Model Continuation High Schools: Social-Cognitive Factors That Contribute to Re-Engaging At-Risk Students Emotionally, Behaviorally, and Cognitively Towards Graduation

Becky Sumbera, Ed.D.
Pepperdine University

Abstract

This three-phase, two-method qualitative study explored and identified policies, programs, and practices that school-site administrators perceived as most effective in reengaging at-risk students emotionally, behaviorally, and cognitively at 10 California Model Continuation High Schools (MCHS). Eccles’ expectancy-value theoretical framework was used to gain insight on effective school context that supported at-risk students’ developmentally appropriate expectancy for success and task-value beliefs towards graduation. Results indicated that MCHS had significant policies, programs, and practices that transformed disengaged at-risk students into graduates by breaking down the barriers of students' prior negative experiences and formed new expectancy and task-value beliefs through positive learning opportunities.
Researchers across the United States have cited the leading cause of dropping out as a decline in student motivation resulting from disengagement in the educational system (Finn, 1989). California's Model Continuation High Schools (MCHS) are recognized as making a difference for the most disengaged students, and yet little is known about why their specific policies, programs, and practices are successful in re-engaging at-risk students. Considering that continuation high schools are California’s premier dropout intervention program (CDE, 2015), it is imperative to examine what critical re-engaging components in MCHS are significant for other schools to consider. This research examined the phenomenon of re-engagement in an effective school context and its developmental influences on at-risk students’ beliefs of expectancy for success and task-value towards graduation.

The study was important because there is a current need to close the dropout gap for low economic status and minority students and to increase engagement for all high school students nationwide. The literature revealed a need for greater understanding of successful policies, programs, and practices at continuation high schools and of schoolwide support structures that address not only the cognitive and behavioral challenges of at-risk students but also their psychological, social, and emotional needs. Currently, the literature focuses on the cognitive and behavioral causes of individual academic failure (Marks, 2000; McDermott, Mordell, & Stolzfus, 2001), overlooking the connection between these failures and the power of a developmentally appropriate school context to re-engage at-risk students in the educational process (Eccles & Roeser, 2011; Graham & Weiner, 2012).

Purpose of Study

Given the multifaceted interactions of the school context and the complex developmental needs of at-risk students, this three-phase, two-method qualitative study had a dual purpose. The first purpose was to explore and identify policies, programs, and practices perceived as being most effective in re-engaging at-risk students emotionally, behaviorally, and cognitively at 10 MCHS in California. The second purpose was to build upon Eccles' expectancy-value theoretical framework (EEVT; Eccles et al., 1983) by gaining insight on effective school context that supported at-risk students’ developmentally appropriate expectancy for success and task-value beliefs towards graduation.

Research Questions

The following central question guided the study at 10 purposely selected California MCHS:
1) How are 10 MCHS re-engaging at-risk students behaviorally, emotionally, and cognitively?
2) What principles of Eccles’ expectancy-value model are evident, if at all, in the identified policies, programs, and practices of the 10 MCHS?

Theoretical Framework

The data were collected, organized, and interpreted through the EEVT framework, which proposes that both social-cognitive variables (expectancy and task-value) are swayed by students’ perception of external structures (psychological factors related to school, family, peers, and community) that influence the development of their personal beliefs and affect the outcome of achievement-related choices and performances (Eccles et al., 1983). The social-cognitive
principles of EEVT are associated with five theoretical frames of research—self-efficacy theory, control theory, self-determination theory (intrinsic motivation only), interest theory, and goal theory—which in turn are connected to social-cognitive theory (Rotter, 1982), achievement theory (Atkinson, 1957), and attribution theory (Weiner, 1985). This makes EEVT framework applicable to a qualitative examination of the multifaceted and multidimensional variables for re-engaging at-risk students through the school context (Wigfield & Eccles, 2002; Wigfield et al., 1997).

The multidimensional aspects of EEVT's psychological factors make it difficult to examine re-engagement in a non-longitudinal study. Consequently, the researcher reduced the basic tenets to include only aspects of EEVT that relate to measuring the school context (policies, programs, and practices). Focusing specifically on school context will assist in examining what principles of Eccles’ Expectancy-Value Model are evident, if at all, in the identified policies, programs, and practices of the 10 MCHS that contribute to re-engaging at-risk students in the educational process (Figure 1).

**Literature Review**

When looking at student re-engagement, the literature operationalized three distinct dimensions of engagement: (a) emotional engagement, (b) behavioral engagement, and (c) cognitive engagement (Appleton, Christenson, & Furlong, 2008; Fredricks, Blumenfeld, & Paris, 2004; Newmann, Wehlage, & Lamborn, 1992). Emotional engagement encompasses students' affective relationships with educators and the school as well as the mindset about the policies, programs, and practices developed through positive or negative experiences (Yazzie-Mintz, 2007). Behavioral engagement reflects students’ participation or lack thereof in schools (Finn, 1993; Fredricks et al., 2004). Cognitive engagement is the intellectual effort or psychological investment of the student in educational activities (Newmann et al., 1992). All three were seen as important re-engagement mechanisms for at-risk students.

![Figure 1. Re-engagement Expectancy-Value Model of Achievement Behavior in Schools](image)
When looking at re-engaging at-risk students in any of the three dimensions of engagement or through policies, programs, and practices, the literature additionally highlighted three basic motivational components that need to be met: (a) competence, or the desire to experience mastery; (b) relatedness, or the desire to interact, be connected, and experience caring from and for others; and (c) autonomy, or the desire to make decisions in one's life (Deci & Ryan, 2000; Eccles & Roeser, 2010; Skinner, Kindermann, & Furrer, 2009). Deci and Ryan (2000) further maintain that these innate needs assist or decrease the students’ interpretation and internalization of external experiences into beliefs. Such needs are seen as engagement initiators that foster the internal psychological changes required for engagement to occur, as reflected in Figure 2 (Deci & Ryan, 2000; Eccles & Roeser, 2010; Eccles et al., 1983; Skinner et al., 2009).

![Figure 2. Sources of Engagement](image)

The transformation of the school context in support of relatedness, competence, and autonomy not only addresses the students’ basic psychological needs but also identifies a motivational process that produces a sense of self, supporting the EEVT model of student engagement (Eccles & Roeser, 2011; Eccles et al., 1983; Graham & Weiner, 2012). The literature review conducted for this study emphasized how school context can facilitate competency by helping students establish realistic expectations, by being consistent in their policies and practices, and by providing relevant and timely feedback (Hattie, 2009; Skinner, 1995). The literature review additionally summarized how relatedness was developed by involving students in school, engaging them in interesting and fun activities, and linking education to their future aspirations (Connell & Wellborn, 1991). By recognizing students’ perspectives and providing opportunity for student initiative and choice, educators can increase the students’ feeling of autonomy (Deci & Ryan, 2000). If these basic needs are thwarted through an inappropriate school context, disengagement begins and eventually the student drops out (Higgins, 2007).

There was a clear agreement across the different domains of research that motivation initiates the process to engage and that engagement is needed to succeed in school. However, the limited perspective on the cognitive and behavioral processes in the existing research dictates a problem-focused approach centered on the individual (Marks, 2000) rather than a more constructive psychological and developmental agenda (Eccles & Roeser, 2011). To support the educators’ need to understand how to re-engage at-risk students, this study sought to focus on the three dimensions of engagement, examining how schools develop students’ values towards graduation, expectancy for success, and the significance of the school context in re-engaging at-risk students.
Methods

The study was conducted in three phases, utilizing two methods. Phase I and Phase III used content analysis, whereas Phase II utilized a phenomenological method. Each phase was designed to delve deeper into the phenomena of re-engagement through diverse perspectives and multiple methods and strategies (Creswell, 2014; Richards & Morse, 2013). The data were collected from twice-awarded MCHS applications from a pool of 81 schools between the years 2009 and 2015 (the awards were given by the California Continuation Education Association in partnership with the California Department of Education). External evaluators were used in all phases to audit the process, intent, clarity, and to construct a reliable representation of the findings (Maxwell, 2005).

Phases I and II collected data on the MCHS to address the first research question and purpose of this study. In Phase I, the initial conventional or inductive content analysis of each site's MCHS application, including statement letters (from a student, parent, teacher, and community member) was used to triangulate policy, program, and practice data and increase the credibility of the subjective analysis of qualitative data in Phase II. The examination of documents allowed the researcher to (a) gather background information on school context, (b) determine implementation levels, (c) gather authentic language from multiple sources, and (d) expand the data to be collected in Phase II (Creswell, 2014; Richards & Morse, 2013).

Phase I utilized a 10-step data analysis process. The researcher first read each application as a whole, then read it again making notes about first impressions. Then the applications were read a third time, and the researcher began coding by initially highlighting key words or phrases indicating re-engagement of at-risk students behaviorally, emotionally, and cognitively. The researcher then made notes about actions, activities, concepts, differences, opinions, processes, or any other information that was seen as relevant to the re-engagement of at-risk students. Next, the application was read a fourth time circling any connection to the development of expectancy or task-value beliefs. The application data coding was bracketed in an attempt to understand the re-engaging policies, programs, and practices from different points of view along the three dimensions of engagement (Creswell, 2014). The researcher then horizontalized the data to discover the range of experiences about re-engagement of at-risk students (Mosustakas, 1994). Quotes from the applications were also gathered to support themes emerging from the coding to allow readers to gain their own conclusions (Richards & Morse, 2013). Finally, the researcher generated an application summary sheet of Phase I data for each site based on the 10-step data analysis.

Phase II used 60-minute semi-structured, open-ended interviews to collect data from 10 site administrators who had at least four years of leadership at the MCHS. The semi-structured interviews allowed the researcher to experience the phenomena more closely and to verify the data gathered in Phase I. The interview scripts included an interview guide and nine prompts addressing the three engagement domains. The purpose of the interviews was to describe the essence of the shared experiences at MCHS in re-engaging at-risk students behaviorally, emotionally, and cognitively (Creswell, 2014). The 10-step data analysis process utilized in Phase I was also used on the transcribed interviews, and data from Phases I and II were combined and reported according to the three dimensions of engagement as supported by the identified re-engagement policies, programs, and practices.

Phase III included a deductive content analysis based on eight theoretical components
(four related to expectancy and four to task-value) of the combined data collected in Phases I and II; this phase aimed at addressing the second research question and purpose of this study. The eight theoretical components were: (a) self-concept of ability to graduate, (b) perception that the task of graduating is doable, (c) healthy attribution for failure and success, (d) healthy locus of control, (e) perceptions of personal importance of doing well on a given task, (f) perceptions of the intentions of the task to accomplish a future goal, (g) immediate enjoyment when performing a task that is intrinsically valued, and (h) ability to overcome negative obstacles, undesirable aspects in a task, or the need to making difficult decisions. Three raters collected data for Phase III and the researcher organized the data into four content analysis summary sheets. These sheets recorded each rater’s individual scores for the eight theoretical components—raw data counts entered using a five-point ordinal implementation scale. The five-point implementation scale was developed as an adaptation of the cypress approach for evaluating specific occurrences (McCready, 2013). Fleiss Kappa was then used to evaluate the raw scores (occurrences) on each of the eight theoretical components noted in the MCHS applications and the MCHS administrator interview transcripts. Such evaluation resulted in two different Proportion of Agreement for each school, Proportion of Agreement for each scale category, Inter-Reliability Ratings (IRR), Observed Agreement (P-Bar), Chance Agreement (Pe), and Cohen's Kappa scores for each of the eight theoretical based components. To account for the raters’ scoring subjectivity and measure the inter-rater agreement, the researcher calculated Cohen's Kappa scores for each of the eight theoretical components of the transcribed interviews and applications.

Results and Findings

In Phase I, the researcher conducted an inductive document review of the 10 MCHS applications that were awarded, including four statement letters; the results identified 11 policies, 10 programs, and 11 practices that were effective in re-engaging at-risk students emotionally, behaviorally, and cognitively. Even though the policy, program, and practice themes identified diverse exemplary school context components of effective re-engagement, as expressed both through self-reporting and in writing, those components were not in themselves re-engagement initiators and required a deeper look into the school context from the perception of MCHS site administrators, which was done in Phase II.

In Phase II, the 10-step phenomenological analysis of semi-structured administrator interviews revealed eight re-engaging implementation strategies perceived to be effective with at-risk students, based on four emotional, two behavioral, and two cognitive components. First, the MCHS re-engaged at-risk students emotionally by maintaining a welcoming, safe, and clean campus, establishing meaningful and supportive adult-student relationships, providing on- and off-campus counseling support, and frequently celebrating small wins. Second, the MCHS re-engaged at-risk students behaviorally by establishing clear and high expectations for all students and seeking active student participation in educational activities, events, and learning opportunities. Finally, the MCHS re-engaged at-risk students cognitively by providing a structured and adaptable learning environment to meet at-risk students’ unique needs and by making sure the students’ educational experiences were relevant to their future.

Even though the initial findings of Phases I and II developed a picture of what MCHS were doing within their school contexts, they did not explain whether, or how, the students’ beliefs were transformed to promote re-engagement. Thus, the content analysis in Phase III
offered a deeper deductive approach to provide insight into the transformation of the students’ expectancy for success and task-value belief towards graduation.

The Phase III findings revealed that two principles of the EEVT (expectancy and task-value beliefs) were evident in all 10 MCHS, at an average exemplary implementation rate of 27% (11 or more occurrences at each site), a progressive implementation rate of 43% (7–10 occurrences), a transitional implementation rate of 24% (4–6 occurrences), and a beginning implementation rate of 6% (1–3 occurrences). The MCHS accomplished this by modifying the school context to break down the barriers of students’ prior negative experiences and form new expectancy and task-value beliefs through positive learning opportunities.

Expectancy captures the students’ beliefs about their success on a given task, and it was explored through four theoretical achievement ability beliefs (Eccles et al., 1983; Skinner, 1995; Wigfield & Eccles, 2002). The Phase III findings indicated that the strongest expectancy belief component was the development of a healthy locus of control, followed by the perception that the task of graduation was doable (Table 1). Next was the development of self-concept of ability to graduate, and last, but still significant, was the development of a healthy attribution for failure and success. These findings showed how the MCHS are building students’ positive self-efficacy and locus of control through their policies, programs, and practices by transforming students’ inappropriate beliefs about their achievement levels and abilities into more constructive and appropriate expectancy beliefs.

Table 1

<table>
<thead>
<tr>
<th>Social-Cognitive Components</th>
<th>Implementation Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Expectancy:</td>
<td></td>
</tr>
<tr>
<td>1. Healthy locus of control</td>
<td>55%</td>
</tr>
<tr>
<td>2. Perception that graduating is doable</td>
<td>30%</td>
</tr>
<tr>
<td>3. Self-concept of ability to graduate</td>
<td>25%</td>
</tr>
<tr>
<td>4. Healthy attribution for failure &amp; success</td>
<td>10%</td>
</tr>
<tr>
<td>Task-value:</td>
<td></td>
</tr>
<tr>
<td>1. Ability to overcome obstacles or make difficult decisions</td>
<td>50%</td>
</tr>
<tr>
<td>2. Perception of intentions of the task to accomplish future goal</td>
<td>30%</td>
</tr>
<tr>
<td>3. Immediate enjoyment when performing intrinsically valued tasks</td>
<td>25%</td>
</tr>
<tr>
<td>4. Personal importance of doing well on a given task</td>
<td>15%</td>
</tr>
</tbody>
</table>

Note: Cohen’s Kappa and inter-rater agreement were calculated for each component.

School programs and practices that build appropriate expectancies are important because self-efficacy and perceived control over competence are major predictors of engagement and
achievement (Bandura, 1997; Pintrich, 2003; Schunk & Mullen, 2012). In fact, motivation and achievement researchers suggest that the school context should support the building of a mastery-based mindset by progressively developing the level of the challenges the students face, by assisting students in envisioning multifaceted concepts, and by providing them with constructive and timely feedback to overcome inappropriate expectancies (Dweck & Elliott, 1983; Eccles & Roeser, 2011; Wigfield & Eccles, 2002). This was most evident in the mentoring and support programs, adaptable learning environments, and systematic monitoring of student progress observed in the MCHS discussed here.

EEVT’s second component, task-value, refers to the qualities of a specific task and how such qualities influence the student's engagement to do the task (Eccles et al., 1983). The Phase III findings indicated that the two strongest components of task-value beliefs were the perceived ability to overcome negative obstacles or make difficult decisions and the perceived intentions of the task to accomplish a future goal (Table 1). Next was the immediate enjoyment when performing an intrinsically valued task, followed by the perception of personal importance of doing well on a given task. These findings show how the policies, programs, and practices at the MCHS are building students' intrinsic motivation, interest, and goal setting to transform their inappropriate beliefs about educational tasks into more constructive, and appropriate task-value beliefs.

Task-value beliefs influence the students’ intent and persistence in the given task (Wigfield et al., 1997). The students determine the value of a school-related task in two ways, based on performance in school and on experiences in different school contexts (Higgins, 2007). If the task is useful, thought-provoking, and meaningful to the student, engagement will occur, which in turn will develop positive intentions and values and therefore affect the student’s beliefs (Pintrich, 2003; Wigfield et al., 1997). All MCHS developed the students’ interest and intrinsic motivation through student activities and events and by providing exploratory career, college, and community service opportunities.

**Conclusions**

Three conclusions resulted from the analysis of the study’s findings. First, at-risk students’ re-engagement is most effective when the school context (policies, and practices) provide learning opportunities that scaffold the development of students’ emotional, behavioral, and cognitive engagement in a successive loop, beginning with emotional engagement. Positive experiences initiate belief alteration and create an amenable mindset for the change, allowing for an open pathway for experiencing success (Finn, 1993; Fredricks, Blumenfeld, & Paris, 2004). Once this pathway is opened, the desire to interact can be nurtured to enhance behavioral engagement, which encompasses students’ effort, persistence, and active participation within the classroom and school context (Bandura, 1997; Newmann et al., 1992; Weiner, 1985). After students become active participants they are ready to begin experiencing effectiveness in their own social and physical environment, leading to cognitive engagement (Bandura, 1997; Weiner, 2007).

MCHS started emotional reengagement during the voluntary intake process, by treating new students with respect and welcoming them into a safe and caring environment. They continued to reengage students by providing individualized support opportunities to immediately address each student’s needs, frequently acknowledging the students’ progress, and encouraging active participation to holistically develop behavioral engagement in and out of the classroom. Next, MCHS provided a structured and adaptable learning environment for relevant educational
experiences to develop students' cognitive abilities. They created the feeling of effectiveness by monitoring student progress and nurturing "whatever it takes" attitudes to ensure student success and not allow failure.

Second, student engagement is most effective when the school context provides developmental opportunities that build students’ self-efficacy and locus of control, altering students’ inappropriate emotional, behavioral, and cognitive expectancy for success beliefs about their perceived ability to graduate. Students construct, interpret, and understand knowledge through positive developmental opportunities. When numerous failed attempts form inappropriate beliefs, it causes at-risk students to stop trying, to experience helplessness and low self-efficacy, or to believe that they have a fixed ability. Students with low self-efficacy tend to regard their performance as a measurement of inherent aptitude, and failure as an indicator of intellectual deficits or something out of their control (Bandura, 1997). When students develop this mindset, it modifies their perspective, decreasing engagement (Bandura, Barbararanelli, Caprara, & Pastorelli, 2001; Schunk & Mullen, 2012), and ultimately deteriorating their performance (Dweck & Elliott, 1983). Understanding the actions required provides the crucial foundation for expectancy to succeed and is the regulatory component for students towards their success or failure (Rotter, 1982).

MCHS built students’ self-efficacy and locus of control through individualized instruction and support to raise the students' confidence in their abilities. They promoted high expectations and appropriate acknowledgment of success and failure based on the students’ efforts, and they had a strong commitment to student success. MCHS also provided clear paths so students would understand how to earn required credits, offered numerous opportunities for active participation, provided individualized support and progress monitoring, and established personal goal setting through advisory and mentoring programs. By supporting the students’ personal development of responsibility for their educational outcomes, it allowed students to overcome their learned helplessness and supported their path towards success and attribution retraining.

Third, student re-engagement is most effective when the school context provides choices that build the students’ intrinsic motivation and interests, altering their inappropriate emotional, behavioral, and cognitive beliefs about perceived task-values towards graduating. EEVT explains values based on the qualities of a specific task and how such qualities influence the student's engagement to do the task (Eccles et al., 1983). The values of a specific task and their influence on the students’ engagement to do the task are key in altering the students’ inappropriate choices and lack of persistence (Eccles et al., 1983). The task’s value can be developed by providing various opportunities to nurture the students’ interest and increase their personal identity by performing the task (Carver & Scheier, 2005; Eccles et al., 1983). The findings supported how MCHS are building students' intrinsic motivation, interest, and future goal setting to turn their inappropriate beliefs about educational tasks into more constructive and appropriate task-value beliefs. All MCHS developed task-values by modifying the school context to support attainment, interest, utility, and cost-value development to improve the students’ outcome choices and performance. Wigfield and colleagues (1997) found that value beliefs influence students’ intent and persistence in a given task. By supporting the students’ interest for future personal goals, MCHS allowed students to build intrinsic motivation and altered their beliefs towards graduation and beyond.
Implications

Practical and theoretical implications resulted from this study. First, the findings can be used to inform school intervention programs and practices that reduce disengagement and dropout as well as policy recommendations that re-engage at-risk students back into the educational process. Second, to better understand the multidimensional aspects of re-engagement, this study conceptualized social-cognitive components of expectancy and task-value to validate and extend EEVT, and it provided an adapted educational model for practical implementation.

Summary

The results of this research suggest that a school context intentionally designed to address the emotional, behavioral, and cognitive aspects of engagement through the development of students' expectancy to succeed beliefs, together with the development of students' task-value beliefs towards graduation and beyond, can lead to re-engagement for at-risk students (Dweck & Elliott, 1983). The genuine importance of this study can be supported by the result of the MCHS's ability to transform disengaged at-risk students emotionally, behaviorally, and cognitively into graduates who seek career and college options. MCHS were able to overcome student obstacles and barriers by creating a school context that supported the right policies, programs, and practices to address their students' diverse needs in the three dimensions of engagement.

MCHS are exemplary sites that have much to share with other continuation high schools looking for successful re-engaging approaches for at-risk students. This research suggests that MCHS had significant policies, programs, and practices that transformed disengaged at-risk students into graduates by developing the students' expectancy for success beliefs and task-value beliefs towards graduation and beyond. The vision of the researcher is for future studies to build upon the presented concepts and share findings with educators who can address the dropout problem and truly guide all students to new heights.
References


Yazzie-Mintz, E. (2007). Students are bored, many skip school, lack adult support: High school students from 110 schools in 26 states participate in IU study. Bloomington, IN: Center for Evaluation and Education Policy, University of Indiana.