CHRISTENSEN INSTITUTE

THE MISSING METRICS:

Emerging practices for measuring students' relationships and networks

BY MAHNAZ CHARANIA, PHD, AND JULIA FREELAND FISHER

JULY 2020

TABLE OF CONTENTS

Executive Summary 3

Introduction 5

- Measuring relationships to address opportunity gaps 5
- Our approach 6

Measuring students' networks: A four-dimensional framework 8

- Dimension 1: Quantity of relationships 8
- Dimension 2: Quality of relationships 11
- Dimension 3: Structure of networks 13
- Dimension 4: Ability to mobilize relationships 15

Looking ahead: Recommendations for building social capital through practical measurement 17

- Start early: Integrate measurement goals into program design 17
- Leverage technology: Make students' relationships and their growth visible 17
- Harness the power of 4D vision: Build a comprehensive view of students' networks 18
- Invest in R&D: Align efforts among education practitioners, researchers, and funders 18

Conclusion 19

Appendices 20

- Appendix A: Programs building students' social capital 20
- Appendix B: Approaches for measuring social capital 21

Notes 26

About the Institute, About the authors 28

EXECUTIVE SUMMARY

Young people need the right resources at their disposal to navigate uncertain times and to pursue their evolving interests and passions. All too often, however, a critical resource in the opportunity equation repeatedly goes unmeasured: students' social capital.

Social capital describes students' access to, and ability to mobilize, relationships that help them further their potential and their goals. Just like skills and knowledge, relationships offer resources that drive access to opportunity.

Most schools and programs wholeheartedly agree that relationships matter. But far fewer actually measure students' social capital. Oftentimes, relationships, valuable as they may be, are treated as inputs to learning and development rather than outcomes in their own right. In turn, schools routinely leave students' access to relationships and networks to chance.

To address this gap, a host of early innovators across K–12, postsecondary, and workforce development are making important strides toward purposefully building and measuring students' social capital in an effort to expand access to opportunity. Drawing on those emerging practices, this paper offers a framework for measuring social capital grounded in both research and practice.

Just like skills and knowledge, relationships offer resources that drive access to opportunity.

Relationships and networks are admittedly complex. But measuring across multiple dimensions of students' networks can help educators and administrators make sense of that complexity. Schools and systems that are starting to prioritize students' social capital rarely use a single metric to gauge how students access and experience relationships. Instead, these programs are capturing data across four interrelated dimensions. These four dimensions include:

1. *Quantity of relationships* measures who is in a student's network over time. The more relationships students have at their disposal, the better their chances of finding the support they need and the opportunities they deserve.

2. *Quality of relationships* measures how students experience the relationships they are in and the extent to which those relationships are meeting their relational, developmental, and instrumental needs. Different relationships offer different value as students' needs evolve.

3. *Structure of networks* gauges the variety of people a student knows and how those people are themselves connected. Different people with varied backgrounds, expertise, and insights can provide students with a wide range of options for discovering opportunities, exploring interests, and accessing career options.

4. *Ability to mobilize relationships* assesses a student's ability to seek out help when needed and to activate different relationships. Connecting a student to relationships isn't enough. Young people must be able to nurture relationships and recognize how and when to leverage relationships as resources in their life journey.

Diversity of students' networks—across racial, ethnic, socioeconomic, and professional lines—undergirds all four of these dimensions. Measuring for diversity can ensure that rather than constraining students to a narrow professional path, a fixed set of learning experiences, or a homogeneous network, diverse relationships open new doors and perspectives at various junctures of a student's journey.

The early innovators who are starting to measure these various dimensions of students' social capital are taking a first, important step toward intentionally building students' relationships as outcomes to their learning and development. Over time, additional, validated strategies for measuring these four dimensions of social capital are needed to systematically reshape how schools and programs define student success and account for the critical role that networks play in the opportunity equation.

Looking ahead, this initial work can begin to drive the next wave of much-needed research and practice partnerships, as well as investments, to support the development and scaling of innovations that prioritize students' relationships alongside academic gains. By intentionally measuring students' social capital, education systems can start to build an evidence base for closing the social side of opportunity gaps and ensuring all students are supported equitably in their path to economic prosperity.

INTRODUCTION

Conventional thinking often goes that if students work hard, they will succeed academically and achieve their desired level of economic success. For far too many students, this equation is incomplete. The belief that our schools are society's "great equalizers" continues to fail millions of students in reaching their fullest potential. Large and remarkably consistent academic achievement and attainment gaps need to be addressed. But they are only part of the story.[1] The divide between high- and low-income students in our country today also reflects a deep inequity hiding behind the meritocratic mask: students' disparate access to social capital.

Social capital describes the benefits that people accrue by virtue of their relationships or membership in social networks. In our research to aid schools and postsecondary institutions and the students they serve, we define social capital as students' access to, and ability to mobilize, relationships that help them further their potential and their goals.[2]

Building students' social capital is an equity imperative for any system committed to closing opportunity gaps. Groundbreaking research on the drivers of social mobility suggests that social capital strongly predicts whether students will move up the income distribution ladder.[3] In other words, access to opportunity depends on social connections, not just on formal education. Many working adults may not be surprised by those findings. After all, an estimated half of all jobs come through personal connections.[4]

Although the value of relationships may be most apparent when graduates hit the job market, decades of research have shown that, at every step along the education pipeline, relationships matter. Starting as early as elementary school, exposure to working adults shapes students' career aspirations and trajectories.[5] Developmental relationships drive everything from higher grades to persistence in school.[6] And the vast majority of young people seeking out work while still in school turn to their networks for help.[7]

Taking the notion that "relationships matter" a step further, social capital research reveals that relationships are a resource that can offer *lasting* value. This value ebbs and flows as new challenges and opportunities arise in students' lives. Some interactions may be brief in duration but large in impact. A referral to a job is a case in point. But many relationships are rarely one-and-done. Students don't turn to that one caring adult, peer, or mentor at a single juncture and then move on with their lives. Instead,relationships can offer durable, ongoing resources such as guidance, information, and support as students make their way through school and life. Just like skills and knowledge, networks are an asset that students will rely on long after they graduate. Long term, a broad and diverse reservoir of positive relationships increases career optionality, buffers risk, and extends longevity.

Measuring relationships to address opportunity gaps

Measurement and equity go hand in hand. Depending on their background, students and young adults report vastly different webs of relationships at their disposal. Yet despite their indisputable value in the opportunity equation and broad agreement that "relationships matter," there's scarce attention paid to actually measuring students' relationships and the value of the networks they form over time.

In part, this is because relationships tend to be seen as *inputs* to learning and academic achievement. Teachers and tutors can boost learning, mentors can increase retention, advisors and experts can expand career prospects. Treating relationships as inputs to these critical student outcomes isn't inaccurate—it's just incomplete. Some short-term relationships can offer real value. But programs hoping to expand access to opportunity should also

aim to broker relationships that themselves outlast discrete interventions. A reservoir of relationships that is built and maintained through the course of and beyond a student's time in school will be instrumental in closing the opportunity gap. To do this well, programs must start to treat relationships as *outcomes* in their own right, quantifying and tracking them over time alongside academic metrics.

Good measurement can allow programs to capture information to reshape their practices so that all students are supported equitably, based on their social needs and their professional ambitions. By intentionally measuring students' social capital, education systems may begin to understand whether they are tapping into existing relationship assets in students' lives and making headway on otherwise-hidden relationship gaps.

So, how do education systems begin to reliably and equitably measure students' social capital and ensure that all students—particularly those on the wrong side of opportunity gaps—graduate with not just skills and knowledge but also a robust network?

Our approach

Measuring social capital is not a new proposition. Decades of research has surfaced theories, methodologies, and instruments for understanding individual- and community-level social capital. These methodologies and instruments have not, however, made it into the mainstream education market. Fortunately, there have been important attempts in recent years to change that. For example, Next Generation Learning Challenges (NGLC), an organization that supports educators who are reimagining public education, has integrated social capital as an outcome into its MyWays student success framework.[8] In addition, the Search Institute, an organization studying how relationships shape youth success, offers one of the leading frameworks on the qualities of developmental relationships. It has summarized the available research on social capital measurement, particularly in support of youth of color and low-income young people, in its recent literature review, "Defining and Measuring Social Capital for Young People."[9]

This report builds on those efforts by offering schools and systems practical ways for integrating measurement of social capital into their existing priorities. We draw on practices that we identified among early innovators at 17 organizations across K–12, postsecondary, and workforce development that are starting to develop and test new ways to measure their students' access to, and ability to mobilize, social capital. See Appendix A for a complete list of the programs we reference throughout.

We then categorized these emerging practices along four dimensions anchored in empirical research on why and how social capital drives access to opportunity. Three of the dimensions serve as a lens to measure students' access to relationships: the **quantity** of relationships in students' networks, the **quality** of relationships in students' networks, and the **structure** of students' networks. These three

dimensions reflect broader sociological, economic, and political science research on the ways in which social capital shapes individuals' access to both critical supports and new opportunities. The framework's fourth dimension is students' **ability** to mobilize networks. This dimension reflects the broader youth development and social and emotional learning research on the ways in which young people's skills and mindsets shape how they build, maintain, and activate relationships.

Diversity of students' networks undergirds all four of these dimensions in various ways. Diversity can refer to different racial, ethnic, and socioeconomic backgrounds represented in students' networks, as well as the array of expertise and professional experiences. Rather than constraining students to a narrow professional path or a fixed set of learning experiences, a diverse network opens new perspectives and new doors at various junctures of a student's journey. In other words, when it comes to unlocking students' potential and expanding their access to opportunity, diversity yields optionality. Diversity is also critical when it comes to nurturing students' ability to develop relationships with others that are different from one's own social identity. Fostering these relationships not only offers young people access to opportunities that may be beyond their reach, but also the opportunity to mutually build emotional and cultural competencies as they maintain relationships over time.

Although nascent, early efforts are beginning to show evidence of closing the opportunity gap for youth and adults alike by measuring along these dimensions. In the next section, we summarize the four dimensions in a conceptual framework that is grounded in research and practice for building students' social capital. The framework is meant to help schools and systems start to gather information and measure their efforts to equitably build students' relationships and networks as gateways to opportunity.

Figure 1. A four-dimensional framework for measuring students' social capital

QUANTITY OF RELATIONSHIPS

Definition:

The number of people in a student's network over time.

Why it matters:

The more relationships students have, the better their chance of finding support and accessing opportunities.

QUALITY OF RELATIONSHIPS

Definition:

How the student experiences the relationship.

Why it matters:

Different relationships offer different value as students' needs evolve. Positive relationships can help meet students' relational, developmental, and instrumental needs.

STRUCTURE OF NETWORKS

Definition:

The different people the student knows and the ways in which they're connected.

Why it matters:

Different network structures serve different, critical functions. Tight-knit webs of relationships offer students reliable support. Diverse networks provide channels for discovering new opportunities.

ABILITY TO MOBILIZE RELATIONSHIPS

Definition:

The mindsets and skills a student needs to activate relationships.

Why it matters:

Teaching students the value of social capital enables them to be active builders of their networks. Knowing how to cultivate and maintain networks enables them to leverage a reservoir of relationships throughout their lives.

"Without the data—and the tools to collect and analyze the data—how can we measure the impact of expanded networks for our students?"

—Kate Schrauth, executive director, iCouldBe

MEASURING STUDENTS' NETWORKS: A FOUR-DIMENSIONAL FRAMEWORK

For each dimension listed below, we begin by briefly summarizing supporting research on the dimension's value toward building students' social capital. We then draw from existing research and practices observed among early innovators to offer guiding questions grounded in practical measurement approaches.

These guiding questions enable school and system leaders to gather data, predict which social capital interventions would most benefit different students, and set priorities to equitably support students' access to opportunity.[10] Depending on the key questions programs aim to answer, we also offer an initial set of indicators for system leaders to consider. Starting with baseline data, these indicators can help schools gauge growth in both students' access to diverse relationships and their ability to mobilize relationships over time. We then spotlight emerging measurement approaches from the programs we identified that are intentionally designing experiences to build students' social capital.

Dimension 1: Quantity of relationships

Key questions to guide measurement:

- Who is in a student's network?
- Are students expanding their networks through program activities?
- How many relationships does a student have across different backgrounds, professions, or geographies?

Indicators to consider tracking:

- Number of strong- and weak-tie relationships a student maintains in everyday life
- Number of peers and adults a student turns to for different supports
- Number of professional connections a student forges over the course of a program
- Number of friendships and other connections a student builds as a result of the program

The sheer number of relationships in students' lives will impact their education and career journey. The more diverse relationships that students have at their disposal, the better their chances for finding support and accessing an array of opportunities.

A comprehensive approach to measuring quantity will take into account *all* of the relationships students can turn to. As systems embark on better measuring their students' networks, it's worth noting that they may be tempted to focus on the strongest connections—or "ties"— in students' lives. But broader research on social capital and emerging practices on the ground would counsel against focusing solely on strong relationships. Although the descriptors sound like value judgments, stronger isn't always better. Sociology research has shown that "weak ties," or those with whom we interact less frequently, can also offer real value by providing access to new information, supports, and opportunities that our stronger-tie networks lack.[11] This finding is especially critical if education systems are interested in nurturing networks that unlock opportunities for young people on the wrong side of opportunity gaps.

Taking into account *both* the strongest relationships as well as the casual acquaintances in students' lives, systems can start to gain visibility into whether and how students' networks are growing over time.

This numbers game is also an equity indicator for programs aiming to close opportunity gaps. Data suggests a gap in access to networks of both informal mentors and professional connections between students from high-income households and those from low-income households. In fact, young people from the top socioeconomic quartile report nearly double the rate of non-family adults accessible to them compared to young people from the bottom quartile.[12] This gap should be troubling to anyone trying to support students' success not only in school, but also in accessing high-quality jobs down the line. Knowing numerous different people, particularly those working across a variety of professions, is critical to expanding a young person's sense of what's possible. Without broad, diverse networks, less-connected students will be at a distinct disadvantage to their better-connected peers.

Without broad, diverse networks, less-connected students will be at a distinct disadvantage to their better-connected peers.

Emerging measurement approaches

Efforts to measure the quantity of students' relationships should not start with a baseline of zero. All young people come to school with existing relationship assets. Many education interventions *add* to those assets in the course of learning pathways by connecting students to additional peers, educators, community members, and mentors. Education systems can begin to account for existing relationships in students' lives and then keep track of how students expand on those assets over time. The innovative programs we've studied are using three main approaches to measure the size of students' networks: relationship mapping, checklists, and student surveys.

Relationship mapping

One strategy to capture baseline data on the number of relationships at students' disposal is the practice of relationship mapping. Mapping relationships is the first step, not the endgame, to keeping track of the size of students' networks. This approach prevents schools from leaving students' access to connections to chance and positions program designers to identify, early on, those who may need additional supports. From there, programs can repeat mapping exercises at regular intervals to understand if, and to what extent, students are increasing the number of their relationships as a result of their school or program. Here are a few examples:

- **The Making Caring Common Project** at the Harvard Graduate School of Education has created a tool to help K–12 schools visually map the relationships between students and staff. In schools using the "Relationship Mapping Strategy," faculty and school staff are presented with student rosters and asked to identify the students with whom they feel they have a strong connection. Students can likewise generate a list of connections and identify the faculty and staff with whom they feel they have strong connections. Schools can then work to ensure that every student has at least one—but ideally many—positive and stable relationships at school.[13]
- **iCouldBe**, a virtual mentoring program, connects high school students to online mentors who guide them through a college and career curriculum. The curriculum combines network-mapping with a series of activities called "quests" that prompt students to identify and forge connections based on their academic and career interests. Many quests encourage students to reach out to other mentors on the iCouldBe platform who share their interests. Other quests ask students to build offline relationships at school or in their community. At each juncture, students add these additional connections to their network maps on the iCouldBe app. As a result, iCouldBe can keep up-to-date information on the number of connections students are forging throughout the course of their program.

Curriculum-embedded activities and checklists

Checklists are another method being used by programs to keep track of the quantity of relationships in students' lives. These checklists can help programs ensure students are building larger networks to support their short- and long-term goals. A few examples include:

- **Beyond 12**, a virtual college coaching platform, includes specific network-expanding activities as part of its college success curriculum. Together, coaches and students keep track of whether students are hitting a series of relationship-specific goals. Example activities include students getting to know their financial aid officer, getting to know a campus advocate or mentor, and identifying at least three peers who can serve as references. By capturing data like these over the course of the school year, Beyond 12 is measuring the extent to which students are growing their on-campus networks.
- **Cajon Valley Union School District**, a public school district that provides K–12 students with career-related learning, focuses on exposing students to a wide range of professionals through a curriculum-embedded activity called "Meet-a-Pro." Educators leverage tools like Nepris, an

"Our motto is: 'There is no significant change without significant relationships.' ... At the end of six months, our goal is for program participants to have 75 new relationships."

—Juan Peña, chief program officer CrossPurpose

online marketplace of industry experts, to invite professionals across industries to share their expertise and excitement about their field of work with students. Nepris allows the district to effectively keep track of the total number of sessions and different range of professionals put into reach for students.

Student surveys

Some programs have begun asking students to share information about the size and composition of their networks in pre- and post-program surveys. For example:

- **CrossPurpose**, a career- and community-development organization in Denver, conducts a social capital survey with all of its participants, with the express goal that participants gain 75 new relationships by the end of the six-month program.[14] CrossPurpose's survey specifically asks participants, *"Please estimate the number of close relationships you maintain in your everyday life. We would qualify a 'close relationship' as a relationship with which you have regular face-to-face contact, and consider the person supportive and committed to your well-being."* Beyond just these strong ties, CrossPurpose also asks for estimates of the number of broader relationships participants maintain across various domains including family, work, religious/spiritual association, and neighborhood.
- **Braven**, a nonprofit that partners with postsecondary institutions to help underrepresented young people to secure high-quality first jobs, asks students a range of questions related to the size of their networks over the course of the program. These include questions such as, *"How many new professionals have you connected with?"* and *"Indicate the number of connections you have made on LinkedIn (minimum 50 expected)."*

These are just a few examples of survey items to better understand how students' networks are or are not growing in the course of programming. See Appendix B for a complete list of sample survey items.

Dimension 2: Quality of relationships

Key questions to guide measurement:

- Do students feel comfortable turning to individuals in their network for help?
- Are individuals in students' networks stepping in to offer support or to broker access to new opportunities?
- Do students feel they belong in a school, program, or workplace setting?
- Are relationships forged in the course of a program poised to outlast the program?

Indicators to consider tracking:

- Degree of trust in relationships
- Degree of adult or mentor's attunement with student's needs[26]
- Belief that the adult or mentor values the young person's preferences and interests
- Level of satisfaction with the relationship
- Presence of adult or mentor behaviors geared toward healthy development
- Presence of adult or mentor behaviors aligned with the young person's personal, academic, or professional goals
- Amount of time voluntarily invested outside of formal programming in the relationship

Understanding relationship quality can provide insights into conditions that enable a relationship to develop in the first place, the value that relationship offers, as well as the elements within the relationship that sustain it.

Measuring relationship quality hinges on an enormous array of factors that can be difficult to capture with precision. That said, decades of youth development research can contribute to education programs' measurement strategies to understand the relational aspects, the developmental value, and the instrumental value of particular relationships.

Relationship quality depends in part on how young people feel about a given relationship, sometimes dubbed relational indicators. Mentoring programs have a long history of trying to measure the relational aspects of mentor-mentee relationships, although these efforts are not as common inside of schools. The National Mentoring Resource Center offers a toolkit with a host of indicators as well as a validated survey that can be used by schools.[15] Its indicators include measures of young people's belief that their mentor values their preferences and interests, as well as indicators of emotional engagement and overall satisfaction with the relationship. Some survey instruments likewise capture information about mentors' or adults' perceptions of the relationship.

Although understanding these relational aspects is important, it's not the only way to gauge relationship quality, especially as relationships evolve and mature. Other measures exist to gauge the developmental quality of relationships. The Search Institute has developed a framework identifying five elements that contribute to "developmental relationships": expressing care, challenging growth, providing support, sharing power, and expanding possibilities.[16] These elements reflect the degree to which a given relationship develops a young person's positive identity, agency, and connection to community, or sense of belonging.

Finally, how well students' relationships align with their actual goals is an important indicator of quality. This can be particularly important for programs aiming to expand career options or help graduates secure high-quality jobs. Measuring this alignment will capture what some researchers dub instrumental value—that is, what a relationship helps a young person to achieve—such as finding or succeeding in a job, learning specific social-emotional skills like responsive listening or time management, or accessing guidance and support needed to succeed academically.

How well students' relationships align with their actual goals is an important indicator of quality.

Emerging measurement approaches

Based on our research, measuring relationship quality remains a challenge for programs, even those highly invested in nurturing networks.[17] Self-report surveys to both students and mentors, or adults intended to support those students, are the primary method that the innovative programs we studied are using to try to measure the quality of the relationships forged in the course of their experiences.

Surveys

Surveys are one method for capturing information about the relational, developmental, and instrumental value that relationships are or are not providing to students. A number of the programs we studied have embedded survey items aimed at understanding these aspects of quality. For example:

- **ASU Local** is a hybrid online learning and work-based learning degree program with an explicit aim of diversifying students' professional networks. The model includes high-touch supports with academic and career coaches as well as curriculum-embedded client projects with local businesses. In its student survey, ASU Local asks students to rate

their student-coach relationship quality on a Likert scale through the following statements: *"I feel supported by…the coaches"* and *"I feel like the…coaches have created a comfortable and safe environment."* ASU Local also aims to understand the depth of relationships students form during their industry-embedded projects by asking students to rate the following statements: *"I consider my new connections members of my professional network" and "I am likely to reach out to this network of professionals in the future."*

- **Union Capital Boston (UCB)**, a community development model in Boston, aims to help both young people and adults access economic opportunity through civic engagement. UCB offers participants access to these forms of social capital through frequent in-person "Network Nights" that include, among other activities, a "Marketplace" where participants can request or offer help. UCB uses surveys to measure participants' access to what the program dubs both "social supports" and "social leverage."[18] Through Network Night exit ticket surveys, UCB asks participants about the nature of the networking experience and the extent to which exchanges or reciprocity took place, including: *"What were your emotions tonight at Network Night? (Happy, Shy, Lonely, Inspired, Bored)" and "Did you participate in Marketplace tonight?."*
- **nXu** is a nonprofit focused on helping youth explore their purpose in the context of diverse communities. The program specifically aims to broker new, diverse peer networks among students who might not otherwise have met. To understand if those friendships are, in fact, forming and if they are durable beyond the program itself, nXu asks students: *"In the past 3 months, how many nXu students have you spent time with outside of school AND outside of nXu sessions?"*

For a list of additional survey items intended to measure the quality of relationships in students' networks, see Appendix B.

Dimension 3: Structure of networks

Key questions to guide measurement:

- How are the people in a student's close, strong-tie support network connected to each other?
- Are the people in a student's broader network themselves members of a variety of different networks?
- Do students know professionals across a wide range of careers or a wide range of professionals working in the professions they are interested in?
- Do students' networks expose them to a range of adults and/or peers across racial and ethnic groups?

Indicators to consider tracking:

- Nature of relationships formed (including where relationships are formed and with whom)
- Attributes of those with whom relationships are formed (including background and career expertise)
- Source of relationships formed (including whether a student met someone through an existing relationship or a specific mentor)
- Student's ability to name connections across or within particular professional industries

"If students, especially underrepresented students, are not learning the language of the workforce and gathering a network of people who want them to succeed, they are unlikely to be invited into the club where access to high-quality, high-paying job opportunities lives."

—Kim Merrit, managing director ASU Learning Enterprise

Different network structures serve different, critical functions. Tight-knit webs of relationships offer reliable, ongoing support to young people. A strong web of support typically contains at least one anchor or especially strong relationship. Research has shown that a web is also more supportive and resilient if the members of that web know one another.[19] This is especially critical for at-risk students: a web of supports can help students overcome adverse life experiences and stay on track.[20]

On the other hand, different people with varied expertise, experiences, and insights can provide students with a much wider range of resources and opportunities than a few closely connected individuals can. For the purposes of expanding access to opportunity, students can benefit from relationships with people they might otherwise not meet—what some sociologists call bridging social capital.[21] Relationships across a diverse array of people can be especially powerful if those people are themselves members of different networks. Networks with what sociologists call high structural diversity can expand options because they contain more channels to new information. In other words, for accessing new opportunities and jobs, not only do students benefit from knowing different people but also from knowing people who don't all know one another. This may be especially important for education programs focused on improving students' job prospects.[22]

Emerging measurement approaches

Although there are sophisticated methodologies to gauge network structure, rigorous efforts to measure the structure of students' networks remain quite rare in practice.[23] We found no programs explicitly measuring the structural diversity of students' networks. The innovative programs we've studied are using two main approaches to measure the structure of students' closer-knit webs of support and friendship and to gauge the extent to which they are successfully diversifying the types of individuals in students' networks: social network mapping and surveys.

Social network mapping

One strategy for better understanding the structure of students' networks is conducting social network analyses (SNA). SNA as a methodology offers a wide range of simple to highly sophisticated approaches to modelling and visualizing networks. SNA approaches can help education programs to measure if and to what extent the people whom students know are connected to one another. For example:

- **xSEL Labs** is a company that produces tools and assessments focused on students' social-emotional learning (SEL) skills and mindsets. One of its tools, called Networker, offers schools a web-based social connections assessment. Students fill out a peer friendship nomination survey, which Networker then uses to generate a network map of peer connections across a classroom. The maps show which students are deeply connected and which students may lack webs of connections.

Student and mentor surveys

Surveys are another method that programs are using to understand the sources of various relationships in students' lives and to gauge whether students are diversifying relationships beyond their preexisting networks. These also include surveys to programs' mentors or staff to understand if they are introducing students to their broader networks. For example:

> Social capital is an asset that is brokered, built, and mobilized.

- **nXu**, previously described, measures the degree to which its peer cohorts unlock more diverse friendship networks with a post-program survey. The survey includes the statement: *"nXu has allowed me to build friendships and connections that I would not have otherwise made."*
- **Big Picture Learning**, a nonprofit that supports a network of high schools that offer internship-based learning, aims to diversify and expand students' professional networks. Using a technology tool called ImBlaze, Big Picture Learning's partner schools can pose questions to students and their internship site mentors on a daily or weekly basis. Some partner schools use the app to ask mentors about the extent to which they are opening up their networks to the students they work with. For example, one school asks mentors, *"Did you introduce your young person to someone in your professional network today?"*

For a list of additional survey items intended to measure the structure of students' networks, see Appendix B.

Dimension 4: Ability to mobilize relationships

Key questions to guide measurement:

- Are students aware of their own social capital and why networks matter?
- Do students have the relationship skills to engage or re-engage with others?
- Do students have the skills and mindsets to mobilize diverse relationships to expand their horizons?

Indicators to consider tracking:

- Relationship skills (including communication, help-seeking behavior, and building relationships across social identities)
- Social awareness (including the ability to recognize different forms of resources and supports)
- Self-awareness (including self-confidence)
- Student agency (including internalized self-efficacy[27])
- Networking skills

Social capital is an asset that is brokered, built, and mobilized. Simply putting relationships within reach without building students' capacity to maintain them may inadvertently shortchange them from activating these relationships when they need them the most.[24]

The Collaborative for Academic, Social, and Emotional Learning (CASEL) has identified a set of interrelated competencies predictive of establishing and maintaining positive relationships, three of which serve as useful indicators

for measuring students' ability to mobilize relationships: relationship skills, social awareness, and self-awareness.[25] High levels of social awareness are also tied to cultural competence and being able to understand the perspective of those from different backgrounds. Cultural competence, or the ability to authentically build relationships across social identities, is an essential relationship skill for maintaining relationships with diverse groups throughout one's life.

Early innovators are recognizing that access to relationships and skills to reach out to adults must go hand in hand. Many programs deliberately weave exercises into their curriculum to teach students skills such as how to initiate conversations at social events, how to write emails introducing themselves, and how to authentically follow up with people they want to stay connected to.

Emerging measurement approaches

Programs that are measuring students' ability to mobilize relationships are increasingly engaging their students in practice sessions to build skills and mindsets around social capital. Some are beginning to capture and incorporate feedback data from these sessions. The majority of programs, however, continue to use surveys as the primary method for capturing student data.

Early innovators are recognizing that access to relationships and skills to reach out to adults must go hand in hand.

Surveys

Programs are using surveys to capture information on students' mindsets and confidence when it comes to building and maintaining networks. For example:

- **trovvit**, a digital portfolio and networking platform used by K–12 schools to help students capture what they are learning and whom they are learning with, asks students: "If you hear the term social capital, what do you think it means? Can you give an example?" This question primes students to begin considering the value of a network and actively building connections by inviting professionals to provide feedback on real-world projects.
- **BASTA**, a nonprofit that works to bridge the employment gap for first-generation students, provides coaching to students on their career search process and brokers connections through which students can apply their skills in mobilizing networks. Its post-program survey also assesses a student's ability to build and access networks. For example, students are asked to indicate agreement with the statements: "I see value in and am comfortable with the concept of networking," "I feel comfortable building relationships in an informal networking setting," and "Participating in BASTA has increased my confidence in my ability to build and leverage a professional network."
- **iCouldBe**, previously described, measures whether students are acquiring the essential skills associated with their academic and career goals by asking them to indicate the extent to which they agree with the following statements: "I know how to write a professional email," "I know how to ask for help in reaching my goals," and "I know how to research different careers online."

For additional examples of survey items intended to measure students' ability to mobilize relationships, see Appendix B.

LOOKING AHEAD: RECOMMENDATIONS FOR BUILDING SOCIAL CAPITAL THROUGH PRACTICAL MEASUREMENT

We cannot improve what we do not measure. The innovative programs we have identified harness the power of practical measurement to capture data and learn which relationships are working for young people, and iterate on curriculum and student experiences to ensure all are equitably connected. With the right tools and investments, more schools and programs can follow suit. Education systems, researchers, and funders all have a role to play. Here are four recommendations to help more education systems move toward measuring students' relationships and networks as gateways to opportunity.

Start early: Integrate measurement to drive program design and improvement

Measurement is an essential component of overall design. Early innovators building students' social capital often work to identify relationship-focused outcomes at the front-end of program design. This approach enables school and system leaders to answer questions such as, "How do we intend to grow our students' networks?" and capture baseline data on predetermined metrics of student success. Incorporating measurements early on also ensures that programs begin by identifying relationships students already have within reach. From there, practical measures can drive program improvement, by informing data-driven, personalized strategies for increasing student access to relationships and networks that will open doors to economic prosperity.

Leverage technology: Make students' relationships and their growth visible

It's not a coincidence that many programs highlighted in this report use technology to capture and track changes in their students' networks over time. Technological infrastructure helps organizations to efficiently gather information and measure progress across multiple dimensions of social capital. For some programs, their infrastructure tools are intentionally built to deliver relationship-focused curriculum as well as assess the degree to which students are building social capital, weaving together essential relationship-specific and academic data that is both purposeful and integrated. For example, Beyond 12 coaches interact with students through a virtual platform that tracks how students' networks are evolving at frequent intervals. As coaches log their interactions with students, this data, in addition to existing datasets on college student trajectories, gives Beyond 12 a more robust portrait of how an individual's needs square with larger trends. This can, in turn, begin to power predictive analytics that help coaches prioritize which students need the most support and when.

Technology can also help students see how their networks evolve over time. For example, iCouldBe leverages its platform not only for backend analytics on relationships forged on the app over time, but its network map also makes visible to students the interactions they have and the assets they build along the way. Similarly, trovvit's digital portfolio tool enables students to track the feedback they receive from professionals on their projects and digitally build diverse networks created in the course of those experiences. Schools that include students as users of relationship-centered outcome data can help students to drive their own learning and exploration of the role of relationships in their lives.

Harness the power of 4D vision: Build a comprehensive view of students' networks

Over time, measuring all four dimensions of social capital described in this report will unlock the greatest insights into whether and how schools and systems are supporting their students holistically. For example, Braven partners with universities to ensure students are career-ready college graduates. The Braven model of building students' social capital, career skills, experiences, and confidence drives its measurement strategy, which includes capturing student-level data across all four dimensions at the start of the program and throughout to ensure students are expanding the depth and breadth of their social capital to put them on a path of choice and opportunity.

For some programs, however, it may not always be feasible or practical to measure for all four dimensions. In those cases, prioritizing dimensions that align with program goals and student needs can still give school leaders a head start in understanding how to evolve their program. For example, programs aimed at exposing students to working professionals may start by capturing quantitative data. Such programs, however, should also consider tracking relationship quality indicators over time if they hope to increase the likelihood that these professional connections outlast the program. Similarly, programs measuring students' ability to build and mobilize relationships to prepare them for the workplace may also benefit from tracking the quantity of students' relationships if they hope to increase their chances of breaking into high-quality jobs.

Invest in R&D: Align efforts among education practitioners, researchers, and funders

The dearth of social capital-focused measures used in schools and postsecondary institutions today reflects a gap in both research and practice that urgently needs to be filled. Research-informed measurement approaches can help enable leaders to understand where authentic connections are forged, which aspects of their social interactions are adding value to students, and whether their students are graduating with the skills to maintain and mobilize their reservoirs of relationships.

Programs aiming to build students' social capital should leverage early innovators' foundational measurement strategies and partner with applied researchers. Researchers from outside of education with deep expertise in measuring social capital can collaborate with education leaders ready to develop and integrate high-quality, validated tools that fit the needs of their programs. This could include developing more robust relationship-mapping models, position-generator tools, network inventories, and other survey instruments specifically designed to support schools aiming to address opportunity gaps. Of course, developing measurement tools and data infrastructure doesn't come cheap. Funders can also play a pivotal role in accelerating research and development by investing in programs' measurement capacity and advancing research to validate survey instruments. They can also invest in technology to streamline relationship data collection and analysis.

"We know that leveraging students' existing networks and empowering them with tools and opportunities to grow their social capital is critical. Since social capital is such an important component of our theory of change, we've taken a multifaceted approach to measuring it."

—Aimee Eubanks Davis, founder & CEO, Braven

CONCLUSION

Today, more than ever, students need access to the right resources to navigate uncertain times. Young people need relationships that provide critical care, support, and encouragement. They also need relationships that can expand their options and connect them to new opportunities—like advice, jobs, and learning experiences. Leveling the playing field of opportunity for students will require measuring relationships as assets in the student success equation.

A host of early innovators are piloting meaningful measurement approaches, some embedded in curriculum, some enabled by technology, and most implemented through surveys. The time is ripe for further development of these early data collection strategies to gain a richer picture of the social capital of students and how their networks are evolving over time. By focusing on the social drivers behind advancement, education systems can begin to fully deliver on their promise to provide all students, not just some, a chance to harness the opportunities that are the building blocks of a fulfilled, successful life.

APPENDIX A

The Christensen Institute interviewed the following programs to understand how they were starting to measure students' access to social capital. Although by no means a comprehensive list, these organizations represent a sample across K–12, postsecondary, and workforce development programs that are investing in students' social capital through their approaches to both program design as well as measurement and evaluation.

ASU Local: A hybrid online learning and work-based, project-based learning model aiming to grow and diversify Arizona State University (ASU) students' professional networks.

BASTA: A program creating a bridge of opportunity between employers and first-generation college-goers of color to increase knowledge and workforce diversity at all levels.

Beyond 12: A program that supports low-income, first-generation, and historically underrepresented students through college using a longitudinal student tracking platform and a personalized student coaching service.

Big Picture Learning: A network that helps schools and education systems support student-driven, real-world, internship-based learning in which students are actively invested in their learning and are challenged to pursue their interests by a supportive community of educators, mentors, and family members.

Braven: A program that empowers college students with the skills, confidence, experience, and networks necessary to transition from college to strong first jobs.

Cajon Valley Union School District's World of Work Initiative (WoW): A K–12 curriculum grounded in career theory, through which students receive exposure to careers, participate in hands-on simulations, meet professionals, and demonstrate their learning across different careers.

Comp Sci High School: A charter high school with a focus on combining inquiry-based learning, work-based learning, and restorative practices to offer rigorous academics alongside computer science curriculum.

CrossPurpose: A tuition-free school that provides career development and placement for unemployed and underemployed adults to lift participants out of poverty.

Future Focused Education: A program that partners with schools and communities to create positive pathways for young people to have impact in their communities.

iCouldBe: A virtual mentoring platform that provides high school students with an online community of professional mentors, empowering teens to stay in school, plan for future careers, and achieve success in life.

Making Caring Common Project: An initiative of the Harvard Graduate School of Education to elevate the importance of developing children's care for others by forging partnerships and bringing related resources to schools.

Matriculate: A virtual platform that supports high-achieving, low-income high school students in navigating the college application process through a personalized student support system.

nXu: A nonprofit that provides in-school and out-of-school programming, purpose-development curriculum, and educator training to equip high school youth and adult educators to explore, articulate, and pursue their purpose.

Streetwise Partners: A nonprofit that pairs volunteers with adult mentees from overlooked and under-resourced communities to provide them with the skills, resources, and access to networks they need to secure and maintain employment.

trovvit: A digital portfolio and networking platform designed to help students capture what they are learning and whom they are learning with to find pathways and opportunities.

Union Capital Boston: A community development model in Boston encouraging civic engagement and increasing access to employment through a platform that rewards member participation in community events.

xSEL Labs: A research and development company that builds social-emotional learning (SEL) tools and assessments for schools.

APPENDIX B

Below is a summary of approaches for measuring students' social capital among the programs interviewed. These approaches are categorized within the four dimensions offered in this report as a starting point for meaningfully measuring social capital: the **quantity** of relationships in students' networks, the **quality** of relationships in students' networks, the **structure** of students' networks, and students' **ability** to mobilize networks.

Although many programs are partnering with researchers to develop rigorous measurement approaches, not all survey items presented below have been statistically validated at the publication time of this report.

Sample approaches for measuring the **quantity** of relationships in students' networks

Survey item	Respondent	Organization
"What adults do you plan to work with today?"	Student	Big Picture Learning
"How many new professionals have you connected with?" "Indicate the number of connections you have made on LinkedIn (minimum 50 expected)." "Do you have a mentor who encourages your goals?"	Student	Braven
"Please estimate the number of close relationships you maintain in your everyday life and indicate the type, such as family, work, faith-based."	Student	CrossPurpose
"My…internship provided me with contact information for at least two adults I might reach out to again."	Student	Future Focused Education
"How many people are in your professional network?" "I have professional friendships and connections that will help me meet my career goals."	Student	Streetwise Partners

Additional data collection strategies	Respondent	Organization
Checklist to identify the extent to which students are growing their on-campus networks. ✓ Identify a campus advocate or mentor ✓ Identify three peers who can serve as references ✓ Create at least one study group with high-performing peers	Coach	Beyond 12
Tracking the number and type of industry professionals students are exposed to through the use of Nepris, an online platform to connect communities to the classroom.	Educator	Cajon Valley Union School District
Series of activities called "quests" that prompt students to identify and forge connections based on their academic and career interests. Students add these connections to their network maps on the iCouldBe app.	Student	iCouldBe
Relationship-mapping activity to visualize relationships students have within reach.	Educator	The Making Caring Common Project

Sample approaches for measuring the **quality** of relationships in students' networks

Survey item	Respondent	Organization
"I feel supported by…the coaches." "I feel connected to…the coaches." "I feel like the…coaches have created a comfortable and safe environment…" "I am likely to reach out to this network of professionals in the future."	Student	ASU Local
"I've developed one or more relationships…that I intend to continue beyond my participation in the program."	Student	BASTA
"How comfortable did you feel at your internship today?" "How well connected do you feel to the adults you are working with at your internship right now?"	Student	Big Picture Learning

Survey item	Respondent	Organization
"How do you feel your relationship is progressing with your cohort/your coach?" "If you were hiring, would you hire this fellow?"	Student Coach	Braven
"I met with an adult or older peer who I will reach out to in the future to help me with my job/career goals."	Student	Comp Sci High School
"During my internship, I felt comfortable reaching out to...staff if I had questions or concerns." "During my internship, I felt comfortable reaching out to my school coordinator if I had questions or concerns."	Student	Future Focused Education
"My mentor praises me and encourages me to do well." "My mentor helps me challenge myself to succeed." "I was very satisfied with this program."	Student	iCouldBe
"I feel comfortable asking my advisor questions related to my application process." "Overall, my advising fellow has been helpful to me as an advisor."	Student	Matriculate
"The Compass Coaches I worked with were helpful." "In the past 3 months, how many nXu students have you spent time with outside of school AND outside of nXu sessions?"	Student	nXu
"How well connected do you feel to your professional contacts?"	Student	Streetwise Partners
"Who do you turn to for help when making academic or life decisions? (select: parents, coach, teacher, mentor, counselor, faith leader, peers)."	Student	trovvit
"What were your emotions tonight at Network Night? (Happy, Shy, Lonely, Inspired, Bored)." "Did you participate in the Marketplace tonight? (Yes - [Made an] Offer, Yes - [Made a] Request, No)."	Student	Union Capital Boston

Sample approaches for measuring the **structure** of students' networks

Survey item	Respondent	Organization
"Did you introduce your young person to someone in your professional network today?"	Mentor	Big Picture Learning
"Have you connected your fellows with anyone in your network?"	Mentor	Braven
"I met with an adult or older peer who did the type of work I am interested in for my future."	Student	Comp Sci High School
"How satisfied were you with this element of your internship: Opportunities I had to meet other employees at the internship site."	Student	Future Focused Education
"nXu has allowed me to build friendships and connections that I would not have otherwise made (strongly disagree to strongly agree)."	Student	nXu

Additional data collection strategies	Respondent	Organization
Students fill out a peer friendship nomination survey on Networker, a web-based social connections assessment tool, to generate a network map of peer connections across a classroom to show which students are deeply connected and which students may lack webs of connections.	Student	xSEL Labs

Sample approaches for measuring students' **ability** to mobilize networks

Survey item	Respondent	Organization
"I am confident in work environments." "I believe I have a professional network." "I consider my new connections members of my professional network."	Student	ASU Local
"I see value in and am comfortable with the concept of networking." "I feel comfortable building relationships in an informal networking setting." "Participating in BASTA has increased my confidence in my ability to build and leverage a professional network."	Student	BASTA
"What personal or professional skills did you see the student use or build today?"	Mentor	Big Picture Learning
"I know how to write a professional email." "I know how to ask for help in reaching my goals." "I know how to research different careers online."	Student	iCouldBe
"If you hear the term social capital, what do you think it means? Can you give an example?" "How do you connect and stay in touch with people you know directly or indirectly…?"	Student	trovvit

NOTES

1. Eric A. Hanushek "Long-run Trends in the U.S. SES-Achievement Gap," The National Bureau of Economic Research, NBER Working Paper No. 26764, February 2020.

2. For more discussion on the varying definitions of social capital, see Frances Moore Lappé and Paul Martin du Bois, "Building Social Capital Without Looking Backward," *National Civic Review* 86, no. 2 (1997): 119-128; Paul S. Adler and Seok-Woo Kwon, "Social Capital: Prospects for a New Concept," *Academy of Management Review* 27, no. 1 (2002): 17-40; and Nan Lin, *Social Capital: A Theory of Social Structure and Action* (Cambridge, United Kingdom: Cambridge University Press, 2002).

3. Researcher Raj Chetty and his team at Opportunity Insights, a center based at Harvard University, have conducted extensive research on the drivers of social mobility. For an overview of Chetty's work and his emphasis on social capital, see Gareth Cook, "The Economist Who Would Fix the American Dream," *The Atlantic*, July 2019.

4. Many studies demonstrate the centrality of social networks in job hunting and job-getting. For example, a 2015 Pew survey found that 55% of respondents used information from acquaintances or friends-of-friends, 63% used professional or network connections, and 66% used connections from close friends or family. See Aaron Smith, "Searching for Work in the Digital Era," Pew Research Center, November 2015.

5. A recent study uncovered troubling data about the uneven landscape of opportunity facing youth. Using patent registration data, the researchers found that children from high-income families are 10 times more likely to become inventors than those from below-median income families. See Alex Bell et al., "Who Becomes an Inventor in America? The Importance of Exposure to Innovation," Opportunity Insights (formerly the Equality of Opportunity Project) based at Harvard University, November 2018, https://opportunityinsights.org/wp-content/uploads/2019/01/patents_paper.pdf.

6. "What We're Learning about Developmental Relationships," Search Institute, accessed June 22, 2020, https://www.search-institute.org/developmental-relationships/learning-developmental-relationships/.

7. Harry Holzer, "Job Search by Employed and Unemployed Youth," *Industrial and Labor Relations Review* 40, no. 4 (July 1987): 601-611.

8. Dave Lash and Grace Belfiore, "5 Essentials in Building Social Capital: Report 4 of the MyWays Student Success Series," Next Generation Learning Challenges, October 2017, https://www.nextgenlearning.org/resources/5-essentials-in-building-social-capital.

9. Peter Scales, Ashley Boat, and Kent Pekel, "Defining and Measuring Social Capital for Young People: A Practical Review of the Literature on Resource-Full Relationships," Search Institute, April 2020, https://www.search-institute.org/wp-content/uploads/2020/05/SOCAP-Lit-Review.pdf.

10. Anthony S. Bryk et al., "Practical Measurement," Carnegie Foundation for the Advancement of Teaching, 2013, https://www.carnegiefoundation.org/resources/publications/practical-measurement/.

11. Mark Granovetter, "The Strength of Weak Ties," *American Journal of Sociology* 78, no. 6 (1973), https://doi.org/10.1086/225469.

12. Robert D. Putnam, *Our Kids: The American Dream in Crisis*. (New York: Simon & Schuster, 2015).

13. "For Educators: Relationship Mapping Strategy (New Version!)," Making Caring Common Project, Harvard University, updated March 2020, https://mcc.gse.harvard.edu/resources-for-educators/relationship-mapping-strategy.

14. The CrossPurpose survey builds on efforts spearheaded by Robert Putnam's previous Saguaro Seminar program at Harvard University. "Saguaro Seminar: Civic Engagement in America," Harvard University, https://www.hks.harvard.edu/centers/taubman/programs-research/saguaro.

15. "Mentoring Relationship Quality and Characteristics," National Mentoring Resource Center, accessed June 22, 2020, https://nationalmentoringresourcecenter.org/index.php/toolkit/item/504-mentoring-relationship-quality-and-characteristics.html.

16. "The Developmental Relationships Framework," Search Institute, accessed June 22, 2020, https://www.search-institute.org/developmental-relationships/developmental-relationships-framework/.

17. Julia Freeland Fisher, "How Are Programs Building Students' Social Capital? 10 Key Trends," Clayton Christensen Institute (blog), July 17, 2019, https://www.christenseninstitute.org/blog/how-are-programs-building-students-social-capital-10-key-trends/.

18. For a complete look at UCB's measurement framework and results, see Anna Leslie, "Union Capital Boston Analysis of Impact: How Social Capital Creates Value in Community," Union Capital Boston, June 2019, https://drive.google.com/file/d/14ohcLNz2kIp79ORriH0FVlecS_312Ivn/view.

19. Shannon M. Varga and Jonathan F. Zaff, "Webs of Support: An Integrative Framework of Relationships, Social Networks, and Social Support for Positive Youth Development," *Adolescent Research Review* 3 (March 2018), https://doi.org/10.1007/s40894-017-0076-x 2017.

20. "Don't Quit on Me: What Young People Who Left School Say About the Power of Relationships," Center for Promise, 2015, http://www.americaspromise.org/report/dont-quit-me. See also Jonathan F. Zaff and Thomas Malone, "Who's Minding the Neighborhood? The Role of Adult Capacity in Keeping Young People on a Path to Graduation," Center for Promise, 2016, https://files.eric.ed.gov/fulltext/ED572736.pdf.

21. See Robert D. Putnam, *Bowling Alone: The Collapse and Revival of American Community* (New York: Simon & Schuster, 2000).

22. For example, LinkedIn, the professional networking site, has been conducting extensive research on network inequality, which includes a variety of measures such as network composition and structural diversity. See Guillaume Saint-Jacques et al., "Fairness through Experimentation: Inequality in A/B Testing as an Approach to Responsible Design," February 2020, arXiv:2002.05819 [cs.SI].

23. The dynamic between network diversity and opportunity is an important area for further development, where methods like position generators, in which students generate lists of professional contacts in specific domains, could prove useful. For an overview of this methodology see Pieter-Paul Verhaeghe and Yaojun Li, "The Position Generator Approach to Social Capital Research: Measurements and Results," in Yaojun Li, ed., *The Handbook of Research Methods and Applications on Social Capital* (Cheltenham: Edward Elgar Publishing Ltd., 2015), 166-186. As the authors define upfront: "Position generators map network members' occupational positions by asking respondents whether they know anyone in their social network with an occupation from a limited and yet representative list of occupations."

24. The opposite is also true: a commitment to teaching relationship skills—without an equal investment in expanding access to networks—may reflect a false narrative about access to opportunity. See Julia Freeland Fisher, "Can Social and Emotional Learning Models Aim to Create Relationships?" American Enterprise Institute, 2020, https://www.aei.org/wp-content/uploads/2020/01/Can-social-and-emotional-learning-models-aim-to-create-relationships.pdf.

25. "Core SEL Competencies," Collaborative for Academic, Social, and Emotional Learning, accessed June 22, 2020, https://casel.org/core-competencies/.

26. Julia Pryce, "Mentor Attunement: An Approach to Successful School-based Mentoring Relationships," *Child and Adolescent Social Work Journal* 29, 2013, https://www.evidencebasedmentoring.org/new-study-highlights-importance-mentor-attunement/.

27. There are many facets of self-efficacy that are emerging as useful indicators for understanding students' ability to mobilize relationships. The terms vary; however, programs are starting to examine how relationship- and career-specific self-efficacy can drive student agency in building and maintaining relationships.

About the Institute

The Clayton Christensen Institute for Disruptive Innovation is a nonprofit, nonpartisan think tank dedicated to improving the world through Disruptive Innovation. Founded on the theories of Harvard professor Clayton M. Christensen, the Institute offers a unique framework for understanding many of society's most pressing problems. Its mission is ambitious but clear: work to shape and elevate the conversation surrounding these issues through rigorous research and public outreach.

About the authors

Mahnaz Charania, PhD is a senior research fellow at the Christensen Institute, where she researches emerging practices and technology tools designed to expand students' social capital as a pathway to social and economic mobility. Her expertise includes measurement and evaluation of innovative practices, strategies for engaging the community in designing new school models, and amplifying student learning through connections outside the classroom.

Julia Freeland Fisher is the director of education research at the Christensen Institute. Her work aims to educate policymakers and community leaders on the power of Disruptive Innovation in the K–12 and higher education spheres. She is the author of "Who You Know: Unlocking Innovations That Expand Students' Networks" (Wiley, 2018).


CHRISTENSEN
INSTITUTE