**Check & Connect Grant Language**

* The following text can be cut, pasted, and revised as needed for grant applications to implement Check & Connect.
* For a cost estimate for training to be included in your grant, please contact Gretchen Hatch at [curt0014@umn.edu](mailto:curt0014@umn.edu) or 612-624-2097
* For questions on the cost of implementing Check & Connect per student, please see <http://checkandconnect.umn.edu/docs/C&CImplementationOptions&Funding.pdf> for information or email [checkandconnect@umn.edu](mailto:checkandconnect@umn.edu)

**Check & Connect Overview**

Check & Connect is a structured mentoring program designed to enhance student engagement at school and with learning for marginalized, disengaged students in grades K-12, A goal of Check & Connect is to foster school completion with academic and social competence. Check & Connect is designed to be a supplemental intervention meant to lend additional support to students who are not experiencing success through universal interventions. This means that in a multi-tiered system of supports, Check & Connect can be considered a tier 2 and/or tier 3 intervention.

*C&C core components.* C&C consists of four core components: 1) A mentor who works with individual students and their families for a minimum of two years; 2) Regular checks by the mentor, utilizing data that schools already collect, of students’ engagement and educational progress (including grades, attendance, and behavior); 3) Timely, personalized interventions, driven by data, to reestablish and maintain students’ connection to school and learning and to enhance his/her social and academic competencies; and 4) Engagement with families - the mentor engages with families and strives to build constructive family-school relationships and foster families’ active participation in their child’s education.

*C&C essential elements.*C&C has clearly delineated elements. It consists of three core elements: relationships, problem solving and capacity building, and persistence. The focus on alterable variables, personalized intervention, commitment, and participation are essential, readily operationalized elements for building relationships with students. See Table 1 for a description of each element.

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| **Table 1. Essential Elements of Check & Connect (C&C)** | | |
| **Elements** | | **C&C description** |
| **Relationships** | | Mentors develop relationships with mentees that are based in mutual trust and open communication, and nurtured through a long-term commitment that is focused on promoting a student’s educational success. |
|  | Focus on Alterable Variables | Systematic monitoring (i.e., “check”) of indicators of disengagement (attendance, grades, behavior) that are readily available to school personnel and can be altered through intervention. |
|  | Personalized, Data-based Intervention | “Connect” supportive interventions that are personalized, not prescriptive; mentors use data that includes the student’s needs, family circumstances, and availability of school and community resources as the basis for intervention design. |
|  | Long term commitment | Mentors make a two-year commitment, which may involve following highly mobile youth and families from school to school and program to program with the district. |
|  | Participation and Affiliation with School | Mentors facilitate student access to and active participation in school-related activities and events. |
| **Problem Solving and Capacity Building** | | A cognitive-behavioral approach is used to promote the acquisition of skills to resolve conflict constructively, encourage the search for solutions rather than a source of blame, foster productive coping skills, and diminish potential to create dependency on the mentor. |
| **Persistence-Plus** | | The mentor is a persistent source of academic motivation and provides the message that “education is important for your future.” |

**History**

Research on Check & Connect began in 1990 with five years of funding support from the U.S. Department of Education, Office of Special Education Programs (OSEP). The principal investigators on this grant were Drs. Bruininks, Thurlow, and Christenson, but many professionals from Minneapolis Public Schools (MPS) were instrumental in obtaining the initial funding. Most importantly, the development of Check & Connect (1990-1995) was a collaborative effort between researchers at the Institute on Community Integration (ICI), University of Minnesota, and school- based professionals in MPS. All subsequent research on Check & Connect has been based at ICI.

To date, two studies involving random assignment of high school students with special needs (Sinclair, Christenson, Evelo, & Hurley, 1998; Sinclair, Christenson, & Thurlow, 2005) and four replication studies of K-12 students with and without disabilities using a non-experimental, pre- post research design have been conducted (Anderson, Christenson, Sinclair, & Lehr, 2004; Kaibel, Sinclair, & Vanden Berk, 2008; Lehr, Sinclair, & Christenson, 2004; Sinclair & Kaibel, 2002). Currently, four more efficacy trials are underway with students with and without disabilities in grades 1-12.

**Evidence for Check & Connect**

**As a sustained intervention, Check & Connect improves enrollment, attendance, and odds of graduation for students who are disengaged and at risk of dropout.** Ninety-four students in special education who had received Check & Connect for two years in middle school were randomly assigned to treatment and control groups upon entrance to ninth grade. By the end of ninth grade, treatment group students were significantly more likely than control group students to be enrolled in school (91% vs. 70%), to have persisted in school with no periods of 15-day absences (85% vs. 64%), and to be on track to graduate within five years (68% vs. 29%) (Sinclair et al., 1998).

**Check & Connect improves persistence, enrollment, access to relevant educational services, student involvement in IEP transition planning, and attendance for students with emotional/behavioral disabilities.** One hundred seventy-five ninth grade students with emotional/behavioral disabilities were randomly assigned to treatment and control groups (11 did not participate due to mobility or other factors) and received the intervention for four to five years. Check & Connect treatment students were less likely to drop out of school than students in the control group at the end of four years (39% vs. 58%) and at the end of five years for a subsample of students (42% vs. 94%). The effect size for treatment and control student differences for a five-year graduation rate was significant and moderate (ES = .53). Students in the treatment group were more likely than those in the control group to be enrolled in an educational program (e.g., alternative, GED), to access relevant educational services (e.g., alternative programs), to be involved in their IEP transition planning, and to demonstrate persistent attendance (Sinclair et al., 2005).

In 2006, Check & Connect met the evidence standards of the What Works Clearinghouse of the Institute of Education Sciences, U.S. Department of Education (WWC, 2006).

**Need for Check & Connect – Literature Review**

* (Be sure to include your site’s baseline data here. What concerns do you have that warrant implementation of Check & Connect?)

**Overarching problem: high school dropout.** Dropping out of school continues to be one of the most serious and pervasive problems facing public education nationally (Balfanz, Bridgeland, Bruce, & Hornig Fox, 2012). Despite evidence of an improving high school graduation rate in the United States (up to 74.7% for the class of 2010 from 66.8% for the class of 2000), the fact remains that a quarter of students who begin high school do not graduate with their peers four years later, with graduation rates even lower for Latino (68.1%), Black (61.7%), and American Indian (51.1%) students (Editorial Projects in Education [EPE], 2013). In 2009-2010, more than 500,000 students dropped out of school (Stillwell & Sable, 2013).

Individuals who drop out of high school face dire consequences. On average, individuals who drop out of high school earn $10,000 less per year than high school graduates (U.S. Department of Labor, Bureau of Labor Statistics, 2012) and are more likely than their peers that graduated to be unemployed, incarcerated, living in poverty, on public assistance, single parents, and in poor health (e.g., Bridgeland, DiIulio, Morison, 2006; Levin, Belfield, Muennig, & Rouse, 2007; Sum, Khatiwada, & McLaughlin, 2009).

The consequences of dropping out are felt not only by the individuals who drop out, but also by society as a whole. Economists estimate that the nation will lose $1.5 trillion over the next decade due to lost earnings, lost tax revenues, less purchasing power, lower levels of worker productivity, higher crime, incarceration, and public assistance (Alliance for Excellent Education [AEE], 2011). Conversely, high school graduates are more likely to live longer, engage in civic activities like voting and volunteering, raise healthier children, and raise children who graduate (AEE, 2011). These consequences and benefits point to the continued need for policymakers, researchers, and educators to focus on promoting school completion for all students. C&C2 will aid in addressing this nationwide problem by developing an intervention to target students showing initial signs of disengagement and re-engaging them in school before they are too far down the path to dropout, ensuring that they are on-track for school completion by the end of 9th grade.

**Disengagement*.*** Why target students showing signs of disengagement? Dropping out of high school is not an instantaneous event, but rather the result of a process of disengagement that occurs over time and culminates in a decision to leave school (Finn, 1989; Rumberger, 1987). Student engagement (defined as students’ commitment to and investment in their school and learning and sense of belonging and identification with school) has become the primary theoretical model for understanding and preventing dropout while promoting school completion (Christenson et al., 2008; Finn, 1989; Grannis, 1994). Finn’s Participation-Identification model (1989) describes the process by which students engage in school and learning as follows: student participation in school and learning lead to successful school performance which promotes feelings of identification with and belonging at school, which in turn leads to greater participation. Finn’s withdrawal cycle describes the opposite – the process of disengagement – in which nonparticipation or physical withdrawal (i.e., absenteeism and truancy) leads to unsuccessful school outcomes, and promotes feelings of nonidentification, which in turn perpetuates students’ withdrawal or disengagement from school and learning. These models indicate that engaging and re-engaging students in school requires comprehensive interventions that target not only academic and behavioral skills but students’ sense of belonging and valuing of school and learning as well, and that the intervention should begin as early as possible to maintain students’ engagement in school or to re-engage students who have begun the process of disengagement.

Research has documented a normative decline in engagement and motivation across school years, with engagement and motivation reaching their lowest point following the critical transition to high school (e.g., Wigfield, Eccles, Schiefele, Roeser, & Davis-Kean, 2006). However, this decline in engagement does not lead to drop out for all students. Why not? Three decades of research show that no one factor is responsible for the decision to drop out – that the process of disengagement is complex and a variety of individual, family, school, and community variables may influence the process and the decision to ultimately drop out. Of particular importance and utility are the alterable variables associated with dropout – those variables that are malleable and therefore amenable to intervention. In their review of the research on dropout, Rumberger and Lim (2008) identified alterable predictors of dropout including student factors (test scores, grades, grade retention, mobility, absenteeism, participation in extracurricular activities, misbehavior, educational expectations, perceived relevance of schoolwork) and institutional factors (family, school, and community structure, resources, and practices).

Bridgeland et al. (2006) conducted interviews and focus groups with 16-24-year-olds who did not complete high school to learn why they dropped out. They concluded: “There is no single reason why students drop out of high school. Respondents report different reasons: a lack of connection to the school environment; a perception that school is boring; feeling unmotivated; academic challenges; and the weight of real world events. But indications are strong that these barriers to graduation are not insurmountable” (p. 4), which implies that these barriers are clear targets for intervention.

**Early Warning Signs.** Fortunately, due to extensive longitudinal research on who drops out and why, researchers have been able to identify early warning signs that alert educators that students are disengaging from school well before they make the decision to drop out (e.g., Allensworth & Easton, 2005; Balfanz & Herzog, 2005; Neild, Balfanz, & Herzog, 2007: Pinkus, 2008). These warning signs of disengagement include alterable predictors for which schools routinely collect data and which are amenable to intervention – identified as the ABCs – are: “Attendance: missing 20 days or being absent 10 percent of school days; behavior: two or more mild or more serious behavior infractions; and course performance: an inability to read at grade level by the end of third grade; failure in English or math in sixth through 9th grade; a GPA of less than 2.0; two or more failures in 9th grade courses; and failure to earn on-time promotion to the tenth grade” (Bruce, Bridgeland, Hornig Fox, & Balfanz, 2011, p. 3). These predictors can be used to develop early warning systems that “could identify – at least by 9th grade – the vast majority of future dropouts nationwide” (Balfanz & Legters, 2004, p. 30).

While an increasing number of schools are putting early warning systems in place, simply identifying students who are on-track and off-track is not enough. Once students are identified, schools must intervene to help re-engage those students and get them back on-track to graduation. A common practice recommendation for addressing dropout is to implement a tiered system of supports with those students showing initial signs of disengagement receiving tier 2 interventions and those with more intensive needs receiving tier 3 interventions (e.g., Dynarski et al., 2008; MacIver & MacIver, 2009; Neild et al., 2007). However, few schools currently implement a tiered system of interventions (Duffy, 2007) and those that do are likely to struggle to find evidence-based interventions to implement at each tier to reengage students in school or to address dropout, which is why outdated, non-evidence-based practices continue to be utilized.

In regard to specific programs to prevent dropout, of the 19 dropout prevention programs reviewed by the What Works Clearinghouse to date, only 2 showed positive effects – Accelerated Middle Schools, which targets middle school students’ academic skills, and C&C. C&C is a one-on-one structured mentoring intervention designed to enhance student engagement for marginalized, disengaged students in grades K-12 through relationship building and systematic monitoring of data (“check”) and personalized “connect” interventions. C&C is conceptualized as a supplemental intervention, meaning that it is designed to complement universal initiatives of schools and districts. In a multi-tiered system of supports it is expected that universal-level instruction and practices will effectively engage approximately 80% of students, leaving approximately 15-20% of students who would likely benefit from supplemental intervention such as C&C.

**Logic Model**

**Assumptions.** Consistent with other researchers (e.g., Skinner, Kindermann, Connell, & Wellborn, 2009), our logic model assumes that engagement is a necessary condition for learning and achievement—i.e., the mediator between contextual influences and desired academic, social, and emotional learning outcomes (Finn, 1989; NRC, 2004). Engagement is considered the outward manifestation of students’ intrinsic motivation (Skinner et al., 2009). Therefore, interventions to facilitate school completion (defined as graduation from high school with the academic and social competence needed to be successful in postsecondary education and career) must target students’ motivation and engagement (e.g., Christenson, Sinclair, Lehr, & Godber, 2001; Grannis, 1994).

Research has demonstrated that interventions aimed at promoting student engagement and ultimately school completion must address engagement comprehensively, “not only focusing on academic or behavioral skill deficits but also on the social and interpersonal aspects of schooling, particularly the need for connections to other adults and peers” (Christenson et al., 2008, p. 2). In the IES practice guide for dropout prevention, Dynarski et al. (2008) assert that increasing student engagement is critical to preventing dropout and recommend school wide reforms that focus on engaging students and targeted interventions that focus on connecting students with adult advocates and supporting students in their academic, behavioral, and social skill development (including strengthening problem solving and decision-making skills). Dynarski and Gleason’s (2002) review of 21 dropout prevention programs led to recommendations that schools take a data-driven approach to addressing students’ needs, provide personal support for students’ engagement, and create personalized settings such as small groups in order to enhance relationships among students.



**Proximal**

* A relationship is formed between the mentor and student
* Increased engagement in school and with learning
* *Staying in school* (decrease in tardies and absences; increase in attendance)
* *Making progress in school* (decrease in discipline referrals; and increase in grades, credits earned, passing of required state tests)
* An increase in student:
  + Awareness of the value of education
  + Motivation
  + School Affiliation
  + Commitment to school
  + Perceived competence
  + Self-regulation skills
  + Problem-solving skills

**Target Population**

* Students who are at-risk of disengagement or dropout
* Students eligible are those who meet specific criteria defined by the referring institution, typically related to indicators of disengagement such as:
  + Attendance, behavior problems, and academic performance

**Situation**

Contextual factors such as school, community, and family practices that can either inhibit or facilitate attainment of outcomes.

In October 2008, approximately 3.0 million 16- 24-year-olds were not enrolled in high school and had not earned a high school credential. These status dropouts accounted for 8.0% of the 38 million 16-24-year-olds living in the United States (U.S. Department of Education, National Center for Education Statistics, 2010).

**Intervention**

**Check**

* Mentors systematically monitor alterable predictors of school completion: attendance, academic performance, and behavior

**Connect**

Mentors:

* Build relationships with students and families
* Problem solve with students
* Use “check” data to provide personalized and timely interventions

**Core Elements**

**Relationships**

* Focus on Alterable Indicators of Disengagement
* Personalized Data-Based Intervention
* Long Term Commitment
* Participation and Affiliation with School

**Problem Solving and Capacity Building**

**Persistence-Plus**

**Check & Connect Logic Model**

**Human Resources**

**Coordinator**

**Mentors**

**Evidence Base**

**Theory**

* Student Engagement
* Systems theory for home-school-community collaboration
* Resilience
* Cognitive-Behavioral
* Intrinsic Motivation
* Social Capital

**Research results**

* Significantly increases the likelihood that students will stay in school

**Inputs**

**Distal**

* **School Completion** (defined as high school graduation with academic and social competence)
* **Prepared for Post-secondary Education and/or Career**

**Outcomes**

**Outputs**

**Role of the mentor**

The mentor is integral to the successful implementation of C&C. A mentor is defined as a caring individual who offers guidance or instruction aimed at promoting healthy development of the mentee (e.g., Dubois & Karcher, 2005; MENTOR/National Mentoring Partnership, 2003). School-based mentoring has been associated with a multitude of positive outcomes for youth, including fewer depressive symptoms, greater acceptance by peers, more positive academic self-beliefs, and better grades (Herrera, Dubois, & Baldwin Grossman, 2013); improved academic performance, school behavior, school attendance, and academic self-efficacy (Herrera et al., 2007); and moderate improvements in support from non-familial adults, peer support, academic self-efﬁcacy, school-related misconduct, absenteeism, and truancy (Wheeler, Keller, & DuBois, 2010). These findings, in addition to the positive outcomes demonstrated in efficacy studies of C&C (Sinclair et al., 1998, 2005), suggest that school-based mentoring is an effective means of increasing student academic and behavioral engagement in school.

The C&Cmentor is a caring adult who supports the mentees in developing positive patterns of engagement at school and with learning. The mentor’s primary goals are to promote regular school participation, to keep education a salient issue for students and parents, and to fuel motivation to learn through persistent support. The mentor builds relationships with students through formal connections (checking of engagement and timely intervention support) and informal connections (fostering student interests, stopping by at lunch), problem-solving to improve students’ ability to address challenging situations, and commitment to working with students and families. The C&C mentor role is modeled after one of the commonly identified protective factors in resiliency literature – the presence of an adult in the child’s life to fuel motivation and foster the development of life skills needed to overcome obstacles (Masten & Coatsworth, 1998).

**Mentoring activities.**

***Building Relationships.*** The mentor will build relationships with each mentee. Relationships will remain focused on educational success for all participants. Mentors realize that building relationships with their mentees will take time.

***Check*.** This component is designed to facilitate the continuous assessment of student levels of engagement with school and to guide the intervention. Student levels of engagement are systematically monitored at least weekly and documented using a monitoring sheet). Engagement with school and learning is assessed by examining *alterable indicators,* that is, factors that are amenable to intervention and within the power of educators and mentors to change, including attendance (tardiness, skipping classes, absenteeism), social/behavior performance (suspension, behavior referrals, detention), and academic performance (course failures, credit accrual). In C&C, the systematic monitoring of students’ educational progress is conducted by the mentor and then discussed with the students.

***Connect*.** A critical part of C&C is delivery of individualized, timely interventions based on frequent collection of student data. To maximize the use of finite resources, the “Connect” component comprises two levels of student-focused interventions: *basic intervention*, which is the same for all C&C students, and *intensive interventions*, which are more frequent and individualized. All students receive the basic intervention, and more intensive interventions are used to supplement the basic intervention when the students are considered at high risk based on their data.

*Basic intervention* uses minimal resources in an effort to keep education salient for the students. *Basic intervention* comprises a deliberate conversation with the students about their progress in school, the relationship between school completion and the *Check* indicators of engagement, and the importance of staying in school. Mentors provide informed feedback on the students’ actual skill level and performance level compared to the desired level and provides a plan of action to close the gap between the two. The mentor problem solves with students to help them “mind” this gap. A standard five-step cognitive-behavioral problem-solving approach is used to resolve conflict and cope with barriers to students’ educational success. The steps include: 1. *Stop. Think about the problem.* 2. *What are the choices*? 3. *Choose one.* 4. *Do it.* 5. *How did it work*? Repeated conversations with students allow mentors to routinely share information and reinforce the skills that students need to stay connected with school and develop the confidence needed to meet the expectations of the school environment.

*Intensive interventions* supplement basic intervention and provide extra support for those students demonstrating high risk. Intensive interventions are personalized to the students needs and often require resource brokering, meaning that the mentor identifies the student’s needs and then connects the student with the appropriate available supports in the school or community. Intensive interventions are often determined with input from the student, family, and school personnel.

***Connect with Families*.** We know from 20+ years of implementing C&C that the family context cannot be ignored when intervening to support students’ school success. In C&C the mentor functions as a liaison between home and school, engaging in four strategies to partner with parents and enhance their participation in their child’s education including enhancing home-school communication, home visits, responding to parents questions or concerns, and encouraging home support for learning.

**Theoretical Underpinnings**

**Engagement theory***.* An important premise of the C&C and C&C2 framework is the shift in focus from *preventing* negative outcomes such as dropout to *promoting* student competence, engagement, and school success. This premise, which is strongly supported in theory and research (Bempechat, 1998; Finn, 1989; McPartland, 1994; Rumberger, 1995; Wentzel, 1998), emphasizes the importance of the person-environment fit and the distribution of responsibility for change across the school, family, community, and student (Christenson & Anderson, 2002). It has served as the overarching conceptual framework for the research on C&C since its inception in 1990. C&C and C&C2 promote student engagement in school and with learning using a model that draws upon the theoretical (Finn, 1989; McPartland, 1994) and empirical literature related to high school dropout and completion (Kaufman, Kwon, Klein, & Chapman, 1999; Rumberger, 1987, 1995).

Engagement is a multidimensional construct that requires an understanding of *affective* connections within the academic environment (e.g., positive adult-student and peer relationships) and *active student behavior* (e.g., attendance, participation, effort, prosocial behavior; Appleton, Christenson, & Furlong, 2008; Artelt, Baumert, Julius-McElvany, & Peschar, 2001). In C&C, this multidimensionality is depicted in an engagement taxonomy of four subtypes: academic (i.e., time on task, credits accrued, and grades), behavioral (i.e., attendance, behavior referrals), cognitive (i.e. perceived relevance of school, self-regulated learning), and affective (sense of connectedness to school) (Appleton et al., 2008; Reschly & Christenson, 2012). The subtypes of engagement are interrelated; therefore, intervention to promote student engagement targeting any one subtype may result in changes in the other subtypes as well. Additionally, engagement is not conceptualized as an attribute of the student, but rather an alterable state of being that is highly influenced by three key contextual factors – home, school, and peer – each of which has the capacity to provide consistent support for learning (Wentzel, 1998). As such, C&C mentors work across all three contexts: home, school, and peers.

**Resilience**. A caring adult supporting a student who faces adversity fosters resilience. The adult focuses on reducing risks and enhancing protective factors. In Check & Connect, the mentor is a caring adult who works with others to reduce the student’s risk factors, enhance his/her protective factors, and help him/her be more successful in school.

**Systems theory**. Responsibility for solving dropout is distributed among the contexts in which the student learns and develops. There must be connections among schools, families, and the community for supporting disengaged youth and enhancing school completion. It is necessary to understand the student perspective in the context of family circumstances and school resources in order to provide differentiated support.

**Cognitive-behavioral theory**. Check & Connect uses cognitive-behavioral problem solving to enhance competence, design interventions, and foster student autonomy and personal responsibility. This is the mechanism for helping students cope with and meet the challenges of the school environment and for the school environment to change to foster student engagement.

**Intrinsic motivation/self-determination theory.** Student engagement has emerged as the cornerstone of education reform initiatives and school completion programs. The NRC (2004) concluded that student engagement is represented by student belief of perceptions of competence and control (*I can*), personal values and goals (*I want to*), and social connectedness to peers and teachers (*I belong*). These perceptions of autonomy, belonging, and competence are the basis for intrinsic motivation (Deci & Ryan, 2000) and are manifested through students’ engagement (Skinner et al., 2009), particularly their *cognitive* and *affective engagement*. Threats to students’ feelings of autonomy, belonging, and competence lead to disengagement; therefore, interventions to re-engage students showing signs of disengagement must work to reduce the threats to students’ motivation or enhance protective factors to act as buffers against the threats (CMHS, 2008). Researchers have found that schools that support competence, autonomy, and relatedness have higher levels of engagement and academic success (Connell, Spencer, & Aber, 1994).

**Evaluation**

Check & Connect has built program evaluation into its implementation through systematic monitoring of alterable variables. Because mentors are regularly monitoring data such as grades, attendance, behavior referrals, etc., the monitoring form provides data to show student academic and behavioral progress over time while in the program.

Here are some steps for thinking about your evaluation plan.

**Step 1:** A first step in any evaluation planning and reporting is describing the context and the participants. This helps evaluators and evaluation stakeholders better understand your students and their needs within the broader context of the school. Consider such questions as—

1. Where is the school located?
2. How large is it?
3. What is the demographic composition of the student body?
4. How are students doing overall?

**Step 2:** Next, describe the students who will participate in Check & Connect.

1. Total number of students who participated in Check & Connect, using an unduplicated count.
2. Demographics of student participants (number or percentage), including eligibility for free/reduced lunch (SES indicator), gender, ethnicity, English Language Learner (ELL) status, disability status.
3. Programmatic characteristics of student participants (number or percentage), including grade level, school name, Check & Connect mentor, and special services received (e.g., special education, ELL).
4. Student levels of engagement with school prior to referral to Check & Connect, which are the variables systematically monitored on the monitoring form.

**Step 3:** Define your evaluation questions and how you will answer them. Possible evaluation questions and measures include:

1. To what extent were Check & Connect students more likely to stay in school?
   1. Possible measures: enrollment/retention rates, dropout rates, mobility, attendance, tardiness, and skipping class.
2. To what extent were Check & Connect students more likely to make progress in school?
   1. Possible measures: credit accrual (on track to graduate, credit deficiencies), course grades, reading objectives passed, assignment completion, accuracy of assignments, behavior referrals, suspensions, and pass rates on state standards tests for AYP.
3. To what extent were Check & Connect students more likely to complete high school?
   1. Possible measures: Calculate the high school graduation rate. You may want to consider the following categories: students who graduated from a traditional high school within four years, students who graduated from an alternative high school, students who completed a GED, and students who graduated within five years.
4. To what extent have Check & Connect students re-engaged with school and learning?
   1. Possible measures: Collect data on teacher and student perceptions of student engagement using a locally developed survey or use one of the engagement instruments described in Fredericks et al., 2011. Track Check & Connect students’ participation in school-wide activities.

**Helpful References:**

Allensworth, E. M. & Easton, J. Q. (2005). *The on-track indicator as a predictor of high school graduation.* Consortium on Chicago School Research.

Allensworth, E. M. & Easton, J. Q. (2007). *What Matters for Staying On-Track and Graduating in Chicago Public High Schools: A Close Look at Course Grades, Failures and Attendance in the Freshmen Year.* Chicago: Consortium on Chicago School Research.

Alliance for Education (2011, November). *The high cost of high school dropouts: What the nation pays for inadequate high schools.* Washington, D.C.: Author. Retrieved from http://www.all4ed.org/files/HighCost.pdf

Ames, C. (1992). Classrooms, goals, structures, and student motivation. *Journal of Educational Psychology, 84*, 267-271.

Ames, C. & Archer, J. (1988). Achievement goals in the classroom: Students' learning strategies and motivation processes. *Journal of Educational Psychology, 80(3),* 260-267.

Anderman, E. M., & Midgley, C. (2002). Methods for studying goals, goal structures, and patterns of adaptive learning. In C. Midgley (Ed.), *Goals, goal structures, and patterns of adaptive learning* (pp. 1–20). Mahwah, NJ: Erlbaum.

Anderman, E. M., & Patrick, H. (2012). Achievement goal theory, conceptualization of ability/intelligence, and classroom climate. In S. L. Christenson, A. L. Reschly, & C. Wylie (Eds.), *Handbook of research on student engagement*. New York, NY: Springer Science.

Anderson, A. R., Christenson, S. L., Sinclair, M. F., & Lehr, C. A. (2004). Check & Connect: The importance of relationships for promoting engagement with school. *Journal of School Psychology, 42*(2), 95–113.

Appleton, J. J., Christenson, S. L., & Furlong, M. J. (2008). Student engagement with school: Critical conceptual and methodological issues of the construct. *Psychology in the Schools*, *45*(5), 369–386.

Appleton, J. J., Christenson, S. L., Kim, D., & Reschly, A. L. (2006). Measuring cognitive and psychological engagement: Validation of the Student Engagement Instrument. *Journal of School Psychology, 44*(5), 427–445.

August, G. J., Anderson, D., & Bloomquist, M. L. (1992). Competence enhancement training for children: An integrated child, parent, and school approach. In S. L. Christenson & J. C. Conoley (Eds.), *Home-school collaboration: Enhancing children’s academic and social competence* (pp. 175-192). Silver Spring, MD: National Association of School Psychologists.

Bachel, Beverly K. *What Do You Really Want?: How To Set a Goal and Go for It! A Guide for Teens*. Free Spirit Publishing, 2001.

Bailey, V. (2001). Cognitive–behavioural therapies for children and adolescents. *Advances in Psychiatric Treatment*, *7*(3), 224-232.

Balfanz, R. & Herzog, L. (2005). Keeping Middle Grade Students on Track to Graduation: Initial Analysis and Implications. Presentation given at the second Regional Middle Grades Symposium, Philadelphia. Accessed at: www.betterhighschools.com/docs/NHS

C\_ApproachestoDropoutPrevention.pdf

Balfanz, R., & Legters, N. (2004). Locating the dropout crisis: Which high schools produce the nation’s dropouts? In G.Orfield (Ed.), *Dropouts in America: Confronting the graduation rate crisis* (pp. 57–84). Cambridge, MA: Harvard Education Press.

Balfanz, R., Bridgeland, J., Bruce, M., & Fox, J. Hornig (2013). *Building a Grad Nation: Progress and Challenge in Ending the High School Dropout Epidemic - 2013 Annual Update.* Washington, D.C.: Civic Enterprises, the Everyone Graduates Center at Johns Hopkins University School of Education, America’s Promise Alliance, and the Alliance for Excellent Education. Retrieved from http://www.civicenterprises.net/ MediaLibrary/Docs/Building-A-Grad-Nation-Report2013\_Full\_v1.pdf.

Blackwell, L. S., Trzesniewski, K., H. & Dweck, C, S. (2007). Implicit theories of intelligence predict achievement across an adolescent transition: A longitudinal study and an intervention. *Child Development, 78(1)*, 246-263.

Bridgeland, John M.; DiIulio, John J., Jr.; Morison, Karen B. (2006). *The Silent Epidemic: Perspectives of High School Dropouts.* Report, The Bill and Melinda Gates Foundation.

Brophy, J. E. (2010). *Motivating students to learn* (3rd Edition). New York, NY: Routledge.

Brophy, J. E., & Good, T. L. (1986). Teacher behavior and student achievement. In M. C. Wittrock (Ed.), *Handbook of research on teaching* (3rd ed., pp. 328-375). New York: Macmillan.

Bruce, M., Bridgeland, J., Hornig Fox, J. & Balfanz, R. (2011). On Track for Success: The Use of Early Warning Indicator and Intervention Systems to Build a Grad Nation, (Washington, D.C.: Civic Enterprises, 2011), http://www.civicenterprises.net/reports/

on\_track\_for\_success.pdf.

Christenson, S.L., & Hirsch, J. (1998). Facilitating partnerships and conflict resolution between families and schools. In K.C. Stoiber & T.Kratochwill (Eds.), *Handbook of group interventions for children and families* (pp. 307–344). Boston: Allyn & Bacon.

Christenson, S. L., Reschly, A. L., Appleton, J. J., Berman, S., Spanjers, D., & Varro, P. (2008). Best practices in fostering student engagement. In A. Thomas and J. Grimes (Eds.), *Best practices in school psychology V* (pp. 1099–1120). Washington, DC: National Association for School Psychologists.

Christenson, S.L., & Sheridan, S.M. (2001). *Schools and families: Creating essential connections for learning.* New York: Guilford Press.

Christenson, S., Sinclair, M. F., Lehr, C. A., & Hurley, C. M. (2000). Promoting successful school completion. In K. M. Minke & G. G. Bear (Eds.), *Preventing school problems--Promoting school success: Strategies and programs that work*. Bethesda: NASP Publications.

Christenson, S. L., Sinclair, M. F., Lehr, C. A., & Godber, Y. (2001). Promoting successful school completion: Critical conceptual and methodological guidelines. *School Psychology Quarterly, 16*(4), 468–484.

Christenson, S. L., Stout, K. E., & Pohl, A. J. (2012).*Implementing Check & Connect with fidelity: What is Check & Connect? How is Check & Connect implemented?*  Minneapolis, MN: University of Minnesota, Institute on Community Integration.

Connell, J. P., & Wellborn, J. G. (1991). Competence, autonomy, and relatedness: A motivational analysis of self-system processes. In M. R. Gunnar & L. A. Sroufe (Eds.), *Self processes and development* (Vol. 23, pp. 43–77). Hillsdale, NJ: Lawrence Erlbaum.

Deci, E. L., & Ryan, R. M. (1985). Intrinsic *motivation and self-determination in human behavior.* New York: Plenum.

DuBois, D. L., & Karcher, M. J. (2005). *Handbook of youth mentoring*. Thousand Oaks, CA: SAGE Publications.

Dweck, C.S. (2006). *Mindset: The new psychology of success*. New York, NY: Random House.

Dweck, C., and Leggett, E. (1988). A social–cognitive approach to motivation and personality. *Psychological Review, 95,* 256–273.

Dynarski, M., Clarke, L., Cobb, B., Finn, J., Rumberger, R., and Smink, J. (2008). *Dropout Prevention: A Practice Guide* (NCEE 2008–4025). Washington, DC: National Center for Education Evaluation and Regional Assistance, Institute of Education Sciences, U.S. Department of Education. Retrieved from http://ies.ed.gov/ncee/wwc.

Dynarski, M., & Gleason, P. (2002). How can we help? What we have learned from recent federal dropout prevention evaluation. *Journal of Education for Students Placed At Risk (JESPAR), 7*(1), 43–69.

Eccles, J. (1983). Expectancies, values and academic behaviors. In J. T. Spence (Ed.), *Achievement and achievement motives* (pp. 75-146). San Francisco: Freeman.

Eccles, J. S., & Wigfield, A. (2002). Motivational beliefs, values, and goals. *Annual Review of Psychology, 53*, 109–132.

Editorial Projects in Education. (2006). The high school pipeline. *Education Week, 25(41S),* 16.

Editorial Projects in Education. (2013). Diplomas count: Second chances: Turning dropouts into graduates. *Education Week*. Available at www.edweek.org/go/dc13.

Finn, J. (1989). Withdrawing from school. *Review of Educational Research, 59*(2), 117–124.

Finn, J. D., & Zimmer, K. S. (2012). Student engagement: What is it? Why does it matter?. In *Handbook of research on student engagement* (pp. 97-131). New York: Springer. Science.

Grannis, J. C. (1994). The dropout prevention initiative in New York City: Educational reforms for at-risk students. In R. J. Rossi (Ed.), Schools and students at risk: Context and framework for positive change (pp. 182-206). New York: Teachers College Press.

Halvorson, H. G. (2010). *Succeed: How we can reach our goals.* NY: Hudson Street Press, Penguin Group.

Hattie, J., Biggs, H. & Purdie, N. (1996)*.* Effects of learning skills interventions on student learning: A meta-analysis*. Review of Educational Research, 6(2)*, 99-136.

Henderson, A. T., & Mapp, K. L.. (2002). A New wave of evidence: The impact of school, family, and community connections on student achievement. Austin, TX: Southwest Educational Development Laboratory.

Janosz, M. (2012). Part IV commentary: Outcomes of engagement and engagement as an outcome: Some consensus, divergences, and unanswered questions. In S. L. Christenson, A. L. Reschly, & C. Wylie (Eds.), *Handbook of research on student engagement*. New York, NY: Springer Science.

Kaibel, C., Sinclair, M. F. & VandenBerk, E. (2008). *Check & Connect- Achieve Minneapolis! Bush Foundation interim report.* Minneapolis, MN: Minneapolis Public Schools.

Karcher, M. J., Kuperminc, G. P., Portwood, S. G., Sipe, C. L., & Taylor, A. S. (2006). Mentoring programs: A framework to inform program development, research, and evaluation. *Journal of Community Psychology*, *34*(6), 709-725.

Kaufman, P., Kwon, J. Y., Klein, S., & Chapman, C. D. (1999). *Dropout rates in the United States: 1998*. Washington, DC: U.S. Department of Education.

Kellaghan, T., Sloane, K., Alvarez, B., & Bloom, B. S. (1993). *The home environment and school learning: Promoting parental involvement in the education of children*. San Francisco, CA: Jossey-Bass, Inc.

Lee, V. E., & Smith, J. B. (1999). Social support and achievement for young adolescents in Chicago: The role of school academic press. *American Educational Research Journal*, *36*, 907–945.

Lehr, C. A., Hansen, A., Sinclair, M. F., & Christenson, S. L. (2004). Moving beyond dropout towards school completion: An integrative review of data-based interventions. *School Psychology Review, 32*(3), 342–364.

Levin, H. M., & Belfield, C. R. (2007). *Investments in K-12 education for Minnesota: What works?* Paper presented at the Growth and Justice Conference, Minneapolis, MN.

Levin, H., Belfield, C., Muennig, P., & Rouse, C. (2007). The costs and benefits of an excellent education for all of America's children. New York: Teachers College Press.

Loukas, A., Roalson, L. A., & Herrera, D. E. (2010). School connectedness buffers the effects of negative family relations and poor effortful control on early adolescent conduct problems. *Journal of Research on Adolescence*, *20*(1), 13-22.

Mac Iver, M. A., & Mac Iver, D. J. (2009). Beyond the indicators: An integrated school-level approach to dropout prevention. Arlington, VA: The Mid-Atlantic Equity Center, The

Maehr, M. L., & Midgley, C. (1991). Enhancing student motivation: A school-wide approach. *Educational Psychologist*, *26*, 399-427.

Maehr, M. & Nicholls, J.G. (1980). "Culture and achievement motivation: a second look." In N. Warren (Ed.), *Studies in cross-cultural psychology Vol 2.* London: Academic Press.

Mager, W., Milich, R., Harris, M., & Howard, A. (2005). Intervention groups for adolescents with conduct problems: Is aggression harmful or helpful? *Journal of Abnormal Child Psychology, 33,* 349–363.

Mapp, K. (2004). Family engagement. In F. P. Schargel & J. Smink (Eds.), *Helping students graduate: A strategic approach to dropout prevention* (pp. 99-113). Larchmont, NY: Eye on Education.

Martin, A. J., & Dowson, M. (2009). Interpersonal relationships, motivation, engagement, and achievement: Yields for theory, current issues, and educational practice. *Review of Educational Research*, *79*(1), 327-365.

Masten, A. S., & Coatsworth, J. D. (1998). The development of competence in favorable and unfavorable environments. *American Psychologist, 53*(2), 205–220.

McKenzie, F. R. (2008). *Theory and practice with adolescents: An applied approach*. Chicago, IL: Lyceum Books.

McPartland, J. M. (1994). Dropout prevention in theory and practice. In R. J. Rossi (Ed.), *Schools and students at risk: Context and framework for positive change* (pp. 255–276). New York: Teachers College Press.

Meece, J. L., Anderman, E. M., & Anderman, L. H. (2006). Classroom goal structure, student motivation, and academic achievement. *Annual Review of Psychology, 57*, 487-503.

MENTOR/National Mentoring Partnership. (2003). Elements of effective practice (2nd ed.). Alexandria, VA: Author. Retrieved from <http://www.eric.ed.gov/PDFS/ED502219.pdf>

Miller, W. R., & Rollnick, S. (1991). *Motivational interviewing: Preparing people to change addictive behavior*. New York, NY: Guilford press.

Miller, R. B., Greene, B. A., Montalvo, G., Ravindran, B., & Nichols, J. (1996). Engagement in academic work: The role of learning goals, future consequences, pleasing others and perceived ability. *Contemporary Educational Psychology, 21*, 388–422.

Murphy, J. J. (2008). *Solution-focused counseling in schools*. Alexandria: American Counseling Association.

Murphy, J. J. (2013). *Conducting Student-driven Interviews: Practical Strategies for Increasing Student Involvement and Addressing Behavior Problems*. New York, NY: Routledge.

National Research Council [NRC], Committee on Increasing High School Students’ Engagement and Motivation. (2003). *Engaging schools: Fostering high school students’ motivation to learn.* Washington, DC: National Academies Press.

Neild, R. C., & Balfanz, R. (2006). *Unfulfilled promise: The dimensions and characteristics of Philadelphia's dropout crisis, 2000-2005*. Philadelphia: Philadelphia Youth Transitions Collaborative, Johns Hopkins University, University of Pennsylvania.

Neild, R. C., Balfanz, R., & Herzog, L. (2007). An early warning system. *Educational Leadership, 64*(2), 28–33.

Newmann, F. M., Wehlage, G. G., & Lamborn, S. D. (1992). The significance and sources of student engagement. In F. M. Newmann (Ed.), *Student engagement and achievement in American secondary schools,* (pp.11-39). New York: Teachers College Press.

Pajares, F., Britner, S. L., & Valiante, G. (2000). Relation between achievement goals and self-beliefs of middle school students in writing and science. *Contemporary Educational Psychology 25*, 406–422.

Pintrich, P. R. (2000). Multiple goals, multiple pathways: The role of goal orientation in learning and achievement. *Journal of Educational Psychology, 92*(3), 544–555.

Pintrich, P. R., & DeGroot, E. V. (1990). Motivational and self-regulated learning components of classroom academic performance. *Journal of Educational Psychology, 82*(1), 33–40.

Pintrich, P.R., & Schrauben, B. (1992). Students' motivational beliefs and their cognitive engagement in classroom academic tasks. In D.H. Schunk & J.L. Meece (Eds.), *Student perceptions in the classroom* (pp. 149-183). Hillsdale, NJ: Erlbaum

Piper, W. E. & McCallum M. (1994). Selection of patients for group interventions. In H. S. Bernard & K.R. MacKenzie (Eds.), *Basics of group psychotherapy* (pp. 1-34). New York: Guilford Press.

Pinkus, L. (2008). *Using Early-Warning Data to Improve Graduation Rates: Closing cracks in the Education System*. Washington, DC: Alliance for Excellent Education. Retrieved from http://www.all4ed.org/files/EWI.pdf.

Ponder, P. (2009). *Graduation Pathways: Using Freshman Year Indicators.* Chicago, Illinois: Chicago Public Schools.

Pressley, M. (1986). The relevance of the good strategy user mode to the teaching of mathematics. *Educational Psychologist, 21,*139-161.

Reinke, W. M., Herman, K. C., & Sprick, R. S. (2011). *Motivational interviewing for effective classroom management: The classroom check-up*. Guilford Press.

Reschly, A. L., & Christenson, S. L. (2012). Jingle, jangle, and conceptual haziness: Evolution and future directions in the engagement construct. In S. L. Christenson, A. L. Reschly, & C. Wylie (Eds.), *Handbook of research on student engagement*. New York, NY: Springer Science.

Rumberger, R. W. (1987). High school dropouts: A review of issues and evidence. *Review of Educational Research, 57*(2), 101–121.

Rumberger, R. W. (1995). Dropping out of middle school: A multilevel analysis of students and schools. *American Educational Research Journal, 32*(3), 583–625.

Rumberger, R. W. (2001, January). *Why students drop out of school and what can be done . Paper presented at the forum Dropouts in America: How severe is the problem? What do we know about intervention and prevention?* Cambridge, MA: Harvard University, Civil Rights Project.

Rumberger, R. W., & Lim, S. A. (2008). *Why students drop out of school: A review of 25 years of research (California Dropout Research Project Report #15).* University of California Santa Barbara.

Ryan, R. M., & Deci, E. L. (2000). Self-determination theory and the facilitation of intrinsic motivation, social development, and well-being. *American Psychologist*, *55*, 68–78.

Schunk, D. H. (1991). Self-efficacy and academic motivation. *Educational Psychologist, 26*, 207-231.

Shernoff, D. J. (2010). Engagement in after-school programs as a predictor of social competence

and academic performance. *American Journal of Community Psychology*, *45*, 325-337.

Shernoff, D. J. (2013). *Optimal Learning Environments to Promote Student Engagement*. New York: Springer.

Shumow, L., & Miller, J. D. (2001). Parents’ at-home and at-school academic involvement with young adolescents. *Journal of Early Adolescence, 21(1)*, 68–91. EJ628426

Sinclair, M. F., & Kaibel, C. (2002). *Dakota County: Secondary Check & Connect programs: School Success Check & Connect program evaluation final summary report*. Minneapolis: University of Minnesota, Institute on Community Integration.

Sinclair, M. F., Christenson, S. L., Evelo, D. L., & Hurley, C. M. (1998). Dropout prevention for youth with disabilities: Efficacy of a sustained school engagement procedure. *Exceptional Children, 65*(1), 7–21.

Sinclair, M. F., Christenson, S. L., & Thurlow, M. L. (2005). Promoting school completion of urban secondary youth with emotional or behavioral disabilities. *Exceptional Children, 71*(4), 465–482.

Skinner, E. A., Kindermann, T. A., Connell, J. P., & Wellborn, J. G. (2009). Engagement as an organizational construct in the dynamics of motivational development. In K. Wentzel & A. Wigfield (Eds.), *Handbook of motivation in school* (pp. 223–245). Mahwah, NJ: Erlbaum.

Skinner E. A, Belmont MJ. 1993. Motivation in the classroom: reciprocal effects of teacher behavior and student engagement across the school year. Journal of Educational Psychology. 85, 571–81.

Skinner, E. A. & Pitzer, J. R. (2012). Developmental dynamics of student engagement, coping, and everyday resilience. In S. L. Christenson, A. L. Reschly, & C. Wylie (Eds.), *Handbook of research on student engagement*. New York, NY: Springer Science.

Stillwell, R., and Sable, J. (2013). *Public School Graduates and Dropouts from the Common Core of Data: School Year 2009–10: First Look* (Provisional Data) (NCES 2013-309rev). U.S. Department of Education. Washington, DC: National Center for Education Statistics. Retrieved June 6, 2013 from http://nces.ed.gov/pubsearch.

Stipek DJ. 1998. *Motivation to Learn: From Theory to Practice*. Boston: Allyn & Bacon.

U.S. Department of Labor, Bureau of Labor Statistics. (2012). *Education pays.* Available at http://www.bls.gov/emp/ep\_chart\_001.htm

Weiner, B. (1986). *An attribution theory of motivation and emotion*. New York: Springer-Verlag.

Wentzel, K. R. (1998). Social relationships and motivation in middle school: The role of parents, teachers, and peers. *Journal of Educational Psychology, 90*(2), 202–209.

What Works Clearinghouse [WWC]. (2006). *Intervention: Check and Connect*. Washington, DC: Department of Education, Institute of Education Sciences. Retrieved from <http://ies.ed.gov/ncee/wwc/reports/dropout/check_conn/>

Wigfield, A., & Eccles, J. S. (2000). Expectancy-value theory of achievement motivation. *Contemporary Educational Psychology, 25,* 68–81

Zimmerman, B. J. (2000). Attaining self-regulation: A social cognitive perspective. In M. Boekaerts, P. R. Pintrich, & M. Zeidner (Eds.), *Handbook of Self-Regulation* (pp. 13-39). San Diego: Academic Press.

Zimmerman, B. J. (2008). Goal setting: A key proactive source of academic self-regulation. In D. H. Schunk & B. J. Zimmerman, (Eds.), *Motivation and Self-Regulated Learning: Theory, Research, and Applications* (pp. 267-296). New York: Lawrence Erlbaum.

Zimmerman, B.J., & Schunk, D.H. (2008). Motivation: An essential dimension of self regulated learning. In D.H. Schunk & B.J. Zimmerman (Eds.), *Motivation and self regulated learning: Theory, research, and applications,* (pp. 1-30). New York, NY: Lawrence Erlbaum Associates.