



# MENTORING MATTERS:

An examination of mentoring practices at an independent secondary school

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## Executive Summary

The context of this work is a PK-12 independent boy's school in the suburbs of a major metropolitan city on the east coast. The school, given the pseudonym Country Day School in this report, serves over one thousand boys from the city and surrounding areas and employs 159 faculty divided among three divisions. In the past few years the school has engaged in several efforts to increase the diversity of both the student body as well as the faculty, particularly focusing on recruitment of females and peoples of color into faculty roles. Traditionally faculty and administrative roles have been primarily filled by males, with a greater number of female faculty in the primary grades. Neighboring the school is a girl's school that partners with CDS in many ways including coordinate classes for 11<sup>th</sup> and 12<sup>th</sup> grades, but the proximity of the girl's school often results in competition for faculty, especially in the middle and upper school grades. One recruitment tool that the school has engaged in is participating in the University of Pennsylvania Day School Teacher Residency (DSTR) program, in which recent college graduates are placed in independent schools for two years while they simultaneously complete a master's degree in education. During this time, DSTR fellows carry a reduced teaching load at the school and are partnered with a master teacher at the school. The DSTR program adds to the already existing mentoring program at CDS as well as a fellows program for new teachers that has a long history at the school.

An understanding of this context led to an examination of the literature on the aspects of effective mentoring practice and the use of mentoring in new teacher induction programs. In the literature, mentoring is commonly defined as “one-to-one support of a novice or less experienced practitioner (mentee) by a more experienced practitioner (mentor), designed primarily to assist the development of the mentee's expertise and to facilitate their induction into the culture of the profession (in this case, teaching) and into the specific local context” (Hobson, et al. 2009). Three main categories of mentoring support defined in the literature are instrumental support, psychosocial or emotional support, and sponsorship within the larger field or institution. Further, researchers have defined the conversation between mentors and proteges as “a special kind of professional conversation regarded as a core activity in knowledge construction (Orland-Barak & Hasin, 2010, Helgevold et al., 2015). This understanding provided a structure to look into the “special conversations.”

The examination of the literature, the conceptual framework, and its application in the context of CDS led to three research questions focused on the mentoring activities and the structures used to support these activities at the school. First, what are the mentoring activities in place at CDS and what activities are used to structure these activities for mentors? Second, how are post-observation debrief sessions or video sessions with UPenn mentors and fellows distinct from reflective practices used within other mentoring pairs at CDS? And finally, is there a relationship between the categories of discussion or approach during debrief and mentor training?

The investigation began with an examination of the materials and training provided to mentors in the DSTR program by the University of Pennsylvania. Qualitative interviews were also conducted with program administrators at the school. Thematic codes were developed from these sources an interview guide was created for qualitative interviews with mentors and proteges. As a result of COVID and the restrictions placed on the school in responding to the

pandemic, the interviews were restricted to only DSTR mentors and fellows. Part of the interviews were conducted in person prior to the restrictions, but the other half were conducted virtually due to social distancing requirements.

**Finding 1: CDS offers a high degree of instrumental support, some psychosocial support, and very little networking support.**

Results show a great degree of instrumental support in the forms of shared assignments, syllabi, assessments, ect., but fellows reported a varying degree of psychosocial support. The data also suggests that mentors provide very little networking support. These varying degrees of support impact fellow's feelings of self-efficacy and emotional connection.

**Finding 2: Fellows in the middle school are more likely to express dissatisfaction with their mentoring experiences.**

Current and former middle school fellow expressed higher sentiments of dissatisfaction when compared with upper school fellows. This follows from the trend where more upper school than middle school fellows have accepted employment at CDS after the DSTR program. Comments about this dissatisfaction largely reference the rigidity of the mentors or differing teaching styles.

**Finding 3: Underrepresented faculty express feeling "isolation" despite the mentoring support.**

Most of the DSTR fellows have been female and people of color, but the majority of mentors are white males. In addition, fellows often find that they are the only person of color or female faculty member in their department or grade, and they express feeling more pressure due to a lack of diversity in representation.

**Finding 4: Post-observation debrief sessions are not as detailed or reflective as what is described by the UPenn training. These sessions are more informal and held on a less frequent or inconsistent basis.**

Both mentors and fellows indicate in the interviews that the more formal DSTR debrief methodology is not being followed at CDS. Instead debrief sessions are often casual, sometimes held in the cafeteria, and infrequent, often resulting from perceived student behavior in the classroom.

**Finding 5: Post-observation discussions primarily focused on classroom management and student behavior.**

Debrief sessions could not be observed because they were not conducted regularly or following the DSTR format but mentors and fellow reported that post-observation discussion often focused on student behavior and classroom management. Fellows reported that mentors often provided advice about how to foster student engagement or about teacher reactions to student behavior.

### Recommendation 1: Outline the “transformative” philosophy of the DSTR Fellows program at CDS

Outlining a clear statement about the mission and goals of the DSTR program at CDS can ensure that all individuals have a clear understanding of the vision of school leaders and addresses the perceptions of middle school fellows around the rigid structure of the mentoring. The statement is a recruitment tool for future mentors and fellows to the program. By outlining the roles of mentors and fellows for the broader school community, it also starts to address the lack of networking support.

### Recommendation 2: Establish debrief protocol and implementation schedule

Currently CDS does not follow the DSTR framework for post-observation debriefing discussions. Implementing a protocol for debriefing ensures that the discussion addresses both content, student behavior and instruction strategies during each debrief. A schedule also ensures that these discussions take place on a consistent basis because the data indicated that post-observation discussions were currently inconsistent and casual in nature.

### Recommendation 3: Improve mentor training prior to first year and create regular meetings for mentors

During the school year the meetings of groups of fellows and mentors is inconsistent. The practice of “critical friends” was not used this year due to time constraints, and mentors rarely meet to discuss issues they are experiencing. Establishing regular meetings for mentors and fellows provides participants with increased support including allowing second year mentors to discuss problems of practice with faculty peers.

### Recommendation 4: Create a network of informal mentors

Benefits to creating this network include increasing the level of networking support, the area that fellows and mentors identified as the lowest level of support currently offered in the program. Possible informal mentors include former fellows and mentors, other members from the department especially in other divisions, and female teachers or teachers of color who are traditionally underrepresented at the school. This network could also serve as a recruitment tool for future potential mentors in the DSTR program and as an opportunity for current mentors and fellows to share specific knowledge about the program with potential participants.

### Recommendation 5: Consider opportunities for fellow’s participation in the community

Interviews revealed the difference in perceptions between mentors and fellows and between faculty in the DSTR program and other faculty not involved in the program. Fellows are engaged in the act of crafting and exploring new identities as teachers and as participants in an independent school world. Creating more opportunities for fellows to participate in the community allows addresses the lack of networking support identified by the data and allows fellows to explore and develop new identities through social connections with other individuals at the school.

#### Recommendation 6: Evaluate the mentor/fellow pairing process

Both mentors and fellows indicated that the mentor selection process often happened late and as a result some mentors could not attend the summer training session prior to the first year of the program. Additionally, since fellows from underrepresented groups expressed feelings of isolation, attempting to match mentors and fellows based on gender, race and ethnicity should be a consideration in the future. Research indicates that mentors and protégées matched based on gender or race report greater psychosocial support and feeling of trust in their first year.

#### Recommendation 7: Prioritize opportunities for fellows to participate in professional development

The lowest area of support as described by both fellows and mentors was network support and professional development provides fellows with this support. Allowing fellows to present what they have learned from these development sessions increases their exposure among the broader faculty at CDS.

## Institutional Context

Country Day School (CDS) is an independent PK-12 boy's school founded in 1897 in suburban mid-Atlantic city. The school includes over one thousand boys from the city and surrounding areas and employs 159 faculty divided among three divisions. Over 35% of the school's student body and 22% of the faculty identify as people of color. CDS has a high standard of teaching excellence and 67% of the faculty hold advanced degrees. The average number of years of teaching experience for CDS faculty is eighteen years, and the average number of years spent at CDS is eleven years.

Country Day has a long history of new teacher fellowship programs used to recruit new teachers to the school. These positions are supported through four endowed fellowships: The Class of 1955 Henry Callard Teaching Fellowship, Michael Howard Cooper Teaching Fellowship, Johnnie L. Forman Jr. Teaching Fellowship, and Tickner Writing Fellowship. The school's website outlines the benefits to potential applicants: "Fellows benefit from the coaching of a mentor teacher and a range of unique professional development experiences. They also participate in regular seminars dedicated to the exploration of critical issues in education." At CDS, all fellows are expected to teach 1-2 classes per year in addition to coaching a sport, which is half of the load of a full-time teacher at the school. In addition, they are expected to attend 1-2 class meetings taught by their mentor teachers. These classes are intended to serve as exemplars for fellows to observe mastery teaching in the curriculum. Fellows also complete several projects such as a shadow day, a "teaching walk," and digital portfolio of work.

Over the past three years, CDS and twelve other independent schools, mostly on the East Coast, have partnered with the University of Pennsylvania as part of the Day School Teaching Residency Program (DSTR). As a part of this program, new teachers are given the opportunity to teach under the guidance of a mentor for two years. While, each school has the ability to form the residency program in a slightly different manner to meet the context of their community, all schools agree that the new teacher will have a reduced teaching load during this time and that the new teacher will be observed on a weekly basis by the mentor teacher as well as other school administrators on a less regular basis. At the same time, the UPenn Fellows commit to a two-year residency at the school that also includes completing coursework towards a Masters of Science in Education. This coursework includes weekly synchronous online classes about subject area methods, intensive seminars on the UPenn campus twice a year, and two weekend sessions at other DSTR partner schools throughout the year. Mentor teachers also attend these off-campus sessions at UPenn and the partner schools as well. Each mentor also agrees to a two-year commitment to partner with the new teachers. In addition, the DSTR school also selects an administration team member or another teacher to serve as a dean within the program, who also travels to these seminar sessions and who provides another level of support within the UPenn program.

The school compensates DSTR fellows in several different forms as part of the program. Fellows receive a reduced salary scaled in proportion to other teachers based on experience and the number of teaching hours. Fellows are compensated for their own teaching hours but not the time they spend observing mentor teachers. A substantial benefit of the program is that fellows complete a master's degree at The University of Pennsylvania over the course of the two years.



The university discounts the tuition cost for fellows by 50% for participating in the program. Additionally, CDS pays for 50% of the remaining cost of tuition for fellows, meaning that the tuition cost is reduced overall by 75%.

<b>DSTR: STRANDS</b>		
<b>Teaching &amp; Learning</b> ✓ Basic pedagogy ✓ Learning theory ✓ Adolescent dev. ✓ Subject methods ✓ Site-specific assignments	<b>History &amp; Culture of Day Schools</b> ✓ What are we doing here? ✓ What do we say we're doing here? ✓ Hidden curriculum of independent day school ✓ Educator's response	<b>Reflective practice</b> ✓ Online theory to practice modules ✓ Master's thesis: + Inquiry project + Self assessment of competencies
<b>Mentoring and Onsite Meetings</b> ✓ School-specific education ✓ Direct feedback on teaching ✓ Apply theory & practice		

Country Day has combined the previous fellowships at the school with the UPenn program. While the Callard and Cooper Fellows are part of the UPenn DSTR, the Forman and Tickner Fellows follow different programs, and Country Day has other new teachers who are not a part of either of these fellowship programs. Since the fall of 2017, the school has recruited one middle school and one upper school teacher per year in the program, and four fellows have successfully completed the program.

<b>Demographic Makeup of DSTR Fellows</b>				
	<b>Gender</b>	<b>Grades</b>	<b>Subject</b>	<b>Employed at CDS after Fellowship</b>
<b>2017-18</b>	Female	MS		No
	Female	US	Science	Yes
<b>2018-19</b>	Female	MS	Science	No
	Male	US	English	Yes
<b>2019-20</b>	Female	MS	History	
	Male	US	Spanish	
<b>2020-21</b>	Female	MS	Math	

	Female	US	Math	
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One goal of the UPenn DSTR partnership is to recruit faculty from traditionally underrepresented groups to the school. The school has traditionally employed more male faculty members especially in the middle and upper grades, but school leadership has developed a strategic plan that includes recruiting faculty from a more diverse backgrounds including more people of color and female faculty. CDS also partners with a neighboring girl’s school in the middle and upper grades, with students taking classes on both campuses and the schools coordinating extra-curricular activities especially in the performing arts. This partnership provides CDS some benefits of students working with faculty at both schools, but also creates competition in the recruitment of female faculty members. Coupled with the strategic plan, the school’s statement “Community, Inclusion and Equity Call to Action” also outlines a commitment to faculty recruitment that includes an ethnically and racially diverse staff that is representative of the larger student and family body. Of the eight UPenn Fellows recruited to CDS, six identify as male and three identify as people of color. All of the middle school fellows identify as female and two of the four identify as people of color. In addition, only one of the eight fellows attended an independent school as either a middle or high school student.

Since all new teachers at CDS are assigned mentors, the problem of practice is that the school operates several different mentorship programs. All of the fellows are partnered with mentor teachers, and other teachers new to Country Day are partnered with mentors as well. In addition, each division structures their mentoring differently. The UPenn model is the only multi-year program which also includes online mentoring from program directors and peers in other DSTR institutions. Thus, Country Day’s mentors are positioned at the intersection of several different activity systems: several mentoring systems, new teacher training, the culture of the school, UPenn GSE and UPenn DSTR.

*Opportunities for development of different types of new teachers at CDS*

	<b>DSTR fellows</b>	<b>Forman &amp; Tickner fellows</b>	<b>Non-fellow new teachers</b>
<i>Number each year</i>	2 (4 total)	1 per fellowship (2 total)	Varies per year
<i>Length of Commitment</i>	2 years with opportunity for hire	1 year without opportunity for hire	1 year contracts
<i>Classes Taught</i>	2	1-2	4

<i>Specialized professional development</i>	Provided by UPenn	None provided by school	At the request of teachers None provided by school
<i>Opportunities for observation and reflection</i>	<ul style="list-style-type: none"> <li>• 2 school visits</li> <li>• Summer week immersion at UPenn</li> <li>• Coursework throughout the year</li> </ul>	<ul style="list-style-type: none"> <li>• Shadow Day</li> <li>• Digital Teaching Portfolio (Forman)</li> <li>• Completed writing project (Tickner)</li> <li>• “Teaching Walk”-- department observations</li> </ul>	<ul style="list-style-type: none"> <li>• Formal faculty evaluation by department head and Dean of Faculty</li> <li>• Self-reflection</li> </ul>

## Research Questions and Conceptual Framework

1. What are the mentoring activities in place at Country Day and what activities are used to structure these activities for mentors?
2. How are debrief sessions or video sessions with UPenn mentors and fellows distinct from reflective practices used within other mentoring pairs?
3. Is there a relationship between the categories of discussion or approach during debrief and mentor training?

### Mentoring as new teacher training

#### Background

Since the early 80's in the United States, school-based mentoring has become a prominent part in the initial teacher education programs across the country and around the world (Hobson, Ashby, Malderez, & Tomlinson, 2009). Mentoring is primarily used to assist beginning teachers who tend to leave the profession at a higher rate (Ingersoll, 2001; Kukua-Acevedo, 2009) due to reports lower teacher efficacy and higher emotional exhaustion (Richter, Kunter, Ludtke, Klusmann, Anders, & Baumert, 2012; Tynjala & Heikkinen, 2011). Cannata, Neergaard, and Hawkinson (2012) provide a Theoretical Framework of Mentoring Beginning Teachers that divides mentoring into precursors, processes and outcomes. This framework follows a logic model format and attempts to distinguish mentoring into distinct but interconnected parts.

#### Precursors

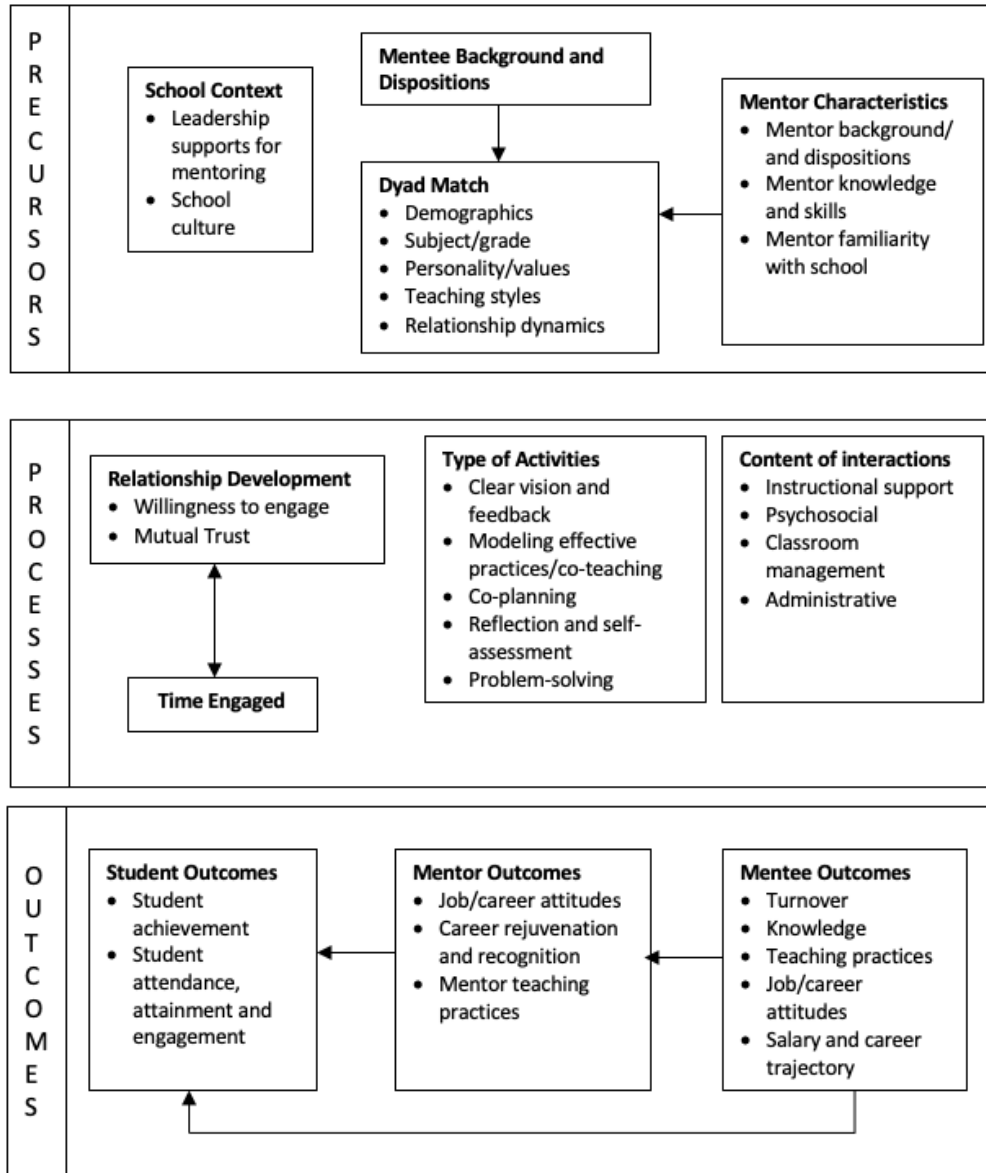
The precursors to the mentoring process describe the organizational conditions and personal perspectives in place outside of the mentoring process. Precursors include school context, mentee background and dispositions, mentor characteristics, and mentor pair matching. These precursors include prior experiences of the mentor and mentee and the history of mentoring activities at the school. Dyad matching has a significant impact on mentee's initial connection with the mentor and the ability of the mentor to provide psychosocial support, although the literature is not conclusive on which aspects of the participants backgrounds have greater impact on the connection between mentor and mentee.

#### Processes

Mentoring is typically defined as an interpersonal exchange between a more experienced individual (colleague, advisor, peer), the mentor, and a less experienced protege. The role of mentor teachers is seen as one-on-one support to help mentees feel welcome, accepted and included facilitated through regular meetings while allowing mentees an appropriate degree of

autonomy to make decisions and to develop their own teaching (Feiman Nemser, 2001; Hascher et al., 2004; Maynard, 2001; Rippon & Martin, 2006; Hobson et al., 2009). Types of mentoring support are divided along three main areas: instrumental support, psychosocial functions, including career related support specific to the site, and networking support in the broader discipline or community (Kram, 1988; Scandura, 1992; Blake-Beard, Bayne, Crosby & Muller, 2011).

**Framework of Mentoring for Beginning Teachers (Cannata, Neergaard and Hawkins, 2012)**

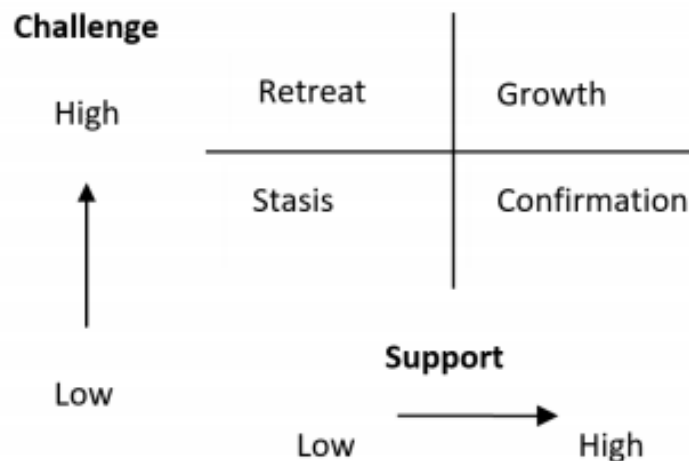


Other researchers have further defined the mentor role as “matriarchal,” focused on “personal caring, emotional support and nurturing, or “patriarchal,” guiding, instructing and challenging (Little, 1990; and Orland-Barak, 2014). The result has been correlated with the retention of beginning teachers, increases in job satisfaction, use of diverse pedagogical strategies, and

improvements in student learning (Hobson et al., 2009). The good mentor, then, is described as: “acting as a model of an ongoing learner who exhibits transparency, is open to learning from colleagues and new teacher, strives for professional growth, engages in the development of new curricula, reads professional articles and shares new knowledge with others” (Rowley, 1999; Orland Barak & Hasin, 2010).

<b>Types of Mentoring Support</b>		
	<b>Purpose of Support</b>	<b>Activities</b>
<b>Psychosocial Support</b>	Personal/Emotional Role Modeling	Counseling Role modeling Friendship Acceptance and Confirmation Goal Setting
<b>Instrumental Support</b>	Socialization Skill Development	Planning Advocating Coaching Protection
<b>Networking Support</b>	Connection with Broader Field Growth of Future Leaders	Introducing Supporting Steering

Orland Barak & Hasin (2010) describe the mentoring conversation as a “special kind of professional conversation regarded as a core activity in knowledge construction.” Moreover, Crasborn et al. (2015) and others locate the source of this “special kind” of conversation in the trust that is built between the mentor and mentee and explain that the mentor is “usually the first to be consulted” both due to the physical proximity and position as an experienced teacher. The Dalloz 2-D model (shown below) demonstrates the relationship between trust and challenge established between the mentor and mentee. Trust is defined as “a psychological state comprising the intention to accept vulnerability based upon the positive expectations of the intentions or behavior of another (Rousseau et al., 1998, p. 395), and others have defined a “deepest form of trust” that includes “identification and reciprocity” (Bouquillon et al., 2005). Trust between mentor and mentee, established through the three main channels of support, allows the mentor to adequately challenge or encourage the mentee to self-challenge in order to promote mentee growth in accordance with the Dalloz 2-D model.



Others describe the impact of these conversations on the teaching practice of the mentee because “teacher’s knowledge and skills are event-structured, context-based, and practice-oriented in nature (Elbaz, 1983; Kessels & Korthagen, 1996; Helman, 2006; Crasborn et al., 2015). And Cochran-Smith and Paris (1992) described that good mentors encourage process rather than products of learning focusing on the connection within the mentor pair relationship and the professional changes in the teacher. Yet, further research on novice teachers has described them as preoccupied with surviving and delivering their lesson plans, in contrast to attention towards the learning of their pupils (Fuller, 1969; Maynard & Furlong, 1995; Richardson & Placier, 2001; Helgevold et al., 2015) and analysis of discourse between mentors and mentees has confirmed that most of the conversation focuses on classroom management.

Strong and Barron (2004) were the first to analyze these conversations and suggested that they could be divided into three different subjects--instructional matters, students, and subject specific--and found that 70% of content based on instruction and classroom management, 18% on students and only 2% on subject specific content. Other research separates the categories of conversation into four groups: instruction and organization, the pupils and class, subject matter, and general topics (Borko & Mayfield, 1995; Coulon, 1994; Edwards & Collison, 1996; Hawkey, 1998; Orland-Barak & Klein, 2005; Strong & Baron, 2004; Crasborn et al., 2011; Helgevold, Naesheim-Bjorkvik, & Ostrem, 2015). Strong and Barron further looked at the direct or indirect questioning in the conversation, and others (Hennissen, Crasborn, Brouwer, Korthagen, & Bergen, 2008; Crasborn et al., 2015) have extended this model into a multi-dimensional matrix by considering who sets the agenda for the conversation.

## Outcomes

The benefits widely reported in the literature are positive impacts on teaching competencies including classroom management skills, socialization to new school environments, and emotional and psychological support (Lindgren, 2005; Bullough & Draper, 2004; Johnson, Berg & Donaldson, 2005; Marable & Raimondi, 2007; Crasborn, Hennissen, Brouwer, Korthagen & Bergen, 2011). Benefits are not isolated to only the mentee, but also include mentor benefits such as leadership training and career rejuvenation, and a broader impact on the organization.

A Model of the Consequences of Mentoring in a Learning Organization

Mentor Benefits	Mentee or Protégé Benefits	Organizational Benefits and Outcomes
<ul style="list-style-type: none"> <li>• Learning partner</li> <li>• Knowledge</li> <li>• Skill enhancement</li> <li>• Cognitive rejuvenation</li> <li>• Feedback</li> <li>• Expanded awareness of environment</li> <li>• Creativity</li> <li>• Sense of purpose and fulfillment</li> </ul>	<ul style="list-style-type: none"> <li>• Knowledge</li> <li>• Skill enhancement</li> <li>• Supportive feedback</li> <li>• Assimilation into the culture</li> <li>• Sense of cohesion, responsibility, and integrity</li> <li>• Awareness of political environment</li> <li>• Sense of power and confidence</li> <li>• Creativity</li> <li>• Leadership development</li> <li>• Higher earnings</li> <li>• Personal values clarification</li> <li>• Professional values clarification</li> <li>• Advancement of underrepresented groups</li> <li>• Increased job satisfaction</li> <li>• Greater influence in the organization</li> </ul>	<ul style="list-style-type: none"> <li>• Improved job performance</li> <li>• Productivity</li> <li>• Cost-effectiveness</li> <li>• Improved recruitment</li> <li>• Talent pool development</li> <li>• Career and life planning</li> <li>• Career satisfaction</li> <li>• Increased organizational communication and understanding</li> <li>• Increased trust</li> <li>• Maintaining motivation</li> <li>• Improved strategic planning</li> <li>• Creativity</li> <li>• Employee enthusiasm</li> <li>• Collaboration</li> </ul>

Klinge (2015). A Conceptual Framework for Mentoring in a Learning Organization

Other benefits to mentees include “self-esteem, self-efficacy, and locus of control” (Cannata, Neergaard, & Hawkinson, 2012), and include increased job retention and persistence.

One difficulty with the research on mentoring is that its findings are primarily informed by mentor and mentees perceptions and accounts taken through surveys and interviews, rather than quantitative measures; however, more recent research has focused on the dialogue between mentor and mentee as the unit of analysis (Strong & Baron, 2004; Crasborn, et al, 2011; Helgevold, Naesheim-Bjorkvik, & Orstrem, 2015). In fact, while the literature points to impressions of exemplary mentoring practices or mentors, there is little systematic research to substantiate these impressions (Orland Barak & Hasin, 2010; Cannata, Neergaard, & Hawkinson, 2012).



## Conceptual Framework

The conceptual framework used in this study is based on the “perspectives towards teaching” crafted through the work of Becker, Greer, Hughes & Strauss (1961) as well as Zeichner and Tabachnick. This view was crafted in the study of teaching through medical school residency program, similar to the format employed in the DSTR, and focuses on new teacher’s perspectives towards teaching as defined as “a coordinated set of ideas and actions a person uses in dealing with some problematic situation (Becker et al., 1961). According to Zeichner & Tabachnick (1985) these perspectives are “realized” through behaviors that are described in the language used to discuss this behavior. Moreover, these behaviors are contextualized within the classroom setting, the broader environment of the school, the background and including the experiences of each of the participants in the mentor pair.

Activity theory offers the opportunity to examine these constructions within the wider context of interrelations between activity systems where “context is constituted through the enactment of an activity involving people and artifacts” and “context is both internal to people—involving specific objects and goals—and, at the same time, external to people, involving artifacts, other people, specific settings” (Nardi, 1996, p. 38). Several researchers (Edwards & Protheroe, 2003; Ellis, Edwards, & Smagorinsky, 2010; Grossman Smagorinsky & Valencia, 1999) cite the ability of activity theory to “address complex social phenomena more than just linear connections between input and output and for it concerns about issues of enculturation and their myriads of causes and effects” to be particularly useful for understanding processes when learning teaching (Helgevold et al., 2015, p. 130). According to Orland-Barak and Becher (2011, p. 116), “such a system entails the enactment of reflective discourse (the tool of mediation), which directs the mentor’s action (the subject of activity) toward promoting participants’ professional learning (the desired object of the activity). The tool of mediation is also shaped by a certain set of rules, which are the explicit and implicit regulations, norms, and conventions that constrain actions and interactions, as determined by the mentor’s professional community. The different systems are constituted through particular “divisions of labor,” which is the way in which members distribute their tasks, power relations, and status within the community.”

One central element of this relationship between mentor and mentee is the discussion in planning for a lesson and in the debrief that takes place after the class as part of a cycle of reflection on action. Activity theory looks at the “dynamic process of participants’ meaning making of their practice as they engage in recursive cycles of reflection” as well as the mentor’s articulation of the “gaps and contradictions between different educational practices, directing participants’ processes and outcomes of learning, as they actively transform their practice” (Orland-Brak and Becher, 2011, p. 115-116). Activity theory views these practices as artifacts which mediate the learning of the mentee and allows the mentor to direct future action to illuminate the gaps and contradictions between different educational practices based on the teacher’s background and context as well as the social and historical setting of the school. In the context of new teacher mentoring, activity theory draws our attention to the conversations between mentor and protégée as a dynamic process where the mentor guides the new teacher to a new understanding of the teaching process.

## Methods

To answer these three research questions, I engaged in observations, interviews with CDS administrators, including all current DSTR fellow and their mentors, and two past DSTR mentors. Interview questions covered topics like past mentoring experiences, current mentoring activities, and topics of debriefing. Initial plans were also to record two post-class debrief discussions for each mentoring dyad, but the interviews revealed that these formal debrief sessions were not being utilized at CDS.

To better understand the UPenn DSTR program, I attended the mentor training prior to the start of the school year and reviewed all materials provided to mentors and fellows. The DSTR training for mentors included four days of in person meetings on UPenn's campus in June. Mentors were required to attend two sixty-minute sessions per day focused on topics such as observation, mentoring activities, and facilitating debriefing sessions. Mentors also attended two additional sixty-minute sessions each day with their mentees. The topics of these sessions were focused on the three DSTR strands: Teaching and Learning, History and Culture of Day Schools, and Reflective Practice. Additionally, administrators, mentors and mentees were allowed independent time to begin planning. Schools were encouraged to create opportunities for administrators, mentors and mentees to start creating relationships as well.

Initial interviews were conducted with the Assistant Head of School and Assistant Head of Upper School, both of whom are involved in the DSTR program. The Assistant Head of School was responsible for the program for its first two years at CDS and continues to be involved in the recruitment and hiring aspects of the program. The purpose of the interview with the Assistant Head of School was to obtain information about why CDS decided to participate in the DSTR program, the initial process of implementation, and recent trends in recruitment and hiring. The Assistant Head of Upper School was selected for interview because he is the current coordinator of the program at CDS. He was previously a mentor in the program during its second year. He is responsible for the implementation of the program including training at the school, facilitating meetings of mentors and fellows, and the initial screening of applicants in the hiring process. The combination of these two individuals provided a comprehensive viewpoint on the changes in the program since its inception through to its current iteration. These interviews revealed potentially different mentoring programs at CDS: the DSTR program and the mentoring provided to teachers new to CDS who were not in the DSTR program.

Research question one is derived from these discussions to determine what mentoring activities were taking place at the school and what training was provided by the DSTR program and the school. The second and third research questions were developed after attending the October meeting of DSTR schools, including fellows and mentors, and a further review of the literature. The curriculum of the DSTR meeting was focused on debriefing tools. This training included several video-taped debriefing sessions where mentors were asked to evaluate the effectiveness of different techniques. The second research question was developed from this training session and conversations to determine the effectiveness of the debriefing methods being deployed at CDS. Previous research (Helgevold et al., 2015, Crasborn et al., 2011; & Strong and Baron, 2004) examined the content of post-observation discussions and method of questioning to

analyze the relationship between mentor and mentee. After reviewing these initial interviews and the relevant literature, an interview guide (Appendix A) was developed.

Research Question Alignment to Concepts and Data Collection Methods		
Research Question	Concept/Variables	Method of data collection
What are the mentoring activities in place at Country Day School and what activities are used to structure these activities for mentors?	<ul style="list-style-type: none"> <li>• Mentoring activities described by interview participants</li> <li>• Effective activities for new teacher development</li> </ul>	<ul style="list-style-type: none"> <li>• Administrator interviews</li> <li>• DSTR Mentor &amp; mentee interview</li> <li>• New teacher interviews</li> </ul>
How are debrief sessions or video sessions with UPenn mentors and fellows distinct from reflective practices used within other mentoring pairs?	<ul style="list-style-type: none"> <li>• Forms of reflective practice used</li> <li>• Types of debrief activity</li> <li>• Other tools used for debriefing</li> </ul>	<ul style="list-style-type: none"> <li>• Review of UPenn training and materials</li> <li>• Mentor interviews</li> </ul>
Is there a relationship between the categories of discussion or approach during debrief and mentor training?	<ul style="list-style-type: none"> <li>• Topics of debriefing discussions</li> <li>• Components of mentor training</li> </ul>	<ul style="list-style-type: none"> <li>• Materials review</li> <li>• Videotape of debrief sessions</li> </ul>

Interviews were conducted with all six DSTR fellows, including two fellows who had completed the program. One of these fellows continues to teach at CDS and the other former fellow is teaching at another independent school. Interview questions focused on open ended responses which allowed participants to describe events and activities in their own words. Interviews took approximately 40 minutes to complete and three were conducted at the school. As a result of COVID, the school stopped all in-person activities in the spring and three other interviews were conducted over Zoom. All three mentors currently participating in the were interviewed as well, two in person and the third over the telephone. One mentor interview was not completed because the mentor was removed from the program and the mentee was being reassigned to a new mentor. Additional interviews with past mentor participants were scheduled but could not be completed because of complications as a result of COVID.

Software was used for the transcription and coding processes. Recordings from the interviews were transcribed through the service Otter.ai and edited for errors. Transcripts were then uploaded to NVivo to help with data analysis and coding. Transcriptions were initially coded for thematic topics and analytic memos were created with the help of handwritten notes to capture impressions from the interview and to identify pertinent quotations. Based on earlier conversations with school administrators the initial topics for coding were:

## Initial Coding Themes

Instrumental Support  
Psychosocial Support  
Networking Support  
Mentoring Activities  
Recruitment  
Informal Mentoring  
Debriefing

This coding and memoing process follows the concepts of Grounded Theory, first proposed by Glaser and Strauss (1967), and later further articulated by Corbin and Strauss (2008). According to Galser (1998) “During the initial and intermediate coding phases, the researcher ascribes meaning to data through the use of codes. Ascribing meaning is not, however, an isolated act. Through the process of constantly comparing data codes to codes, codes to categories, and categories to categories, the researcher interacts with the data, continually reassessing meaning to “what is really going on” in the data (Glaser, 1998, p. 12). Memoing prompts the researcher to question positions, of both the subject and the researcher within a social context, and to make visible internal debates and decision making. From the memos and initial coding, intermediate codes were developed including sub-codes for specific activities related to each mode of support initially coded and codes for statement about diversity, mentor pairing, teaching styles, and independence as these were recurring topics that began to emerge from the interviews.

### Limitations

As a result of the COVID impact on the school and in particular the increased demands on the faculty, the school asked me to limit my interviews to only DSTR fellows and mentors and not to continue the research on the other mentoring programs at the school. Therefore, I did not interview mentors or new teachers who were not a part of the DSTR program. Additionally, interviews with mentors no longer participating in the program were cancelled as well due to the pandemic.

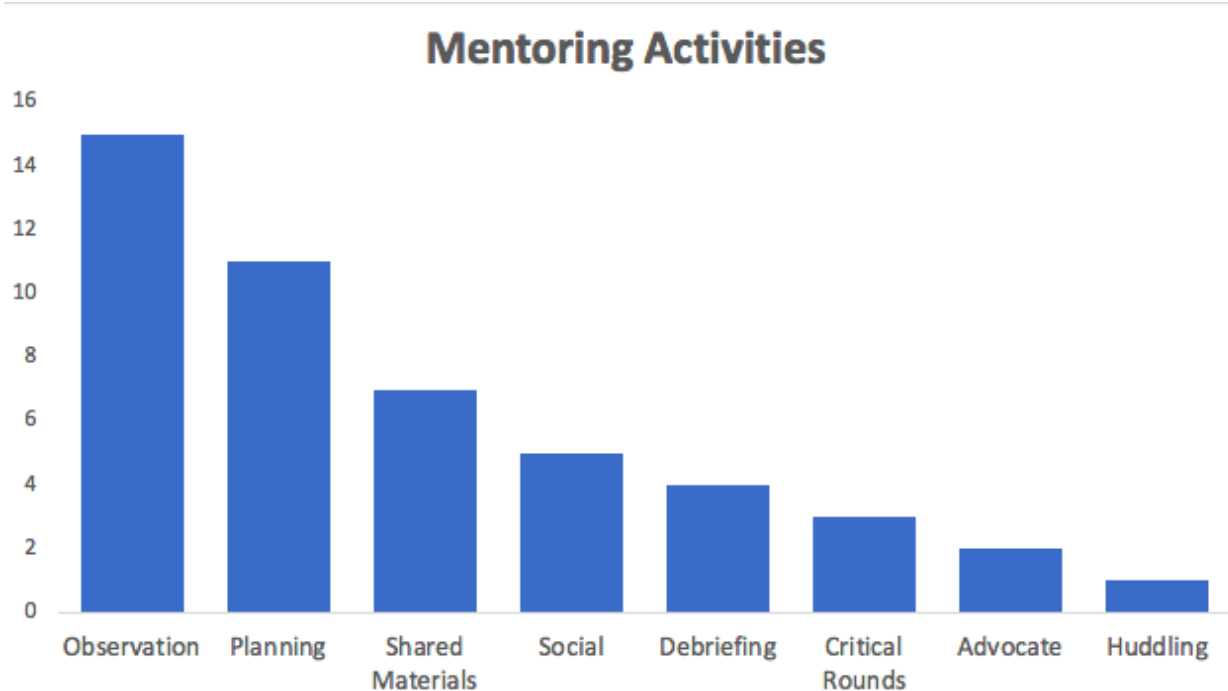
An additional limitation is that after completing interviews with DSTR program mentors and mentees, it became clear that participants were not completing the debriefing activity in the manner intended by the training. As a result, I was not able to videotape debriefing sessions as intended. Participants did describe short post-observation discussions on an irregular and informal basis, but I was not able to observe these. The complications of COVID resulted in online synchronous and asynchronous classes which also caused further difficulties for participants to debrief on a regular basis and for my ability to observe these conversations.

## Analysis and Findings

Research Question 1: What are the mentoring activities in place at CDS and what programs are used to structure these activities for mentors & mentees?

### **Finding 1: CDS offers a high degree of instrumental support, some psychosocial support, and very little networking support**

When mentors and fellows were asked about typical mentoring activities, they identified nine activities. All mentors and fellows discussed frequent mentor observation of the fellow as well as daily observation of the mentor teacher by the fellow. Eight fellows discussed co-planning or shared plans as a regular activity and five fellows and one mentor discussed sharing of materials. Three fellows also described some form of debriefing and one mentioned an activity he described as “huddling.” These activities, which are defined as instrumental support, represent the majority of mentoring activities. Other activities including “critical rounds,” social activities, and informal mentoring fall under the category of psychosocial support. Of the activities mentioned, only advocating fits under the category of networking support. Mentors and mentees were most often to mention observation when discussing mentoring activities (graph below), followed by planning and shared materials with activities like critical rounds, advocating, and huddling, which directly address teaching and networking activities being mentioned by a few individuals. The graph notes the number of instances each activity was mentioned in participant interviews.



### **Instrumental Support**

Of the three types of support offered by mentor teachers to mentees, both members of the pair at CDS indicated various forms of instrumental support were offered, including shared syllabi, assignments, rubrics and assessments. In the first year, mentees taught the same classes as the mentor teacher. The pairs engaged in regular meetings to plan upcoming classes and the mentees often utilized identical assignments and assessments. Several fellows described following the curriculum of their mentors closely, “We spent a lot of time on curriculum together and so my first year especially I followed what his curriculum to a tee” and another said “in the beginning I was pretty much trying to imitate her and do what she was doing.” Fellows discussed the benefits of being able to use the materials instead of having to create their own in their first year of teaching: “And the best part of the program is that he kind of passed down to me all of his syllabi and the rubrics that he uses and the assignments and his lesson plans. So that’s, the program’s really amazing because I didn’t have to make any of those on my own. I could just follow his lead last year.” Fellows usually observed mentor’s class prior to teaching their own sections in order to model the lesson plans and troubleshoot some of the potential responses from students. One fellow described the pattern of observations in the first year as set up to guide her progress:

*The first couple of months, my mentor was in my, well, pretty much the majority of the first year my mentor was in my class every single day. And I was in one of her classes every single day. And we kind of set it up so that I had access to her curriculum. And then I taught like one day behind her, so that I could like observe her class one day and then make changes that I wanted to and then teach it the next day. So in the beginning, I was pretty much trying to like, imitate her and kind of just like, do what she was doing. And then towards the end of the year became more, I guess, just like doing more different things than I was at the beginning of the year relative to her and that has increased this year as well.*

During these classes, some mentors engaged in coaching activities like “huddling” or making meta-narrative comments during teaching to highlight changes the mentee could consider when teaching the same lesson. These techniques were presented at the mid-year DSTR meetings as effective methods for mentor coaching.

During the first year of the fellowship, mentors also observed fellow’s classes on a regular basis, and most indicated that observations were daily. Observations conducted were intended to ensure curricular goals were met by mentee’s lessons as well as to understand mentee’s strengths and weaknesses in order to guide future planning. One fellow described these observations:

*And then I think the first three months of teaching, he was in my class every day observing me. So, I had almost immediate feedback, every class for like, what he thought went, well what he thought I could improve on. And he would always take really good notes that he let me look over afterwards. And so I was getting a lot of feedback. And I think I was getting quality feedback as well.*

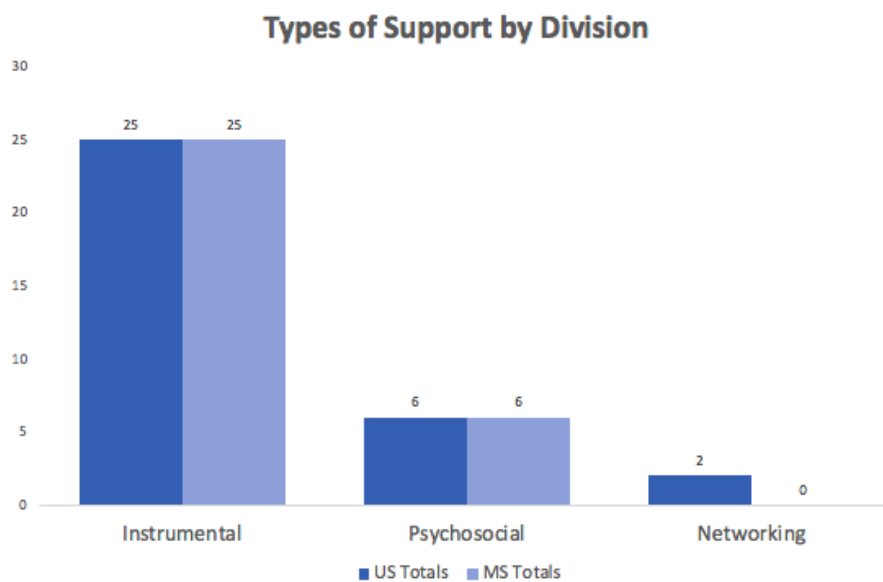
Several mentees noted that mentor teachers were such a regular presence in their classrooms that the students did not even notice their presence. Fellows also noted that mentor teachers rarely if ever interrupted or made comments during classroom observations but saved any comments for the fellow until after the class. Both first and second year mentors helped fellows to plan upcoming activities:

*“And one of the things that I appreciated about my mentor was that she’s always been pretty open about kind of like ‘tag teaming’ with me if there was something that I was interested in. We would both discuss ways that we could imagine doing it and she was pretty open to trying to integrate those ideas into his class as well, especially this year.”*

In addition to support around instruction, mentors also provided other instrumental support to assist mentee’s socialization to CDS. Such activities include preparation and guidance during comment writing at the end of the marking period, discussions about expectations for important community events such as “Back to School Night,” and preparation for parent teacher conferences.

In the second year of the fellowship, instrumental support was provided less frequently as fellows often taught classes that were not identical to those of mentor teachers or made significant changes to their class beyond that of mentor teachers. Some fellows also took on additional classes as well outside of their departments or the supervision of mentors. One upper school fellow described that in the process of changing the books taught in his class the second year he talked with his mentor and department head a few times, but he was allowed to make the changes and felt supported throughout the process. Similarly, another upper school fellow described the process of shadowing a class in another department because it was in a field of interest, and then being asked to take on an extra class in this subject in the second year.

## Psychosocial Support



Of the three types of mentoring support provided at CDS, instrumental support was most often described by both fellows and mentors, but there was a considerable difference in the amount and description of psychosocial support provided. Psychosocial support involves other emotional support including such activities as counseling, offering personal advice or friendship, confirming, and goal setting. This is especially important since only one of the DSTR fellows attended an independent school like CDS. Both mentors and fellows described a varying degree of psychosocial support. While both upper school and lower school mentors and fellows indicate an equal amount of psychosocial support, this type of support is significantly lower than the instrumental support provided. Some examples of support that both mentors and fellows describe are when a student was being accused of academic dishonesty or of disciplinary issues. One upper school fellow stated:

*We kind of go, we base it on more, I guess the emotional weight of what needs to be, I guess addressed or what is addressed if something happens like academic dishonesty in a class or a student is, you know yelling or making jokes when the materials really heavy, then we'll have a really a conversation that is either charged by irritation or are just concerned depending.*

Another middle school fellow also discussed this connection:

*So sometimes we'll just kind of like, try and catch up and talk about how things are going. And I actually think like, the informal time, even though it's a little bit rare is usually where like my favorite conversation moments happen in terms of thinking of like ideas or just kind of like, talking about how things are going because there are still a lot of things in our classrooms that are the same or like kind of, especially in like the structure of the class.*

Both comments demonstrate the value that fellows place on the emotional support provided by their mentors. These descriptions also demonstrate that these sessions are infrequent or are based on events rather than planned opportunities for the two to connect.

Two mentors and two fellows detailed problems in the mentor pairing process. The issues stem from hiring fellows who have interest in a wide variety of subjects and then finding faculty in the departments to pair with the fellows. The school has traditionally hired fellows who have strong academic and athletic backgrounds, four of the six fellows played Division I sports and three either earned double majors or minors in a secondary field. As a result, the teaching assignment for the fellows and the mentor pairing was often determined late in the process. For at least one pair, this prevented the mentor from attending the summer training session prior to the first academic year. Since all the fellows and mentors at the school typically attend the session, this is a great opportunity to establish a strong connection between mentor and fellow, which is facilitated by the training as well as the informal meetings that take place during social settings throughout the week. Another middle school fellow described problems with the pairing process:



*I think that [CDS] needs to be more intentional about the mentor/mentee pairing process. It's been totally fine in the upper school, but in the middle school, they have had some issues with finding right fit because of that initial, like, we'll take anybody approach, which as an applicant was awesome. Like I was super stoked about that. But I think that it kind of put current faculty members in a little bit of a bind to be like, okay, we have a science fellow or like, we have a history fellow, like who's gonna volunteer. And maybe that department isn't at a place where they want to be accepting fellows.*

These comments reveal the fellow's perceptions that the mentor pairing process is the last step in the recruitment of DSTR fellows and that the process does not take into account the capacity of the department or mentors to assume the workload of the program.

One additional structure of support that has been used at CDS is a meeting described as "critical peers." At this meeting, which in previous years was scheduled for every other week, one fellow would be asked to present a problem of practice that she has encountered in her own experience at the school. While these practices could be related to classroom experiences, they also included issues outside of the classroom such as dealing with a difficult parent or how to approach a colleague about an issue. After the presentation, other fellows would discuss the elements of the problem and offer possible options. Mentors also attended the meetings and after the discussion among the fellows would offer additional perspectives as well. One of the fellows and one of the mentors discussed this meeting as beneficial. In addition to the immediate benefit in addressing the problem of practice, this regular meeting allows the fellows and mentors to see each other as a network of support. According to several participants, scheduling constraints have stopped these meetings this past year.

### **Networking Support**

Networking support encompasses activities such as introducing, steering, advocating and support that the mentor provides outside of instructional activities, as well as within the broader independent school world or within an academic field. In the context of CDS networking support might include helping fellows to make connections in the professional communities by participating in independent school conferences such as National Association of Independent Schools or International Boy's Schools Coalition or attending conferences with them, encouraging them to be a part of a professional organization related to the academic discipline or to publish in a journal, or introducing the fellow to peer teachers at other schools. Networking support also includes the network within the school itself and includes activities such as introducing fellows to faculty and staff in different divisions or to alumni or trustees of the school.

DSTR fellows already have access to networking support as a benefit of being a part of the UPenn program. Three in person events throughout the year provide mentors and fellows the opportunity to network with individuals at other independent schools in the program. Additionally, UPenn supports several affinity groups for the program and fellows interact with other DSTR members in their subject disciplines at least once per month in "teaching rounds." However, beyond the UPenn framework, CDS fellows described no activities that might be described as networking support either within the CDS community, the broader independent

school community, or within the professional discipline. Only one of the upper school fellows described a mentor as an “advocate.” She describes this support as a type of protection taking place within the community:

*He was my first kind of advocate at school too, like he was the one that was like, 'Hey, why are you coaching three seasons, you're not supposed to coach three seasons' and like he went and spoke to the athletic director about that. So, I immediately felt like he was going to be supportive. And he's also just such an honest human being, like, even when it's critical, like, I know it's coming from a good place. And I trust him implicitly.*

While this fellow describes the protection of the mentor, this description reveals that other individuals did not understand the expectations of the fellows, and that the mentor needed to set boundaries for the fellow. Other fellows described feeling disconnected from the rest of the school community and the problems that result from the lack of a clear understanding of their roles:

*I think it's really cool for these schools to say we have this fellowship with UPenn, but if it's never like infiltrating past the four people it directly and immediately affects, then what...how much is it actually impacting our community?*

Another fellow offered a similar description:

*It's sort of isolated, and I guess speaks to again, like how many people actually know what we're doing, besides the people that are directly involved. We don't even know what all of us are doing.*

All three comments reveal a lack of networking support within the school to help fellows establish their role within a broader community at CDS. Furthermore, none of the fellows or mentors indicated that they engaged in networking support beyond CDS either.

## **Finding 2: Fellows in the middle school are more likely to express dissatisfaction with their mentoring experiences.**

All three of the middle school fellows describe their instrumental support as being rigid, at least in the first year. One of the mentors confirmed this view and offered the insight that that has changed slightly in the last year of the program, but she attributed the change to the hiring of a new interim middle school head, not a change in the program. The fellows describe the teaching styles of their mentors as “regimented” and expressed a desire to “just try out this random new science thing that I just read about as see what happens.” Another fellow said, “I think the other challenging thing has been the ongoing difference in the way that we approach teaching and specifically science education” and that she was nervous to bring up new ideas “because my mentor just wasn’t really interested in those things.” Another fellow also commented that she was discouraged from trying new teaching techniques as well:

*So, in the beginning of the year, I did not have very much freedom. And that was one of the initial points of conflict. I was meant to, I was paired with someone who had been*

*teaching, I think, for 15 years at [CDS], and prior to that had been teaching for a long time. And essentially, it was like anytime I presented something particularly like a new teaching method that we were learning at Penn, he was like 'I did that before I tried that seven years ago. It didn't work, don't do it.' And that was really like, detrimental to my development as a teacher because I think that this is what this program is for. You are doing a disservice if you are not allowing your mentee to be able to explore in the same way that you did when you were a first-year teacher.*

All of the fellows pointed back to the philosophy of the DSTR program as reflective and inquiry based, the final Capstone project for the program is labeled as an Inquiry Project, to draw a contrast between the types of support being provided by CDS and the expectations of the UPenn program. Further, they indicate by not being allowed the freedom to engage in an open and experimental way with new pieces of curriculum or teaching techniques, their relationships with their mentors suffered and they felt less valued as participants.

In the upper school, however, mentors and fellows both describe a more personal connection as resulting from the freedom that fellows are given to explore new materials and techniques. Both members of one pair described a strong personal connection as resulting from their time coaching together. They both describe the conversations from the classroom often extending to the athletic field as well.

*We both coach lacrosse, and, and I like to remember certain moments where, you know, we'll be in the middle of the drill or something. And like, like, the guys are, like, you know, doing their thing. We're just kind of sitting on the sidelines. Maybe another coach is running the drill and we talk about American literature. I think that's really cool that we have that, you know, different setting to talk about even if it's pretty brief, like just affirmative that you know, okay, this has happened in my class or maybe I here are a few things that you can do differently. The fact that we have that time together I think helps.*

Other upper school fellows also describe a higher degree of psychosocial support. One upper school fellow described the “freedom” he had to choose new materials for his class:

*I just followed his lead last year. And he gave me a lot of freedom to deviate, if I wanted to do a different type of lesson or a different book. I taught a different a couple different books that he did in my first year. But that's what I that's what I've loved about the program so much is that I have all this infrastructure in place, but I have some freedom too and watching his classes really helps.*

The comments of another upper school fellow in describing his relationship with his mentor contrast with those of the middle school fellows:

*He's really not fixed to his authority. And I would say, between us, I guess the authority is really fluid. It's more of a reciprocal exchange of ideas. And it's only kind of authoritative when we want it to be or asked for that guidance or perspective. So that's, yeah, that's how I would really characterize it overall.*

The fellow described his mentor’s position as having “fluid” authority and he indicated that they had a “reciprocal exchange of ideas,” which he indicated at other times as well, made him feel free to express his ideas. This reciprocity and fluid authority contrasts with the lack of freedom that one fellow in the middle school signaled as the source of conflict and that other middle school fellows also demonstrated in their comments about

**Finding 3: Underrepresented faculty express feeling “isolation” despite the mentoring support**

Another aspect of mentor/mentee pairing that has been extensively studied in the literature that also arose in the interviews was the pairing based on gender and ethnicity. The research indicates that women and people of color experience greater psychosocial support when they are paired with like mentors. This perception of support is usually attributed to a higher degree of trust and shared empathy. Due to historical hiring patterns at CDS, few faculty are female or people of color which means that fewer may be selected as mentors for the program. As a result, all but one fellow has been paired with a male mentor in their department, and all but one of the mentors have been white.

Fellow/Mentor pairing by Race and Gender						
	Division	Gender	Race		Gender	Race
<b>Fellow 1</b>	US	Female		Mentor 1	Male	White
<b>Fellow 2</b>	MS	Female		Mentor 2	Male	
<b>Fellow 3</b>	US	Male	White	Mentor 3	Male	White
<b>Fellow 4</b>	MS	Female	Asian	Mentor 4	Female	White
<b>Fellow 5</b>	US	Male	African American	Mentor 5	Male	White
<b>Fellow 6</b>	MS	Female	Latinx	Mentor 6	Male	African American

Several of the female fellows indicated feeling some tension at being a female teacher at an all boy’s school and spoke about being the only female member of their department in their division.

On fellow stated, “when I came into the department, I was the only woman and was the first woman in the department probably, I don’t know, I think I was the first permanent woman in the department when I got there because I know that there was an interim for a sabbatical, but I was the first permanent female hire. Now there are two of us.” Two of the fellows attest to talking with their mentor about “being a woman at a boy’s school,” especially when an issue would arise:

*I had a kid last year who, for the life of him would not learn from me. He had such an issue learning from a woman. And that’s exactly what he said. He’s like, ‘I don’t like, I’ve never had a woman as a teacher. I don’t know how to look like...I don’t want to learn from you.’ And I’m like, ‘Fine. Whatever.’ But we problem-solved through that.*

This fellow felt empowered to work through the issue because she was supported by her mentor and other informal members who were female faculty in other departments. Another fellow spoke about the perceptions of gender at CDS and how it affected her relationship with her mentor:

*I think that women are perceived as the more caring and like, nicer. So my first point of communication, granted I had just had surgery and was on crutches...maybe this comes from that part and not from me being a woman, but my mentor essentially said, you need to establish the rule the first day of school. So actually, I think I'm going to take your classroom because I don't think that you can do that.*

Again, the perception of this fellow was that she was being treated differently from the other fellows and perceived as less able because of her gender. These fellows feel like they are facing considerable challenges as a new teacher and additional challenges in the CDS community as being in a minority group, but do not have the kind of psychosocial support from a mentor who has faced the same challenges.

One fellow described that while she did not have a female mentor in her own department, she found female faculty in other departments who served as informal mentors. These other faculty provided her support in dealing with issues of gender:

*And then [faculty member] in the English department has just been, you know, another one where I can go and say like, I am having issues as a woman in a boys school, how have you handled these situations? Or like what's your best solution here? And so, [faculty 1] and [faculty 2] have been really like informal mentors. For me, in terms of like, emotional support, as like, I hate playing like gender card, but like, I am a minority, gender wise at Gilman and, I don't love the all boy's setting. I think it's wonderful, but there are times where I'm like, "Oh my gosh, like, I need someone to vent to.*

Her comments illustrate the issues of being a female teacher at a boy's school and not feeling support within her own department. She describes the emotional or psychosocial support of other women in other departments as being significant.

Several fellows who identify as people of color also describe feeling "isolated" within their department or not being able to talk to their mentor about issues related to race or ethnicity. The majority of mentors have been white and male while the majority of the fellows have been female and are mostly individuals of color. While CDS has made an effort to hire more women and people of color, and the DSTR program is a part of that effort, several fellows spoke about larger issues of race, gender and privilege that they felt like their mentor could not address or made worse:

*"So I think I've navigated that well, but the Penn fellowship itself, the more challenging thing is really just the outside of the classroom stuff and outside of Penn work, it's more the real political and economic kind of realities that we have to navigate that also kind of inform in are informed by what we have to do in the classroom and our jobs and so on. And that's usually kind of, you know, questions of compensation. Other schools have*

*housing stipends. [CDS] doesn't offer a housing stipend or, you know, the privileges that exists between the Penn fellows, at [CDS] alone, right. Like, you know, one Penn fellow's father, you know, found housing for him. I have to find my own housing, right, and I pay out of pocket for that stuff. So I mean, it's, that's more of the challenge and trying to, in trying to come to terms with that stuff and it may or may not affect how we go about or kind of view the mentor-mentee relationship, bringing it full circle but it definitely does have an impact on it and just being a [CDS] in general.”*

In this experience, the fellow discusses economic realities, which were discussed on several occasions during the interview, and privileges of another fellow, and that “trying to come to terms with that stuff” affected the mentor-mentee relationship.

Research Question 2: How are debrief sessions or video sessions with UPenn mentors and fellows distinct from reflective practices used within other mentoring pairs?

**Finding 4: Post-observation debrief sessions are not as detailed or reflective as what is described by the UPenn training. These sessions are more informal and held on a less frequent or inconsistent basis.**

At the mid-year training meeting for mentors, DSTR professors focused their presentations on debriefing strategies to use in discussions with fellows. The debriefing strategy included allowing fellows to reflect on the effective elements of the lesson and to discuss other approaches to class topics. The presentations included providing a range of questions to facilitate post-observation conversations, with resources aimed at distinguishing between directive coaching versus facilitative coaching.

In completing interviews with mentors and fellows it became clear that this practice was not being implemented with fidelity at CDS. Both the format of the UPenn style debrief as well as the proscribed frequency are not being followed in the current setup at CDS. While mentors and fellows sometimes engaged in post-class follow up, these conversations were not based on a schedule or implemented on a consistent basis. Mentors and fellows both described short coaching sessions after classes to discuss mentor observations:

*Of course, after class, we would talk for 10 to 15 minutes and, and really even not directly after class but like a few periods later during lunch or at the end of the day. But a lot of it's just informal and just figuring out the best way to engage your students and you know, almost like our huddling in, you know, 10 minutes. Just, just feedback advice and thoughts, different ways to do certain things.*

DSTR first year mentors sit in on fellows' classes on a daily basis, so there is not enough time to implement a debrief protocol for every class. One mentor commented on these informal meetings resulting from the schedule,

*So I think by keeping it more casual, it helps to kind of talk about things immediately. Where with like more veteran teachers, I like to keep it more formal so that we have the time to actually, or that I blocked that time out for us to meet. Where [my fellow's] schedule is so open that we could sort of talk whenever.*

These comments point to issues several mentors cited such as the need to teach another class or other meetings as impediments to more formalized feedback. In the second year, mentors observe fellow's classes on average around once per week. A second-year fellow also commented on the informal and casual nature of the process:

*We may just have chats in an empty classroom or like in the office whenever something comes up. We rarely debrief, and that's usually before big projects or big changes or activities. And that's those are more of like, you know, sit down kind of conversations and we kind of just workshop things we might be interested in or like he's really interested in kind of adapting.*

This fellow describes debrief sessions in the second year as chats that take place in the available spaces in the school. This fellow also differentiates between these “chats” and the “sit down kind of conversations” that he indicates are less frequent and are more focused on planning and workshoping activities rather than debriefing observations.

Mentors and fellows frequently discussed the cafeteria as an area that allowed for more informal conversations including debriefing class activities. Having these discussions in the cafeteria might be a strategy to mitigate the time constraints, but it also has an impact on the tone of the feedback. One fellow described this practice:

*So that's what it usually it kind of looks like the debriefing and things like that or what we can do it over lunch with even, [CDS] has an interesting kind of lunch culture where they will talk about students and things that I would consider to be closed door conversations or kind of, you know, more hush conversations, openly at the lunch table. So sometimes that will happen.*

On a regular basis these are “chats” or “casual” and he again describes lunch as being a location for some of these discussions. One of the mentors describes how the meetings changed from informal discussions to more structured observations:

*And this year, I've actually done some more like formal write ups. We didn't do a lot of the formal kind of debrief like UPenn kind of modeled last year. But we did more, I've done more of that this year, just to kind of show like, this is what it looks like in a more like normal setting, as opposed to me always being in there and kind of chatting after class. But [CDS] kind of gives you the freedom to kind of work on what you need to with your fellow and to kind of decide how frequently you need to meet and kind of what that looks like.*

Again, this mentor describes typical debriefing activity in the first year as “chatting” and describes that this informal structure allows for a “freedom.” This comment also clearly demonstrates the mentor understands the distinction between the UPenn modeled debrief activities and the types of casual conversations used at CDS. Another fellow also described debriefing activities as taking place at lunch, but also indicated that the mentor teacher allowed her to look over the notes taken during class, “He would always take really good notes that he let me look over afterwards, so I was getting a lot of feedback. And we would sit down and chat over lunch about how I can handle something better or something he hadn’t thought of that I was doing that he wanted to incorporate. So, it felt really symbiotic in that sense as well.” Both comments indicate that fellows found this kind of debrief to be timely and helpful.



Research Question 3: Is there a connection between the categories of discussion or approach during debrief and mentor training?

**Finding 5: Post-observation discussions primarily focused on classroom management and student behavior.**

The finding that mentors at CDS were not employing the UPenn framework for post-observation debriefing prevented recording and analysis of debrief sessions for analysis. Instead participants were asked about the typical focus of these post-observation discussions. Comments from both mentors and mentees about the categories of topics revealed that these conversations often focused on classroom behavior of students or classroom management. In describing this feedback, one fellow noted its focus on student behavior as well as its casual nature:

*But for the most part, she would just kind of like hang out, do her own thing, and then like, every once in a while, be like, you really need to stop trying to talk over seventh grade boys because it's not gonna happen.*

This fellow indicated that the feedback resulted from student behavior. The feedback is focused on teacher reaction to student behavior instead of strategies to mitigate behavior or to implement in order to alter its effects in class. Similarly, another upper school fellow also noted that feedback or discussion of class activities often resulted from disruptive student behavior during class:

*So that's where the planning of activity we usually do as well after big activities, or incidents in class or something happens that you know really is just irritating or a student does something, we'll just you know, chat about it not in a really scientific way more than the casual way usually, that stuff.*

This fellow discusses mainly describes these as planning related to “big activities” or after an “incident.” Both comments describe that these conversations were a result of classroom behaviors and that the feedback was delivered in a casual format.

Other fellows similarly described feedback as focused on classroom management, but indicated that comments were directed at methods to increase student engagement. One middle school second year fellow described these discussions:

*I think mostly our conversations are about the classroom management. And the different students that were specifically in my class last year, and different ways that I can engage certain students versus others.*

A second-year upper school fellow also noted a similar focus on classroom management, specifically how the setup of the classroom can impact the engagement of certain participants:

*So those bits of advice that [my fellow] gave me, the things that I wouldn't even see, like she's sitting, she's feels isolated. That's maybe why she's not talking is because there's two empty seats next to her. Let's move her into the circle. Let's rearrange the furniture,*

*let's you stand in the back of the classroom instead of the front of the classroom has all these little tactics that he's obviously developed in his years of teaching that I would never even really thought of in my first year has helped me kind of develop that skill in the English classroom specifically where you have to, you have to speak up, you have to be vulnerable and feel comfortable with each other.*

Both comments highlight the focus of mentor comments on student interaction and how to utilize classroom management techniques in order to increase engagement from students who are reluctant participants. The upper school fellow notes that his mentor is helping him to “develop a skill,” a sentiment that was reflected in the comments of the lower school fellow as well, which demonstrates that fellows found value in this discussion.

One intent of this question was to ascertain if the mentors followed the inquiry based reflective framework of the DSTR curriculum in their own debrief practices or if mentors followed another practice. Since CDS mentors and fellows were not employing the debrief framework, this practice could not be recorded and observed. While comments from participants do reveal the focus of some of these conversations, they do not reveal the methods mentors or fellows used to come to these conclusions.

## Recommendations

### 1. Outline the “transformative” philosophy of the DSTR Fellows program at CDS:

In the initial interviews, school administrators made clear the goals of the DSTR program at CDS was to transform both the teaching of the mentees, as well as to provide a framework for the mentors, mid-career teacher leaders, to reflect on their own practices as well. School leaders also discussed the positive impact they felt this would have on the larger culture of the faculty after several cohorts of teachers were involved in the program and some DSTR fellows graduated into the faculty. However, comments by fellows revealed a distinction between the mentoring experience in the middle school and upper school levels with the primary distinction being that upper school fellows felt more freedom to explore while middle school fellows felt restricted to the curriculum created by their mentors.

Cochran-Smith and Paris (1995) first distinguished two types of mentoring for new teachers: knowledge transmission or knowledge transformation. This model has been further developed to include “educative mentoring” (Feiman-Nemser, 2001; Wang & Odell, 2002). In the more traditional knowledge transmission model “mentors perceive their role as expert teachers and transmit their knowledge within a hierarchically structured relationship.” Richter et al. (2013) further traces the foundations of this mentor/protegee dynamic and notes that in this structure “novices are socialized into the prevailing culture of schooling which manifests the status quo.” In the knowledge transformation model the relationship between mentor and mentee is collaborative in nature and knowledge about teaching is “mutually generated.” Feiman-Nemser elaborate “[mentors] interact with their novices in a way that supports inquiry and that enables them to learn in and from their practice.” This framework echoes the inquiry-based methodology modeled by the UPenn curriculum and which several mentors and fellows discussed during interviews. Moreover, Richter et al. build on the research of others to demonstrate that beginning teachers have more self-efficacy and feel less emotional exhaustion when they have constructivist oriented mentoring.

Outlining a clear statement about the mission and goals of the DSTR program at CDS can ensure that all individuals have a clear understanding of the vision of school leaders. Moreover, this statement could also be a part of recruiting future mentors to the program and in outlining the roles of mentors and fellows for the broader school community. As part of a logic model, this outline can provide a more comprehensive structure to the DSTR program at CDS and ensure that other parts of the program are implemented consistently to support the overall mission and goals of the program.

### 2. Establish debrief protocol and implementation schedule:

The beginning of the year is a challenging time for everyone and creating and implementing a process of debriefing with a new mentee adds to the challenge. Establishing the norms of the debriefing process is an essential part of developing the relationship between mentor and mentee because it creates the framework for giving and receiving feedback. However, one challenge to this relationship is if mentors or fellows perceive a discrepancy between their own feedback process and the processes of other pairs. Establishing a set protocol for feedback and a schedule

for implementation reduces the burden placed on mentors to create their own feedback process and ensures that feedback addresses all areas of teaching, including classroom management, content delivery and student engagement. In the most recent training sessions (October 2020), after this study was completed, the DSTR program recommended a written framework (included below) for regular debriefings to be used with first year mentors. This framework is recommended but not required by DSTR. Benefits of the framework include ease of use, employing reflective strategies from both mentor and fellow, and establishing pathways for future actions.



**Independent School Teaching Residency (ISTR)**

## **Collaborative Assessment Log**

*This flexible tool/protocol can be used to guide and record notes from coaching/mentoring conversations in a range of situations from planning or debriefing a lesson, analyzing student work, observations of other teachers, or discussing professional goals and growth.*

<b>Presenter's Name:</b>	<b>Mentor's Name:</b>	<b>Date:</b>
<b>+ What's Working? (Recent Growth and Successes):</b>	<b>▲ Current Focus, Challenges, and Concerns:</b>	
<b>Presenter's Next Steps:</b>	<b>Support/Resources Needed:</b>	

*Adapted from New Teacher Center.*

Hobson et al. (2009) as well as others (Foster, 1999; Heilbronn, Jones, Bubb, & Totterdell, 2002; Hobson, 2002) establish that the most effective part of the work is observations of the mentee and of the mentor and that the guidelines for effective communication include a pre-observation conference to set goals and where the post-observation debrief is “(i) conducted in a sensitive, non-threatening way; (ii) focuses on specific aspects of mentees’ teaching; and (iii) provides an opportunity for genuine and constructive dialogue between mentor and mentee which includes joint exploration of the perceived strengths and weaknesses of the mentee’s teaching, discussion of the likely impacts of observed teaching actions, and the development of ideas which might help the mentee overcome any problems or weaknesses” (Hobson et al., p. 212). Establishing this protocol would ensure that discussions follow the guidelines established by Hobson et al., that the feedback is focused on a specific aspect and delivered in such a way, perhaps through a form, that allows the fellow time to process implications for planning future lessons. The recommendations above also point to the need for “joint exploration” by both the mentor and fellow, which is in alignment with the UPenn’s focus on reflective practice as well. Currently,

pre-observation meetings are not a regular practice at CDS, and could be included as part of the observation protocol.

Several fellows and mentors talked about the reflective and inquiry-based nature of the UPenn program at times being at odds with the structures at the school. Several fellows indicated the importance of having input such as when mentors were willing to adopt or try out ideas they suggested, it made them feel accepted or valued in the exchange. One fellow described this as “reciprocal” instead of “being told what to do.” A framework that allowed for this type of regular reflection and input as well as mentor guidance could mitigate this difference in perspectives.

Another challenge to post-observation discussions is to focus on “specific aspects of mentees’ teaching” and to allow a “joint exploration” for how these teaching practices mediate student’s understandings. Many researchers (Helgevold, Naesheim-Bjorkvik, Ostrem, 2015; Crasborn, Hennissen, Brouwer, Korthagen, & Bergen, 2011; Orland-Barak & Klein, 2005; and Strong & Baron, 2004) have noted that post-observation discussion can be divided into several categories such as: instruction and organization, student behavior, classroom setup, content and other matters. During feedback mentors’ suggestions focus on teaching/instruction (70%), students or classroom (18%) and the smallest focus on content (2%). These findings are consistent with the comments of mentors and fellows at CDS. A debrief protocol would encourage mentors and fellows to keep all four areas in mind when engaging in planning as well as during post-observation debrief.

### **3. Improve mentor training prior to first year and create regular meetings for mentors:**

Current training for new mentors is the three-day orientation with fellows at UPenn in July. Mentors leave this event with many materials as well as the book, *The Art of Coaching* (Aguilar, 2013), but no additional training. The in-person event presents several methods for observation and approaches to mentoring and debriefing. In addition to the formal DSTR program, many informal events help to create the basis for the psychosocial connection between mentor and fellow. This event also serves to create networking connections for mentors and fellows at other schools as well. However, as several mentors noted in interviews, since the pairings have been made late in the process, some mentors have not been able to attend the meetings. The result is that some mentors have little to no training when the school year begins. Moreover, research (Langdon et al., 2014) has indicated that mentors who have access to professional development have significantly more positive perceptions than mentors who do not have access to this kind of training.

The structure of the in-person training sessions prioritizes the instrumental support of mentees, but more training needs to focus on the areas of psychosocial support and network support that currently are the weaknesses of the DSTR program at CDS. Bullough (2005) suggested that “mentor preparation needs to go beyond training, traditionally conceived as behavioral inculcation without insight, and should include planned strategies to assist individuals in developing their identities as mentors.” He and others (Carroll, 2005; Graham, 1997; Orland 2001) recommended seminars organized around the practice of mentoring to serve as a type of

“affinity groups,” “helping to overcome mentor isolation, facilitating the development of a shared discourse for mentoring, and enhancing mentors’ skill development through conversations about mentoring practice and pedagogy”

During the school year the meetings of groups of fellows and mentors is inconsistent. For the first two years of the program fellows and mentors met together to discuss problems of practice, but these sessions were led by fellows. Scheduling issues interrupted these meetings this past year. Even during this time, mentors do not have regular meetings to talk about issues with the program or to share approaches to mentoring that have led to successful outcomes. One way to resolve this issue is to give mentors relief from one season of coaching and reserving this time for regular meetings with mentors.

#### **4. Create a network of informal mentors:**

When fellows were asked about informal mentors, several were able to explicitly name other individuals at the school. Often these informal mentors were individuals with whom they coached or whom they felt comfortable discussing issues about being a woman or person of color at the school. These informal mentoring relationships offer fellows psychosocial support and increase the sense of belonging or connection within the school community. Other fellows, who expressed feeling less connected with the school, described informal mentors in other places such as past teachers or others in the DSTR program. This data suggests that creating additional support by encouraging informal mentorship opportunities can increase fellow’s connection to the community and improve retention.

Several fellows described informal mentors who they coached with or who they worked with as co-advisors. These non-academic areas provided fellows with additional informal mentors and allowed them to make contributions that they felt were validated by veteran faculty members. One fellow described that in co-advising with teachers besides her mentor, she was able to watch other teachers build relationships with students and able to contribute in a substantial way. Another upper school fellow described that due to his experience with a Division I sport, the coach was willing to provide him with more responsibilities in coaching, and this level of respect provided him with a feeling of support. Since these areas tend to lie outside of structures and frameworks of existing academic frameworks, they allow fellows to take on more substantial roles in a low-stakes environment and for additional mentors to take on a psychosocial supporting role.

Additional benefits to creating this network include increasing the level of networking support, the area that fellows and mentors identified as the lowest level of support currently offered in the program. Possible informal mentors include former fellows and mentors, other members from the department especially in other divisions, and female teachers or teachers of color who are traditionally underrepresented at the school. This network could also serve as a recruitment tool for future potential mentors in the DSTR program and as an opportunity for current mentors and fellows to share specific knowledge about the program with potential participants. This network would also allow program administrators to evaluate the talents of potential mentors and to work with individuals to build strengths or capacities in other areas as well.

## **5. Consider opportunities for fellow's participation in the community:**

One benefit of the DSTR program that the CDS program director described was the impact of fellow's learning on the larger school community. He identified specifically the professional development on the mentor, the inclusion of new strategies on classroom instruction, and the influence of knowledge about the field of education within the school faculty. He also described the impact of the reflective and inquiry-based practices on the professional culture at CDS. However, while these benefits were reflected in the comments of several mentors, the fellows also described feeling isolated from other areas of school life. One second year fellow described feeling disconnected from the school outside of the DSTR fellows and mentors. Another fellow described a teaching schedule that often left him without any obligations after lunch or with days that he did not need to come to school. Other fellows also described frustration being called "teacher interns," which is apparently a hold over from how fellows were classified in the past: "But there's a lack of respect for what we do. And that just stuff that if there were more people who knew what the program actually was, that wouldn't be the case."

These interviews reveal the difference in perceptions between mentors and fellow and between mentors and other faculty not involved in the DSTR program. Fellows are engaged in the act of crafting and exploring new identities as teachers and as participants in an independent school world. Jean Lave (1996, p. 157) focusing on apprenticeship in teachers stated, "crafting identities in practices becomes the fundamental project subjects engage in; crafting identities is a *social* process, and becoming more knowledgeably skilled is an aspect of participation in social practice. By such reason, who you are becoming shapes crucially and fundamentally what you 'know.'" Creating more opportunities for fellows to participate in the community allows for them to explore and develop these identities through social connections with other individuals at the school

## **6. Evaluate the mentor/fellow pairing process:**

Both mentors and fellows discussed problems with the mentor pairing process in the current system. One concern focused on the late timing of the pairing preventing mentors from attending the summer orientation session at UPenn. If mentors cannot attend these sessions, then they miss training on observation techniques and mentoring strategies. Moreover, this time is also important for mentors to begin the process of psychosocial support through informal activities and to begin to develop a personal and emotional bond. Interviews with mentors and fellows indicated psychosocial support as an area that needed more development. Earlier pairing will allow for mentors to receive the benefits of training and an earlier connection with fellows.

Additional comments revealed that fellows of underrepresented groups often felt a lack of psychosocial support or reported feeling isolated. Researchers (Allen, Day, & Lenz, 2005; Lockwood, 2006; Foley, 2006; Kark & Shilo- Dubnov, 2007) have demonstrated female students experience greater comfort and psychosocial support when they have female mentors versus when they are paired with male mentors and are more likely to feel a greater sense of efficacy and to persist in an academic field. Similar to these findings, researchers who studied mentor matching based on race, especially when looking at doctoral students who are the same age as the DSTR fellows, found that mentees felt greater psychosocial support and were more likely to

persist in the field when matched with a mentor of the same race (Estrada, Hernandez, & Schultz, 2018; Blake-Beard et al., 2011; Brown, Daly, & Leong, 2009; Ortiz-Walters & Gilson, 2005). These findings suggest that matching based on gender and race may improve perceptions of support and retention of fellows. CDS is actively recruiting faculty members to increase representation to these underrepresented groups and the DSTR fellows program is a part of this recruitment strategy. However, DSTR fellows might feel a greater sense of belonging if paired with a mentor who is able to lead them through some of the challenges that other females or people of color face at CDS or independent schools in general. Pairing DSTR fellows with mentors who have similar demographic backgrounds may increase retention of DSTR fellows in the future but also requires that CDS have willing mentors with enough experience at CDS to fill those roles as well.

#### **7. Prioritize opportunities for fellows to participate in professional development:**

The lowest area of support as described by both fellows and mentors was network support. Yet, due to CDS's position in a large east coast city, major conferences are often held in the city or nearby locations and are easy to access. The school also maintains strong ties with both the National Association of Independent Schools and the International Boy's Schools Coalition, both of which have major conferences on the east coast every few years. While these major multiple day events are accessible, the state association of independent schools also offers a robust option of single day or partial day events. The school should encourage fellows to participate in these professional development opportunities.

Fellows and mentors are already engaged in classes and three professional development meetings per year as part of the UPenn program, but these other meetings allow fellows the opportunity to make connections outside of the immediate DSTR program. Attending conferences or other professional development can also give fellows the opportunity to share findings from the meetings with other CDS faculty and thus give fellows more opportunity to showcase their knowledge at CDS.



## Conclusions

The purpose of this improvement project was to determine the current mentoring practices in place to support new teacher induction at an independent day school setting and to examine the practices of a subset of these teachers enrolled in a two-year teaching fellowship. Through interviews of school administrators and program participants findings demonstrated that while new teachers are provided with a high level of instrumental support, they do not feel as supported in other areas, especially emotionally or in their broader career path. Moreover, the findings revealed that in particular middle school fellows and fellows from underserved populations felt unsupported. The study also revealed that the school is not following the recommended methods to support post-observation discussions between mentors and fellows.

Recommendations focus on methods to improve organizational structures to improve networking and psychosocial support as well as establishing alignment between the school's goals and UPenn's reflective practice. This includes improving training for mentors by increasing the number of meetings for mentors, determining mentor pairing earlier to ensure new mentors can attend the summer training session, and selecting mentors who are committed to "transformative mentoring." Recommendations also include addressing broader concerns about diversity in hiring in order to pair fellows with mentors based on race and gender or to lead to formal pathways for fellows to create connections with informal mentors who share similar demographic characteristics. The outcome of these steps is intended to impact the sense of belonging that fellows feel in the larger CDS community.

## References

- Aguilar, E. (2013). *The Art of Coaching: Effective Strategies for School Transformation*. San Francisco, CA: Jossey-Bass.
- Allen, T. D., Day, R., & Lentz, E. (2005). The role of interpersonal comfort in mentoring relationships. *Journal of Career Development*, 31, 155–169.  
<https://doi.org/10.1007/s10871-004-2224-3>.
- Allen, T. D., & Eby, L. T. (2007). *The Blackwell handbook of mentoring: A multiple perspectives approach*. Malden, MA: Blackwell.
- Atkins, S. (2019). Trust-based mentoring towards a new knowledge state as a change cycle: Exploring key interpersonal interactions, *International Journal of Evidence Based Coaching and Mentoring*, 17(2), 36-51.
- Atkinson, D., Neville, H., & Casas, A. (1991). The Mentorship of Ethnic Minorities in Professional Psychology. *Professional Psychology: Research and Practice*, 22(4), 336–338. <https://doi.org/10.1037/0735-7028.22.4.336>
- Bear, S. (2018). Enhancing Learning for Participants in Workplace Mentoring Programmes, *International Journal of Evidence Based Coaching and Mentoring*, 16 (1), 35-46.
- Becker, H., Greer, B., Hughes, E. & Strauss, A. (1961). *Boys in white*. Chicago: University of Chicago Press.
- Blake-Beard, S., Bayne, M., Crosby, F., & Muller, C. (2011). Matching by Race and Gender in Mentoring Relationships: Keeping our Eyes on the Prize. *Journal of Social Issues*, 67(3), 622–643. <https://doi.org/10.1111/j.1540-4560.2011.01717.x>
- Brown, R., Daly, B., & Leong, F. (2009). Mentoring in Research: A Developmental Approach. *Professional Psychology: Research and Practice*, 40(3), 306–313.  
<https://doi.org/10.1037/a0011996>
- Bouquillon, E., Sosik, J. & Lee, D. (2005). “It’s only a phase”: Examining trust, identification and mentoring functions received across the mentoring phases. *Mentoring and Tutoring: Partnership in Learning*, 13(2), 239-258.
- Bullough, R., & Draper, R. (2004). Making Sense of a Failed Triad: Mentors, University Supervisors, and Positioning Theory. *Journal of Teacher Education*, 55(5), 407–420.  
<https://doi.org/10.1177/0022487104269804>
- Bullough, R. V. (2005). Being and becoming a mentor: school-based teacher educators and teacher educator identity. *Teaching and Teacher Education*, 21(2), 143–155.  
<https://doi.org/10.1016/j.tate.2004.12.002>

- Cannata, M., Neergaard, L., & Hawkinson, L. (2012). A Comprehensive Framework for Understanding the Teacher Mentoring Relationship. (unpublished)
- Carroll, D. (2005). Learning through interactive talk: a school-based mentor teacher study group as a context for professional learning. *Teaching and Teacher Education*, 21, 457-473.
- Chamberlain-Salaun, J., Mills, J., & Usher, K. (2013). Linking Symbolic Interactionism and Grounded Theory Methods in a Research Design: From Corbin and Strauss' Assumptions to Action. *SAGE Open*, 3(3), 215824401350575–. <https://doi.org/10.1177/2158244013505757>
- Cochran-Smith, M., & Paris, C. L. (1995). Mentor and mentoring: did Homer have it right. In J. Smyth (Ed.), *Critical discourses on teacher development* (pp. 181-202). London, UK: Cassell.
- Corbin, J., & Strauss, A. (2008). *Basics of qualitative research: Techniques and procedures for developing grounded theory*. Los Angeles, CA: Sage.
- Crasborn, F., Hennissen, P., Brouwer, N., Korthagen, F., & Bergen, T. (2011). Exploring a two-dimensional model of mentor teacher roles in mentoring dialogues. *Teaching and Teacher Education*, 27(2), 320–331. <https://doi.org/10.1016/j.tate.2010.08.014>
- Crisp, G., & Cruz, I. (2009). Mentoring College Students: A Critical Review of the Literature Between 1990 and 2007. *Research in Higher Education*, 50(6), 525–545. <https://doi.org/10.1007/s11162-009-9130-2>
- Daloz, L. (1999). *Mentor: Guiding the journey of adult learners*. San Francisco, CA: Jossey-Bass.
- Dominguez, N., & Hager, M. (2013). Mentoring frameworks: synthesis and critique. *International Journal of Mentoring and Coaching in Education*, 2(3), 171–188. <https://doi.org/10.1108/IJMCE-03-2013-0014>
- Dreher, G., & Ash, R. (1990). A Comparative Study of Mentoring Among Men and Women in Managerial, Professional, and Technical Positions. *Journal of Applied Psychology*, 75(5), 539–546. <https://doi.org/10.1037/0021-9010.75.5.539>
- Edwards, A., & Protheroe, L. (2003). Learning to see in Classrooms: what are student teachers learning about teaching and learning while learning to teach in schools? *British Educational Research Journal*, 29(2), 227-242.
- Ellis, V. Edwards, A & Smagorinsky, P. (Eds.). (2010). *Cultural historical perspectives on teacher education and development: Learning teaching*. New York, NY: Routledge.

- Ensher, E., & Murphy, S. (1997). Effects of Race, Gender, Perceived Similarity, and Contact on Mentor Relationships. *Journal of Vocational Behavior*, 50(3), 460–481. <https://doi.org/10.1006/jvbe.1996.1547>
- Feiman-Nemser, S. (1998). Teachers as teacher educators. *European Journal of Teacher Education*, 21(1), 63-74.
- Feiman-Nemser, S. (2001). Helping Novices Learn to Teach: Lessons from an Exemplary Support Teacher. *Journal of Teacher Education*, 52(1), 17–30. <https://doi.org/10.1177/0022487101052001003>
- Foster, R. (1999). School-based initial teacher training in England and France: trainee teachers' perspectives compared. *Mentoring and Tutoring: Partnership in Learning*, 7(2), 131-143.
- Gammel, J., & Rutstein-Riley, A. (2016). A Relational Approach to Mentoring Women Doctoral Students. *New Directions for Teaching and Learning*, 2016(147), 27–35. <https://doi.org/10.1002/tl.20196>
- Gilbert, L. (1985). Dimensions of same-gender student-faculty role-model relationships. *Sex Roles*, 12(1), 111–123. <https://doi.org/10.1007/BF00288041>
- Glaser, B., & Strauss, A. (1967). *The discovery of grounded theory: Strategies for qualitative research*. New York, NY: Aldine de Gruyter.
- Glaser, B. (1998). *Doing grounded theory: Issues and discussions*. Mill Valley, CA: Sociology Press.
- Graham, P. (1997). Tensions in the mentor teacher-student teacher relationship: creating productive sites for learning within a high school English teacher education program. *Teaching and Teacher Education*, 13(5), 513-527.
- Grossman, P.L. Smagorinsky, P., & Valencia, S. (1999). Appropriating tools for teaching English: a theoretical framework for research on learning to teach. *American Journal of Education*, 108(1), 1-29.
- Hamilton, B. A., & Scandura, T. A. (2003). Implications for Organizational Learning and Development in a Wired World. *Organizational Dynamics*, 31(4), 388–402.
- Heilbronn, R., Jones, C., Bubb, S., & Totterdell, M. (2002). School-based induction tutors-a challenging role. *School Leadership and Management*, 22(4), 371-388.
- Helgevold, N., Næsheim-Bjørkvik, G., & Østrem, S. (2015). Key focus areas and use of tools in mentoring conversations during internship in initial teacher education. *Teaching and Teacher Education*, 49, 128–137. <https://doi.org/10.1016/j.tate.2015.03.005>

- Hennissen, P., Crasborn, F., Brouwer, N., Korthagen, F., & Bergen, T. (2008). Mapping mentor teachers' roles in mentoring dialogues. *Educational Research Review*, 3(2), 168–186. <https://doi.org/10.1016/j.edurev.2008.01.001>
- Hobson, A.J. (2002). Student teacher's perceptions of school-based mentoring in initial teacher training (ITT). *Mentoring and Tutoring: Partnership in Learning*, 10(1), 5-20.
- Hobson, A. J., Ashby, P., Malderez, A., & Tomlinson, P. D. (2009). Mentoring beginning teachers: What we know and what we don't. *Teaching and Teacher Education*, 25(1), 207–216. <https://doi.org/10.1016/j.tate.2008.09.001>
- Høynes, S.-M., Klemp, T., & Nilssen, V. (2019). Mentoring prospective mathematics teachers as conductors of whole class dialogues – Using video as a tool. *Teaching and Teacher Education*, 77, 287–298. <https://doi.org/10.1016/j.tate.2018.10.014>
- Ingersoll, R. (2016). Teacher Turnover and Teacher Shortages: An Organizational Analysis. *American Educational Research Journal*, 38(3), 499–534. <https://doi.org/10.3102/00028312038003499>
- Jacobi, M. (1991). Mentoring and Undergraduate Academic Success: A Literature Review. *Review of Educational Research*, 61(4), 505–532. <https://doi.org/10.3102/00346543061004505>
- Johnson, S., Berg, J., & Donaldson, M. (2005). Who stays in teaching and why: A review of the literature on teacher retention. (A Project on the Next Generation of Teachers). Cambridge, MA: Harvard Graduate School of Education.
- Klinge, C. (2015). A Conceptual Framework for Mentoring in a Learning Organization. *Adult Learning*, 26(4), 160–166. <https://doi.org/10.1177/1045159515594154>
- Kukla-Acevedo, S. (2009). Leavers, Movers, and Stayers: The Role of Workplace Conditions in Teacher Mobility Decisions. *The Journal of Educational Research (Washington, D.C.)*, 102(6), 443–452. <https://doi.org/10.3200/joer.102.6.443-452>
- Langdon, F. J., Alexander, P. A., Ryde, A., & Baggetta, P. (2014). A national survey of induction and mentoring: How it is perceived within communities of practice. *Teaching and Teacher Education*, 44, 92–105. <https://doi.org/10.1016/j.tate.2014.08.004>
- Lave, J. (1996). Teaching, as Learning, in Practice. *Mind, Culture, and Activity*, 3(3), 149-164.
- Lindgren, U. (2005). Experiences of beginning teachers in a school-based mentoring program in Sweden. *Educational Studies*, 31(3), 251–263. <https://doi.org/10.1080/03055690500236290>
- Little, J.W. (1990). The mentor phenomenon and the social organization of teaching. In. C. B. Cazden (ed.), *Review of research in education*, 16 (pp. 297-305). Washington, DC: AREA.

- Lockwood, P. (2006). "Someone like me can be successful": Do college students need same-gender role models? *Psychology of Women Quarterly*, 30, 36 – 46.  
<https://doi:10.1111/j.1471-6402.2006.00260.x>.
- Marable, M. A., & Raimondi, S. L. (2007). Teachers' perceptions of what was most (and least) supportive during their first year of teaching. *Mentoring & Tutoring*, 15(1), 25–37.
- McCann, T., Johannessen, L., Fiene, J., Wehman, T., Brannon, D., Jares, D., Burke, L. & Young, M.J.. (2009). Mentoring Matters: Mentoring New Teachers: What Teacher Education Programs Can Do to Help. *English Journal*, 98(6), 92–94.
- McQuillin, S., Lyons, M., Clayton, R., & Anderson, J. (2018). Assessing the impact of school-based mentoring: Common problems and solutions associated with evaluating nonprescriptive youth development programs. *Applied Developmental Science*, 24(3), 1-15.
- Mirzaei, F., Phang, F., & Kashefi, H. (2014). Assessing and Improving Reflective Thinking of Experienced and Inexperienced Teachers. *Procedia, Social and Behavioral Sciences*, 141, 633–639. <https://doi.org/10.1016/j.sbspro.2014.05.111>
- Murphy, M., Steele, C., & Gross, J. (2007). Signaling Threat: How Situational Cues Affect Women in Math, Science, and Engineering Settings. *Psychological Science*, 18(10), 879–885. <https://doi.org/10.1111/j.1467-9280.2007.01995.x>
- Nardi, B.A. (1996). Studying context: A comparison of activity theory, situated action models, and distributed cognition. In B.A. Nardi (Ed.), *Context and consciousness: Activity theory and human-computer interaction* (pp 69-102). Cambridge, MA: MIT Press.
- Nick, J., Delahoyde, T., Del Prato, D., Mitchell, C., Ortiz, J., Ottley, C., Young, P., Cannon, S., Lasater, K., Reising, D., & Siktberg, L. (2012). Best practices in academic mentoring: a model for excellence. *Nursing Research and Practice*, 2012(2012), 937906.  
<https://doi.org/10.1155/2012/937906>
- Orland, L. (2001). Reading a mentoring situation: one aspect of learning to mentor. *Teaching and Teacher Education*, 17, 75-88.
- Orland-Barak, L. (2014). Mediation in mentoring: A synthesis of studies in Teaching and Teacher Education. *Teaching and Teacher Education*, 44, 180–188.  
<https://doi.org/10.1016/j.tate.2014.07.011>
- Orland-Barak, L., & Becher, A. (2011). Cycles of Action through Systems of Activity: Examining an Action Research Model through the Lens of Activity Theory. *Mind, Culture, and Activity*, 18(2), 115–128. <https://doi.org/10.1080/10749039.2010.484099>

- Orland-Barak, L., & Hasin, R. (2010). Exemplary mentors' perspectives towards mentoring across mentoring contexts: Lessons from collective case studies. *Teaching and Teacher Education*, 26(3), 427–437. <https://doi.org/10.1016/j.tate.2009.05.009>
- Orland-Barak, L. & Klien, S. (2005). The expressed and the realized: mentors' representations of a mentoring conversation and its realization in practice. *Teaching and Teacher Education*, 21(4), 379-402.
- Ortiz-Walters, R., & Gilson, L. (2005). Mentoring in academia: An examination of the experiences of protégés of color. *Journal of Vocational Behavior*, 67(3), 459–475. <https://doi.org/10.1016/j.jvb.2004.09.004>
- Ragins, B., & Cotton, J. (1999). Mentor Functions and Outcomes: A Comparison of Men and Women in Formal and Informal Mentoring Relationships. *Journal of Applied Psychology*, 84(4), 529–550. <https://doi.org/10.1037/0021-9010.84.4.529>
- Richter, D., Kunter, M., Ludtke, O., Klusmann, U., Anders, Y., & Baumert, J. (2013). How different mentoring approaches affect beginning teachers' development in the first years of practice. *Teaching and Teacher Education*. 36, 166-177.
- Rippon, J., & Martin, M. (2006). What makes a good induction supporter? *Teaching and Teacher Education*, 22(1), 84–99. <https://doi.org/10.1016/j.tate.2005.07.004>
- Rollinson, D., Broadfield, A., & Edwards, D.J. (1988). *Organizational behavior and analysis: an integrated approach*. Harrow: Addison & Wesley.
- Rousseau, D., Sitkin, S., Burt, R. and Camerer, C. (1998). “Not so different after all:” A cross discipline view of trust. *Academy of Management Review*, 23(3), 393-404.
- Rowley, J.B. (1999). The good mentor. *Educational Leadership* (2), 56 (8), 20-22.
- Strong, M., & Baron, W. (2004). An analysis of mentoring conversations with beginning teachers: suggestions and responses. *Teaching and Teacher Education*, 20(1), 47–57. <https://doi.org/10.1016/j.tate.2003.09.005>
- Tynjälä, P., & Heikkinen, H. (2011). Beginning teachers' transition from pre-service education to working life: Theoretical perspectives and best practices. *Zeitschrift Für Erziehungswissenschaft*, 14(1), 11–33. <https://doi.org/10.1007/s11618-011-0175-6>
- Wang, J. & Odell, S. J. (2002). Mentored learning to teach according to standards-based reform: a critical review. *Review of Educational Research*, 72(3), 481-546.
- Yuan, E. R. (2016). The dark side of mentoring on pre-service language teachers' identity formation. *Teaching and Teacher Education*, 55, 188–197. <https://doi.org/10.1016/j.tate.2016.01.012>

Zeichner, K.M. & Tabachnick, B.R. (1985). The development of teacher perspectives: social strategies and institutional control in the socialization of beginning teacher. *Journal of Education for Teaching*, 11, 1-25.



## Appendix A: Interview Guide

### Introductory Questions:

1. Can you describe your position at the school?
  - a. In addition to teaching, what other activities are you responsible for?
  - b. How long have you been at this school? In teaching?
2. Can you briefly tell me about your background prior to coming to CDS?
  - a. Training?
  - b. Schools?
  - c. Experience?
3. How did you become involved in this program?
  - a. How did you learn about it?
  - b. How did you apply to be a part of it? Can you describe the application process?
  - c. Did you apply for other programs like it? Does the school have other programs like it?
  - d. Did you look at other graduate programs in addition to this one (UPenn DSTR only)

### Mentors only:

1. Can you describe the process of becoming a mentor?
2. Is it the same for the different programs at CDS?
3. Have you had experience mentoring prior to this program?
  - a. When was this?
  - b. Can you describe it a little bit?
4. Have you had experience being mentored?
  - a. When was this?
  - b. Can you describe it a little bit?
5. What is your perception of the UPenn/Fellows/New teacher mentor program at CDS?
6. Did you receive any training prior to this year?
  - a. Can you describe that a little bit?
  - b. Is there something you wish you had known prior to this year? An area of training you wished the program had focused on?
7. Have you received any training with regards to the program this year?
  - a. Can you describe that?
  - b. Is there a particular area where you feel like this training was focused?
  - c. Is there any area that you feel like the training missed?
8. What structures are in place to support you as a mentor?
9. What allowances (course reduction, salary benefit, ect.) are you granted in being a part of this mentorship program?
  - a. Is this the same for all mentor programs?
10. How many hours a week would you estimate you spend in preparing for mentoring?
  - a. Classroom observation?

- b. Other mentoring activities?
- c. Debrief?
- d. Training/Professional development?

### **Mentor Related Behaviors:**

1. What was your training like prior to starting this school year?
2. Can you describe the role of the mentor at CDS?
  - a. How often is the mentor in the mentee's classes?
  - b. How many classes do you teach?
  - c. Does the mentor have a supervisory/evaluative role?
3. What types of activities do you engage in with your mentor/mentee that you would describe as "mentoring behaviors"?
  - a. Can you describe how often each of these happen?
  - b. Which of these do you find to be effective? Why?
  - c. What kinds of supports are provided by the school for these behaviors?
  - d. What structures do you think are most important part of the mentoring relationship?
4. What interventions do you and your mentor/mentee use to discuss teaching activities?
5. How do you use debriefing activities?
  - a. Do you use video?
  - b. Do you use other tools?
6. Would you say you mostly discuss classroom management, students, content, other?
7. What other kinds of activities (not class related) do you engage in with your mentor/mentee?
  - a. What other supports are mentors expected to provide?
8. What is the most important aspect of the mentor/mentee relationship?
9. What types of training have you received this year focused on mentoring?
10. What have been the challenges in mentoring/working with your mentor this year?

### **Mentee Questions:**

1. Can you describe typical activities with your mentor?
2. How would you describe your mentor's process of guiding your practice?
  - a. Directed
  - b. Exploratory
3. How would you describe the role of the mentor at CDS?
4. Is this similar to other mentor/mentee experiences you may have had?
5. What types of activities do you engage in with your mentor that you would describe as "mentoring behaviors"?
  - a. Can you describe how often each of these happen?
  - b. Which of these do you find to be effective? Why?
  - c. What kinds of supports are provided by the school for these behaviors?
  - d. What structures do you think are most important part of the mentoring relationship?
6. What interventions do you and your mentor/mentee use to discuss teaching activities?

7. How do you use debriefing activities?
  - a. Do you use video?
  - b. Do you use other tools?
8. Would you say you mostly discuss classroom management, students, content, other?
9. What other kinds of activities (not class related) do you engage in with your mentor/mentee?
10. What have been the challenges in working with your mentor this year?
  - a. What kinds of supports does the school provide to deal with these challenges?

**Other Questions:**

1. If you have a conflict with your mentor, what supports are provided to you by the school?
2. Do the mentors meet together at any point in the year?
  - a. Who organizes these meetings?
3. Do the fellows/new teachers meet together in separate meetings?
4. Is there anything you would change about the teaching fellows/UPenn/mentoring program?