family
- Better chance for success than before

School Initiatives & Community:

- Make decisions based on options out there
- Participate as an active citizen in the community
- Stay out of jail and be an asset to the community
- Some individual students will be inventors, CEOs, leaders

Several teachers responded:

- Never thought about that before

Short-Term Goals to Long-Term Impact. While several teachers were able to

immediately provide characteristics for abstract qualities former students should possess, there clearly had been little consideration of the extent to which the alternative school activities directly aligned with adult outcomes. Educational policy requirements that students must be college and career ready were acknowledged, but no specific actions were attached. School practice of taking students on field trips and bringing speakers in to discuss local industry and career possibilities was also highlighted. There was general agreement that instruction focused on hands-on and creative lessons was useful for problem-solving and critical thinking skills that are transferable to work and other real-world applications. Several teachers also mentioned the school focus on respect, timeliness, and social skills necessary for successful adult life. Specific teacher responses are listed below:

- College and career readiness
- Introduction to possibilities in the community (jobs, training schools, college opportunities)
- Transferable skills for future/adult world (learning to get along with others, social mannerisms, and problem-solving and critical thinking skills)

Conclusions and Discussion

Literature supports the assertion that a sense of belonging is a necessary precursor to achieving student engagement and ultimately academic achievement. Both the logic modeling activity and other evidence indicates teachers accept the central process or theory of change that for students to progress, they must first build relationships so students have a sense of belonging that can lead to engagement and ultimately academic achievement (Anastos, 2003; Foley & Pang, 2006; Shepperson, Reynolds, & Hemmer, 2013). At School for Success, administrators, counselors, and teachers enthusiastically espouse a belief that through individual attention and relationship building, students can gain the academic, social, and emotional skills needed to do well.

Supporting the pilot project as a "fix" for problem students and dropout prevention, district officials nonetheless require standard student assessment on thrice-annual state-mandated tests and other accountability measures required of all schools. The stage is set for a potential conflict between the instructional purpose cast by the school and the district requirements for academic improvement based on standardized tests. Despite a palpable sense of enthusiasm by teachers, empirical evidence questioned the success of instructional strategies to improve student academic performance. Paired samples t-tests of math scores ($t(31) = -.0.71$, $p= 0.49$) and reading scores ($t(31) = 1.23$, $p= 0.23$) on district-mandated achievement tests indicated no significant different in percentile scores from fall to spring the previous year. The participatory logic modeling similarly suggested a focus on social and emotional wellness over academics. Student results are somewhat mitigated by improved attendance rates, and reduced discipline problems. Interviews with the principal, however, indicated a push for improved academic scores and recent professional development for teachers to target academically rigorous lessons.

The logic modeling activity combined with empirical evidence showed that teachers supported relationship building and a sense of belonging that encouraged student engagement. The school needed to ensure the academic rigor that will improve learning outcomes, raise test scores, and ultimately provide added opportunities for these students' futures. Continued support from the district and real value for the students and community require that the

continuum from belonging to achievement be reached.

The goal of participant logic modeling is to understand the workings of a program from the perspective or varied perspectives of groups of participants. The process provides understanding of how an intervention (program, project, policy, or strategy) may be a success or failure not simply based on outcomes, but by understanding the implementation process. For example, a reading program would be deemed successful if student scores on assessments improved. But what if reading improvements were minimal or inconsistent? Poor results may be due to bad curriculum or poor teaching. Only by distinguishing between implementation failure (done poorly) and theory failure (done right but not effective) is it possible to identify the important attributes of the program (Funnel & Rogers, 2011).

In the case of the School for Success, the espoused theory of the teachers was that relationship building was important in order to have students feel safe and become engaged in learning. While the teachers lauded the innovative activities and nurturing atmosphere in the school, it was apparent that few of the instructional staff had conceptually linked everyday school actions with more standardized requirements of academic improvement. Ultimately, the school's success and future depend on inserting the missing link in the chain, from building relationships, to engaging learning, to improving academics, to living successful adult lives.

References

Achilles, C. M. & Finn, J. D. (2000). Should class size be a cornerstone for educational policy? In Wang, M. C. & Finn, J. D. (Eds.), *How small classes help teachers do their best* (pp. 299-323). Philadelphia, PA: Temple University Center for Research in Human Development in Education.

Anastos, E. (2003). Providing quality instruction in alternative settings. *Leadership, 33*(2), 25-38.

Anonymous School District. (n.d.). [Write up of mission, goals, and instruction]. Unpublished manuscript.

Baker, A. M. (1992). *Using a theory of dropout prevention to determine the effectiveness of the High School Redirection replication program* (Dissertation). Available from Dissertation Abstracts International 52(08), 2761A. (UMI No. 9136351).

Beken, J. A., Williams, J, Combs, J. P., & Slate, J. R. (2010, April-June). Academic alternative school settings: A conceptual Analysis, Part 1. *International Journal of Educational Leadership Preparation 5*(2). Retrieved from http://cnx.org/content/m34134/latest/

Berliner, D. (2010). Are Teachers Responsible for Low Achievement by Poor Students? *Education Digest: Essential Readings Condensed for Quick Review, 75*(7), 4-8. Retrieved online from ERIC database.

Boaler, J. (1998). Alternative Approaches to Teaching, Learning and Assessing Mathematics. *Evaluation and Program Planning, 21*, 129-141.

Bowen, K. (2009, November). High school dropouts. *L J World.com*. Retrieved October 20, 2011 from http://www2.ljworld.com/news/2009/nov/08/high-school-dropouts-kyleigh-bowen/

Bridgeland, J. M., Dilulio, J. J., & Morison, K. B. (2006). *The silent epidemic: Perspectives of high school dropouts.* Washington DC: U.S. Department of Education, Office of Educational Research and Improvement.

Christle, C., Jolivette, K., & Nelson, C. (2007). School characteristics related to high school dropout rates. *Remedial & Special Education, 28*(6), 325-339.

Carver, P. R., Lewis, L., & Tice, P. (2010, March). *Alternative schools and programs for public school students at risk of educational failure: 2007-08* (NCES 2010026). Washington DC: Institute of Education Services, National Center for Educational Statistics, Retrieved from http://nces.ed.gov/pubs2010/2010026.pdf

Chen, H. T. & Rossi, P. H. (Eds.). (1992). *Using theory to improve program and policy evaluations.* Santa Barbara, CA: Greenwood Press.

D'Angelo, F. D., & Zemanick, R. (2009). The Twilight Academy - An Alternative Education Program that Works. *Preventing School Failure, 54*(4), 211-218.

Donaldson, D. I. (2007). *Program theory-driven evaluation science: Strategies and applications*. Mahwah, NJ: Erlbaum.

Donaldson, D. I., Christie, C. A., & Mark, M. M. (2009). *What counts as credible evidence in applied research and evaluation practice?* Los Angeles, CA: Sage Publications.

Foley, R. M., & Pang, L. (2006). Alternative education programs: Program and student characteristics. *The High School Journal, 89*(3), 10 – 21.

Fullan, M. (2001). *Leading in a culture of change*. New York, NY: John Wiley & Sons.

Funnell, S. C., & Rogers, P. J. (2011). *Purposeful program theory: Effective use of theories of Change and logic models.* San Francisco, CA: John Wiley & Sons.

Hernandez Jozefowicz-Simbeni, D. M. (2008). An Ecological and Developmental Perspective on Dropout Risk Factors in Early Adolescence: Role of School Social Workers in Dropout Prevention Efforts. *Children & Schools*, *30*(1) 49-62.

Hoyle, J. R. & Collier, V. (2006). Urban CEO superintendents' alternative strategies in reducing school dropouts. *Education and Urban Society, 39*(1), 69-90. doi: 10.1177/0013124506291983.

Jobs for the Future (JFF). (2009). *Reinventing alternative education: An assessment of current state policy and how to improve it*. Retrieved March 1, 2011, from http://www.aypf.org/documents /AlternativeEducationBrief.pdf

Knowlton, L. W., & Phillips, C. C. (2012). *The logic model guidebook: Better strategies for great results* (2nd ed.). Los Angeles, CA: Sage Publications.

Laird, J., Lew, S., DeBell, M., & Chapman, C. (2006, June). *Dropout rates in the United States, 2002 and 2003*. National Center for Educational Statistics, Institute of Educational Sciences. Washington DC: US Dept. of Education. Retrieved August 1, 2011 from http://eric.ed.gov/PDFS/ED492587.pdf

Leithwood, K., Harris, A., & Hopkins, D. (2008). Seven strong claims about successful school leadership. *School Leadership and Management, 28*(1), 27-42.

McKee, J., & Connor, E. (2007). Alternative schools, mainstream education. *Principal Leadership, 8*(4), 44-49.

Patton, M. Q. (2008). *Utilization-focused evaluation*. Thousand Oaks, CA: Sage Publications.

Raywid, M. A. (1999, May). History and issues of alternative schools. *The Education Digest*, 47-51.

Ruiz de Velasco, J., Austin, G., Dixon, D., Johnson, J., McLaughlin, M., & Perez, L. (2008). *Alternative Education Options: A Descriptive Study of California Continuation High Schools.* An Issue Brief from the California Alternative Education Research Project (CAERP). Retrieved August 28, 2011 from http://jgc.stanford.edu/docs/AEO%20Issue%20Brief%204-26-08fin.pdf

Saldana, J. (2013). *The coding manual for qualitative researchers* (2nd ed.). Thousand Oaks, CA: Sage Publications.

Shepperson, T., Reynolds, M., & Hemmer, L. (2013). Showing more promise that performance: Assessment of a first year alternative program. *The International Journal of Assessment and Evaluation 19(3),* 1-8.

Smink, J., & Reimer, M. (2005). Fifteen effective strategies for improving student attendance and reducing truancy. *National Dropout Prevention Center/Network*. Clemson, SC: Clemson University.

Suh, S., Suh, J., & Houston, I. (2007). Predictors of categorical at-risk high school dropouts. *Journal of Counseling & Development, 85*(2), 196-203.

Swanson, C. B. (2008, April 1). *Cities in crisis: A specific analytic report on high school graduation.* Editorial Projects in Education Research Center. Retrieved from http://www.americaspromise.org

Thomas J. W. (2000). *A review of research on project-based learning*. San Rafael, CA: The Autodesk Foundation.

Tyack, D., & Tobin, W. (1994, Autumn). The "grammar" of schooling: Why has it been so hard to change? *American Educational Research Journal 31*(3), pp. 453-479.

Weiss, C. H. (1997). How Can Theory-Based Evaluation Make Greater Headway? *Evaluation Review 21*(4). doi: 10.1177/0193841X9702100405.

Williams, J., Beken, J., Combs, J., & Slate, J. (2010, May 6). *Graduation and Attendance Rates of At-Risk Students at Traditional and Academic Alternative High Schools: A Two-Year Statewide Study*. Retrieved from http://cnx.org/content/m34077/1.2/

Yerrick, R., & Beatty-Adler, D. (2011). Addressing Equity and Diversity with Teachers Through Informal Science Institutions and Teacher Professional Development. *Journal of Science Teacher Education 2*(3), 229-253.

Tara Shepperson is Assistant Professor, Eastern Kentucky University.
Lynn Hemmer is Assistant Professor, Texas A & M University, Corpus Christi.