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Untapped Potential: An Embedded Case Study on Shaping Teacher Leaders' Beliefs  
About Course Access

By

Tyler Francis Graff

A dissertation submitted in partial satisfaction of the

requirements for the degree of

Doctor of Education

in the

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of

University of California, Berkeley

Committee in charge:

Professor Michelle Hoda Wilkerson, Chair

Professor Judith Warren Little

Professor Travis J. Bristol

Spring 2024



## Abstract

### Untapped Potential: An Embedded Case Study on Shaping Teacher Leaders' Beliefs About Course Access

by

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This study aims to better understand how teacher leaders influence the detracking of secondary school schedules through the following research questions (a) How and to what extent do teacher leaders have influence on the detracking of the school schedule? (b) What influences teacher beliefs around tracking and how does professional development shift those beliefs? In this embedded case study, I conducted seven semi-structured interviews, gathered data through a questionnaire of 19 teacher leaders, and analyzed documents from the Tamarack school district. However, the key analytic unit of the study was four semi-structured interviews with teacher leaders who participated in a professional development aimed at shifting teacher leaders' beliefs about equity centered school scheduling. Findings revealed the following: 1) leadership and school structures shape teacher agency, 2) teacher leaders focused on technical aspects of the school schedule, 3) when departments identified normative issues of interest, they influenced course offerings and access points, 4) reflection and conversation shifted teacher leader beliefs, 5) beliefs changed based on teacher leaders' experience and training, and 6) department chairs lacked opportunities for professional development. These findings offer several implications for policy, future research, and for practitioners in the field working toward a more equitable school schedule.

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## Chapter One: Problem Statement

In today's US secondary schools, students are often tracked into homogeneous classes that have negative impacts on their educational outcomes. Classes such as advanced placement courses can have artificial barriers such as summer homework or prerequisite classes that make it more difficult for students to gain access to enrollment. Remedial classes tend to have less qualified teachers and lowered expectations for the students who are enrolled (Oakes, 1992; Turner & Spain, 2016). However, undoing these tracking choices is complex work that requires attention to the technical, normative, and political (Oakes, 1992) elements of school change. Although the research is clear that teacher leaders are essential in effective implementation of school reform efforts, they often lack the training needed to do the complex work they're asked to do. This dissertation is aimed at better understanding the influence teacher leaders have in the detracking of the school schedule toward more equitable outcomes for students of color and low-income students and how these teacher leaders' beliefs change through professional development by investigating the following two questions:

- 1) How and to what extent do teacher leaders have influence on the detracking of the school schedule?
- 2) What influences teacher beliefs around tracking and how does professional development shift those beliefs?

### Background Information on the Problem

Since the inception of modern schooling in the United States, students have been organized and sorted in order to make teaching and learning more efficient and targeted. Students have been sorted by gender when only boys were allowed to attend school, by age during the Industrial Revolution when a factory model was applied to schooling, and by measured intelligence in 1913, with the debut of Alfred Binet's IQ test (Oakes et al., 1997). In fact, one of the initial rationales for grouping students by perceived ability was to support the development of a stratified workforce and society (Oakes & Guiton, 1995; Strello et al., 2021), and this goal continues to support the maintenance of tracking in today's schools (Oakes & Lipton, 2007). These initial ideas of sorting students in order to create a stratified workforce have resulted in academic tracking, which leads to disproportionate negative outcomes for students placed in lower-track classes (Leung et al., 2020) within the school schedule.

Once students are placed in leveled classes, often based on biases baked into the school systems (Oakes & Guiton, 1995), tracking begins to have disproportionate impacts on the students within the lower tracks. These negative effects include the reduction of positive peer effects (Strello et. al, 2021; Zimmer, 2003) and differentiated resources in terms of the quality of teachers, class materials, course content, and rigor (Oakes, 1992; Turner & Spain, 2016) and negatively influence student-to-student conversations and collaboration (Nasir et a., 2014). Furthermore, being placed in a lower track leads to reduced academic outcomes and opportunities along with larger achievement gaps, furthering negative relationships with school for students in the lowest tracks (Leung et al., 2020; Oakes, 1992). These lower track placements send negative signals to students who are already receiving compounding negative signals



about their aptitude, intelligence, and belonging in school (Nasir et al., 2014; Oakes, 1992).

Oakes et al. (1997) argue that conceptions of intelligence are socially constructed and maintain race and class hierarchies within schools and classrooms. This process begins when students are placed in low-track classes, where they respond poorly to lowered expectations and develop negative self concepts of their own intelligence, further reinforcing their teachers' negative beliefs about them (Kelly & Carbonaro, 2012). Students continue to adapt their beliefs about ability and intelligence, in response to the signals sent by their school (Karlson, 2015), such as teachers' expectations, grades, and track placement. Thus, when teachers have low expectations of students in low-track classes, students meet those low expectations and teachers continue to adjust curriculum to meet these new lowered expectations rather than use the curriculum and strong pedagogy to influence what students know and are able to do (Oakes & Guiton, 1995).

This argument helps us better understand the reciprocity among teacher beliefs, adaptations in teaching practices, and shifts in student learning (Opfer & Pedder, 2011). As students meet the lowered expectations in the classroom, teachers adapt the curriculum to meet students' newly perceived academic ability, further lowering standards. The bias present in school-level tracking leads students, often students of color and low-income students, in low-track classes to see themselves as less capable. Schools often see student achievement and intelligence as fixed rather than malleable, particularly by the time students get to high school (Oakes & Guiton, 1995, Haimovitz & Dweck, 2017). Once there, those conceptions are further cemented through the negative effects of the low-track classes, making it increasingly difficult for students to move into higher tracked classes. Rather than tracking being a linear process, these three elements each reinforce each other over time.

There is no simple formula for detracking that can be applied broadly; detracking efforts must be applied to the local context they sit within, and creating a culture of detracking is more important than any one specific strategy (Oakes & Lipton, 1992). In order to establish that culture, schools must ensure a wide range of stakeholders are engaged in the detracking process, allowing for distributed leadership (Spillane et al., 2004) to support the complexities of systems change. Working to detrack schools is not without roadblocks and will result in many middle-class parents exerting pressure on superintendents and boards of education to maintain the status quo (Turner & Spain, 2016). Domina and his colleagues went further, finding that "elite students and their parents resist detracking efforts, particularly in schools that enroll large proportions of academically advantaged students" (Domina et al., 2016, p.1236). Furthermore, tracking is in alignment with White middle- and upper-class American values and culture including individualism and competition, making detracking more intractable. These values of help fuel the parental pressure to uphold the inequitable system of tracking that exists in many schools (Bracey, 2003).

One way to better understand these complexities and unearth how systems change within a local context is possible is to closely examine case studies on the topic (Oakes, 1992). Systems-level leaders, school administrators, and site leadership teams looking to detrack their schools need to take a broad view of the issue to see every angle of the systems-change process. Jeannie Oakes offered the Dimensions of

Change framework, discussed in detail later, which can be helpful to school systems seeking to enact detracking policies. Oakes found that “technical, normative, and political perspectives allow us to examine traditional school practices in the context of the beliefs, values, relationships, and power allocations that keep them in place and permit us to consider how proposed curricular, organizational, and classroom changes challenge seldom-questioned regularities of school cultures” (Oakes et al., 1993, p. 463).

### **Problem Statement**

Like many other school districts across the region, “Tamarack School District<sup>1</sup>,” a suburban school district, offers a variety of classes, including remedial math courses for English Language Learners, differentiated math courses starting in seventh grade, Advanced Placement (AP) courses, and specialized Career and Technical Education (CTE) pathways, in addition to special education courses. Within these differentiated courses, racialized patterns begin to emerge, including remedial classes that have an overrepresentation of Latino and low-income students and AP and honors classes that have an overrepresentation of White students, who are also predominantly not socio-economically disadvantaged.

Although the housing segregation within the city of Tamarack perpetuates inequalities for its residents, exposing some of the property rights that Ladson-Billings and Tate name as one of the factors upholding inequities in education (Ladson-Billings & Tate, 1995), meaning that there is a right to exclude Black and Latino people from participation, these property rights to college placement classes and advanced course offerings need not be extended to the privileged few if the correct conditions are created to detrack the school schedule. As an example, Figure 1 below highlights the disproportionate enrollment of White students in advanced placement courses at Tamarack’s two traditional high schools. While the overall enrollment of Latino students at the high schools is 59%, the enrollment of Latino students within advanced placement courses is 18–42%, with some of the lowest Latino AP enrollment coming in math and science courses at 21% each. Research by Klopfenstein (2004) and by Scafidi et al. (2015) highlights that this disproportionality is common across schools in the United States, with Black, Latino, and low-income students enrolling in AP classes at half the rate of their White counterparts. These track placements send clear messages from the school to students about their ability and aptitude (Karlson, 2015) that maintain class and race privilege (Oakes et al., 1997).

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<sup>1</sup> All school names are pseudonyms to protect the anonymity of the participants in this dissertation.

**Figure 1***Advanced Placement (AP) Enrollment by Ethnicity in Tamarack School District Traditional High Schools*

<b>AP Course</b>	<b>Total Enrollment</b>	<b>Latino Enrollment</b>	<b>White Enrollment</b>
English	609	154; 25%	380; 62%
Social Science	411	97; 24%	265; 64%
Math	701	147; 21%	459; 65%
Science	500	107; 21%	299; 60%
Fine Art/For. Lang.	428	181; 42%	208; 49%
Electives	60	11; 18%	42; 70%

These disproportionate enrollment trends are similar for the specialized programs at each high school, the Engineering Academy at Mission High School and the Environmental Leadership Program at Wallace High School, as well as for the honors classes offered at the freshman and sophomore levels. Some of the tracking within these programs begins at the single comprehensive middle school for the district, within the math department. Welch Middle School offers a compressed math course in seventh grade that allows selected students to enter algebra in their eighth-grade year. Students are selected for the class based on two assessments, grades, and teacher recommendations; it is clear that many emergent bilingual and Latino students are being left out of this compressed class. This grouping by race and class furthers the inequalities already present in schools (Oakes, 1992). Early tracking in the middle school sets the stage for deeper and more complex tracking at the high school, where the advancement in mathematics allows for earlier access to AP classes and more challenging science courses. This level of tracking illustrates a clear need for a comprehensive detracking process. However, in order to successfully engage in the detracking process, teacher leaders, who are essential to systems change (Vernon-Dotson & Floyd, 2012), need to be engaged in the work and given the professional development needed to successfully engage in this complex systems change for equity.

If, as a school system, Tamarack School District wishes to meet its mission of uplifting student achievement, then systems of tracking within its schools must be dismantled in order to allow access and opportunity for its students and to establish positive messages around achievement and aptitudes to Black, Latino, and low-income students within the system.

**Research Sites**

Tamarack is located near a large urban city center. Demographically the town is composed of 66% White, 30% Hispanic, and 6% Asian residents (United States Census Bureau, 2022). The families that commute into the city center for work earn upper-middle-class incomes, like much of the surrounding county. What makes

Tamarack different from the surrounding towns is that it is also home to a large, and growing, population of immigrants from Central America. Many of these families work in the service industry throughout the local region and live in a densely populated neighborhood of Tamarack, which is segregated by from other neighborhoods in the town.

This segregation bleeds its way into the school system. Starting in elementary school, students attend their neighborhood schools based on their geographic location, and, due to the housing segregation, patterns of school attendance follow suit. Of the elementary schools, four serve a predominantly Latino population, while two serve a largely White population, and one serves a diverse population more representative of the community. The elementary students then matriculate into the comprehensive middle school, where many families experience a diverse school population for the first time. The two traditional high schools mirror similar demographics to the middle school, with about 60% of the students being Latino and 40% White. One of the high schools has a slightly higher enrollment of Latino students, while the other is also fed from outside the district, enrolling a higher proportion of White and affluent students. This diversity is a unique feature of Tamarack within the context of the county, where 85.3% of the population is White. The local context of Tamarack sets an important stage for school and ultimately course enrollment patterns. In a diverse community such as Tamarack, racialized patterns of tracking can arise depending on the course offerings and enrollment practices schools engage in.

Within the Tamarack School District, there are two traditional high schools that this research will focus on. First, Wallace High School, with an enrollment of 1,200, has a student body that is 47% Latino, 39% White, and 5% two or more races. Within those racial demographics, 44% of the overall student population is socioeconomically disadvantaged, 10% are homeless, 16% are emergent bilingual students, and 12% are students with disabilities. In addition to enrolling students from within Tamarack School District, Wallace enrolls students from a nearby K–8 school district with a significantly higher proportion of affluent and White students. The principal of Wallace High School has been working at the school and involved in the school schedule for 14 years, nine of which have been as a principal. Before coming to Wallace, she was an assistant principal within a different school district for 10 years, giving her 24 years experience in working with school schedules and student enrollment.

Across the city, Mission High School is the oldest school in the county and enrolls a similar number of students at 1,287. The demographics, however, are significantly different than Wallace High School, and all of the students enrolling at Mission High School matriculate from the district's comprehensive middle school. The demographic makeup of Mission High School includes 68% Latino students, 27% White students, and 1% students with two or more races. Of the student body, 62% are socioeconomically disadvantaged, 20% are homeless, 25% are emergent bilingual students, and 10% are students with disabilities. In recent years, Mission High School has also enrolled an increasing number of newcomer students from Central America, totaling nearly 10% of the school's enrollment. The principal of Mission High School is in his second year as principal and has been involved in the scheduling process as a site leader for five years, including two years as an assistant principal in another state.

Although the schools are beginning to collaborate on more curricular activities, both schools have largely been able to make decisions about their scheduling in isolation. This includes the development of CTE pathways, expanded AP classes, and specialized pathways and programs. To complicate matters, principals have also had the autonomy to permit different levels of prerequisites for AP classes, enroll advanced classes at different grade levels, and offer differing levels of support classes for their students.

Both of the schools operate under the same collective bargaining agreement (CBA) with the union. The CBA states, “School administration has final responsibility for the master schedule and teacher assignments,” and goes on to describe an approach to scheduling that will be covered in more detail in the findings chapter, which includes administrators collaborating with department heads on a number of the components of the final school schedule. The main touch point for this collaboration with administrators is the department chair. However, each of the departments in both of the schools identifies their department chairs in a different way. Some of the departments vote on the chairperson each year, while others rotate it through the department every year. This results in some departments having stable leadership year over year while others are constantly adjusting to their new chairperson each year, leaving discrepancies in the level of experience with the schedule-building process. Additionally, neither principal has explicit expectations or training for their department chairs at the beginning of the year, and the district office does not offer such training either.

Both of the schools within the study, however, are helping to execute the strategic plan of the school district, which was written with significant input from site leadership, teachers, students, and parents. This plan serves as a guiding light for much of the equity work within the district and includes some strategic initiatives around course offerings, student supports, and the diversification of AP courses.

### **Tamarack School District Strategic Plan**

During the 2019–2020 school year, Tamarack School District hired a new superintendent, who leveraged an equity audit conducted by Ed Trust West in the 2018–2019 school year to develop a three-year strategic plan. The initial equity audit contained 61 discrete recommendations for the school district to advance equity within its systems across ten topics, including resource allocation, staff diversity, and course access. In order to fully develop the strategic plan and narrow the actions, the education services department along with site leadership and the superintendent engaged the community in a series of input sessions. The administrative team visited each school site two separate times to gather input on and narrow the recommendations for the final strategic plan. Additionally, a steering committee was convened to further narrow the initial recommendations along with parent input, followed by a final narrowing of the actions from principals to ensure alignment across the district. The full strategic plan was finalized in the fall of 2020 and subsequently approved by the Tamarack School Board. The finalized plan still contains nearly 50 discrete actions, and is currently being used by the cabinet leadership team of the school district to track progress on the discrete actions and overarching goals.

The final Board-approved plan highlights a handful of actions that directly address course access within the district. These actions include increasing the

graduation rate and the number of students meeting the UC A-G requirements, minimum course requirements for admission to University of California and California State Universities, by expanding counseling services and engaging counselors in professional development focused on course access and a counseling curriculum that facilitates all students having the opportunity to understand how to navigate the school system, including access to AP courses. It also asks for the redesigning of the science course pathway to reduce tracking and to increase the number of students of color in AP courses, as well as the addition of an ethnic studies class as a graduation requirement.

Although the presence of a strategic plan is only a technical element of the change process, as described in Oakes's Dimension of Change Framework (Oakes, 1992), it allowed the superintendent and their cabinet team to create space for conversations that were more normative in nature. These conversations allowed the participants in the input sessions to prioritize actions and discuss the efficacy or importance of each action. Politically, the superintendent can now leverage the Board-approved document to enact change where there may be resistance from teachers or parents, as many of the actions within the plan are in support of closing opportunity gaps for Black, Latino, and low-income students within the district.

### **Limitations of the Strategic Plan**

Ultimately, the list of initiatives within the strategic plan was narrowed, although not significantly, by the steering committee. Although this narrowed list of recommendations has a significant focus on equity work across the system, with so many discrete actions, the plan has the potential to prevent staff from doing deep systemic work that pays attention to the normative and political elements of systems change. If there had been more conflict during steering committee meetings, there may have been potential for the creation of more coherence and focus within the plan. Furthermore, student voice was not used in the process of narrowing the recommendations, which I believe would have helped the committee understand the needs of students and illuminated where the school systems may be creating pain and disconnection for Black, Latino, and low-income students (Howard, 2002).

Even with significant discussions and input, the plan ultimately lacks focus, which is leading to initial strain on both administrators and teachers. For example, the report suggests hiring more counselors and engaging them in professional development. However, it does not specify that professional development address counselors' beliefs about students' capability and achievement as it relates to supporting students with selecting their classes. Without engaging counselors specifically with issues of race, these changes may not result in reducing equity gaps and may even exacerbate such gaps if training reinforces harmful beliefs and practices. Additionally, with the number of initiatives spelled out in the plan, there will be limited resources in terms of time, staff attention, iteration, and funding put into any one action item, further limiting the impact of the initiatives. This lack of focus is not uncommon for districts, and the lack of initial screening of and a minimal narrowing of actions by district office staff based on best practices may have left the plan too large to effectively implement in the long term (Corcoran et al., 2001).

Ultimately, this technical strategic plan has a strong list of actions focused on course access and explicitly calls for the reduction of tracking, but it lacks some of the normative momentum that may help in deeper implementation at the school site level. In the next section, I will describe one particular action within the strategic plan and highlight how the normative and political elements of the Dimensions of Change framework can serve to resist systems change and what role teacher leaders can play in those two elements of the Dimensions of Change framework, which will be discussed in detail in the literature review.

### **Teacher Leadership Within the Strategic Plan**

With the strategic plan as a technical guiding document calling for a range of actions that may help to reduce tracking within Tamarack School District, some of the actions within the document call for more normative conversations to shift practice within the school district. A discussion focused on reworking the science course sequence was one example of a normative conversation, which had associated political pressures and mixed results. Ultimately, teachers and teacher leaders played an integral role in the course sequence decision process. The Board of Education and superintendent prioritized the design of thoughtful processes so that the conversation would include teacher, student, and parental input. The additional political pressure from the school board to authentically engage teachers in the decision-making process highlighted that teachers play a significant role in the development of course offerings, curriculum decisions, and departmental organization in Tamarack (Cheung et al., 2018; Vernon-Dotson & Floyd, 2012). From instructional coaches and department chairs to school site council members and instructional leadership team members, Tamarack has a wide range of teachers taking on formal and informal leadership roles. Teacher leaders are present throughout the system, yet their roles are loosely defined, a pattern seen across the country when it comes to teacher leadership (Wenner & Campbell, 2017). These key teacher leaders often bring new course recommendations to the Secondary Curriculum Advisory Council (SCAC) for approval or facilitate conversations about what courses will be offered within their department meetings. This is one of the many ways teachers take on leadership within the district without formal leadership development, a trend seen across the field of teacher leadership (Smylie & Eckert, 2018). This committee, which reviews and makes recommendations on course offerings, is composed of mostly teachers along with two to three administrators; participation may be voluntary or may be a way for teachers to fulfill their contractually obligated adjunct duty hours. In practice, the majority of the recommendations that come to this committee are approved by the group without significant vetting or pushback.

In all, up until the fall of 2021, very few of the teacher leaders across Tamarack School District had received any formal leadership training, and most had received minimal training related to equity-centered decision-making, yet a significant number of teacher leaders were tasked with making such decisions. Teacher leaders, such as department chairs, also carry significant weight in the decisions to assign teachers certain courses. This often results in newer teachers teaching lower-track, remedial, ELD, and freshman-level classes and more senior teachers teaching AP, honors, or upper-division courses (Burdman, 2000), due to normative pressures and informal

hierarchy amongst teachers. These patterns of class assignment are a signal of the normative beliefs that low-track classes are more difficult and less enjoyable to teach. These beliefs are held by some teachers and department heads, who codify these placements into recommendations for the principal and ultimately into the school schedule. However, these patterns are fluid, and some teacher leaders act as instructional coaches, teaching classes more traditionally taught by less senior teachers, such as AVID or ninth grade. More strategic professional development for teacher leaders has the potential to disrupt this trend by normalizing the assignment of the most equipped teachers to teach students who need the most support.

Teacher leadership training is a growing area of interest across the country and ranges from in-house programs that school districts design to formal masters programs (Smylie & Eckert, 2018; Wenner & Campbell, 2017). In step with that growing trend, the Tamarack Education Services Department spearheaded a new Leadership Team for Teachers with support from a grant at the county level during the 2021–2022 school year. This program is aimed at building internal capacity within the teaching corps through a series of leadership engagements and workshops focused on standards-based grading, the Graduate Profile (a description of desired soft skills for Tamarack School District graduates), and equity-centered leadership practices related to systems change (Smylie & Eckert, 2018). The program currently has 18 members ranging from sixth- through twelfth-grade teachers. It has the long-term goals of empowering teachers to design and support the implementation of equity-focused systems change and building a foundational contingent of teachers who have the potential to take on more formalized leadership roles as they become available, which is common for many teacher leaders across the country (Vernon-Dotson et al., 2012).

In all, teacher leaders play a significant role in the systems-change process (Cheung et al., 2018) and are playing a growing role in that process within the Tamarack school district. Although they lack the formal positional authority that administrators tend to have, they make up for it with expertise and moral authority amongst teachers (Hess, 2015), which is evident in the interactions that department heads have with their departments when making decisions around course assignments for classroom teachers. However, the inequitable teacher placement resulting in more experienced teachers working with students who need less skilled teachers is an example of systems producing exactly the results they have been designed to get (Hinnant-Crawford, 2020), and clearly illuminates some of the normative beliefs and political pressures (Oakes, 1997) that maintain these placements. Even with teaching assignments delivered as recommendations to principals, reversals on those decisions are infrequent, showing the political power that teacher leaders hold when making decisions of such importance. This political influence also shows itself in the SCAC when course recommendations are made with minimal pushback or rebuttal from other teachers. Ultimately, with limited leadership training on how to make equity-centered decisions, there is opportunity for bias to be baked into these decisions. Additionally, the egalitarian nature of the profession (Cheung et al., 2018; Flores, 2018) makes it hard for teachers to argue differing positions, as it may disrupt that balance of power, bringing unrest or discomfort among teachers. Teacher leaders clearly have the political influence to assert change within the school district, yet are only now beginning to



engage in leadership development that may support their ability to make equity-centered decisions around course offerings and teacher placements.

However, teacher leaders are not the only political players influencing course access issues. The broader political landscape, including educational policy, parental pressures, and the Board of Education, has influence in these areas. In the section below, I will explore how those political influences shape the course offerings within the high school schedules in the school district.

### **An Example: Detracking Efforts**

Although there are significant challenges to detracking courses and diversifying AP classes across the system, there are reasons to be hopeful as people with power and influence, who also have the normative belief that students of color deserve opportunities for advancement, begin looking for small wins (Weick, 1984). In the spring of 2022, Wallace High School (the high school with a higher enrollment of White students, and more AP course offerings) began working with a consultant from Equal Opportunity Schools, a consultant who supports districts to “increase access, belonging, and success in rigorous college and career-prep” (Equal Opportunity Schools, 2022) courses. The school worked with the consultant to build an equity team of teacher leaders, who engaged in professional development on equitable access to AP courses and supported the implementation of a school-wide survey for staff and students, which led to conversations between students and teachers they had an established relationship with. The survey helped the equity team identify belief patterns for staff and students and then put them in contact with each other to have conversations around AP enrollment. One of the findings was that 38% of the staff thought that reducing disproportionality in AP was a core responsibility and 51% of the staff thought it was an important responsibility (Equal Opportunity Schools, 2021). These percentages highlight an initial normative belief about students and their ability to handle the rigors of AP courses, in that nearly 89% of teachers saw reducing disproportionality as a core or important responsibility of the school.

These initial beliefs set a strong foundation for potential detracking or course access discussions held by teachers. Additionally, 89% of students across race and socioeconomic level had aspirations to obtain a two-year, four-year, or advanced degree (Equal Opportunity Schools, 2021). The survey and the resultant student information cards, which contain data describing demographics, academic achievement, and relational connections to staff, also included students’ race and language status. The centering of race helped the school increase the number of Latino students taking AP courses by 18% in one year. This expansion of AP courses highlights the interest convergence between White parents wanting access for their children and increased access for students of color; that is, more access for everyone did not jeopardize access for White students.

However, the elimination of honors classes at the freshman and sophomore levels, as a way to minimize tracking at the early stages of high school, has had the exact opposite effect. The original equity audit and subsequent strategic plan, identified the reduction of tracking, particularly at the freshman and sophomore level, as a recommended action for reducing the negative impacts of early tracking (Strello et al., 2021). However, when equity-oriented actions come into tension with the priorities of

parents closer to power and privilege, there is often significant resistance and subsequent pressure applied to the Board and superintendent (Turner & Spain, 2016).

In the spring of 2021, Mission High School began to enact some of the detracking efforts outlined in the strategic plan at the freshman and sophomore level. The courses identified to be eliminated, called “honors” courses, provided few curricular differences from college placement courses and did not result in the college credit or GPA bump that AP courses do. That is to say, students in the honors classes were taught the same lessons, in the same classrooms, as students in the college placement classes, but students with the honors designation were asked to read an additional book or write additional papers. In essence, these honors classes offered no more rigor, just more work.

Typically, departments and principals have discretion to eliminate course offerings like these “honors” courses based on student need or teacher availability without any formal process. However, when Mission High School parents heard of the reduction in honors courses, they organized a coalition to share their thoughts with the Board and superintendent, communicating that their students would be at a disadvantage without these classes or may not have access to rigorous academic content without the honors courses. With this swift response from a small group of about five White parents, the classes were reinstated and the Board asked staff to engage in a process of analyzing the classes and engaging the community around the honors offerings in the following school year.

Turner and Spain highlighted the power parents hold in the role of systems change by saying, “Parents have successfully undermined untracking by lobbying school board members, threatening to exit their school systems, co-opting educational leaders, and generating support from other parents” (Turner & Spain, 2016, p.787). The attempted Mission High School honors course reductions are a prime example of White families using their power and privilege to reinforce the idea of property rights to these classes, even though the classes offered no substantive pedagogical advantage. Additionally, this example illuminates the interactions between the tenants of meritocracy and property rights with the political dimension of the Dimensions of Change framework. On the contrary, these course designations are one of many ways schools send messages to students about their aptitude and academic promise (Karlson, 2015).

Anecdotes like this highlight where the espoused values (Argyris & Schon, 1974) come into conflict with the enacted values of the organization. While the elimination of these embedded honors classes had the potential to create more heterogeneous classes, the tracking, or property rights (Ladson-Billings & Tate, 1995), of parents closer to power and privilege took precedence over the potential to have more integrated classes at the freshman and sophomore levels. At the same time, there is a limited understanding of the negative impacts of tracking or the limited benefits for advanced students. Zimmer found that “it is hard to advocate for tracking when the results suggest that it reduces the peer effect for low- and average-ability students and in total has an insignificant effect on high-ability students” (Zimmer, 2003, p. 314). A shift to heterogeneous classrooms could have had the potential to maintain outcomes for students formerly tracked into honors classes while increasing the outcomes for

lower-achieving students (Zimmer, 2003) by providing additional preparation and an onramp to AP classes for more Black, Latino, and low-income students.

This vignette about detracking is also a clear articulation of the Dimensions of Change framework (Oakes, 1997) in action. Despite a technical strategic plan calling for the elimination of honors classes, the normative beliefs of parents close to privilege and power regarding curricular differences for their students, and the political influence they have through email and meetings with the Board and superintendent, halted the detracking of the school schedule (Turner & Spain, 2016). With a more distributed approach to leadership yielding a larger coalition of well-trained teacher leaders, a change like this may have been able to withstand the parental pressures, as teacher leaders could have more clearly articulated the lack of rigor or equivalent rigor with only increased volume of work in honors classes and the potential upside of the reduction of tracking for all students, including traditionally higher-tracked students.

Through this description of the Tamarack School District efforts toward equity, and in particular the Mission High School detracking vignette, I have highlighted the importance of combining the tenets of distributed leadership and the Dimensions of Change framework as an analytical and practical tool in systems change. The elements of the Dimensions of Change Framework can support systems leaders in the creation of equitable systems that support all students, regardless of background. They also further support the importance of teacher leadership in the change process (Bellibaş et al., 2020; Vernon-Dotson & Floyd, 2012) and intentional professional development to support teacher leaders in making equitable systems change. When those in power to make decisions, be they teacher leaders or more formal leaders, are able to see that systems are not color blind and that nobody has property rights to particular classes, and to understand the technical, normative, and political elements of the change effort, they can begin to disrupt the inequities within the school schedules. Just as Ladson-Billings and Tate (1995) articulated, the nexus between property rights and educational inequities is an important place to begin examining how to disrupt change in service of equity.

### **Significance of the Research**

In this study, I review the literature on tracking and teacher leadership, along with highlighting the importance of Jannie Oakes's Dimensions of Change framework and Spillane's distributed leadership theory as important tools in the detracking process. From there, I review the methodology I used in this embedded case study, analyze the data collected, and highlight the findings from the research. Finally, I end the dissertation by highlighting my key findings related to the first research question: that structures within the schools moderated the influence teacher leaders had on the school schedule; that teacher leaders tend to focus their attention on the technical aspects of the schedule build; and that when departments identified normative changes, they effected change within their schedule. Then I share my key findings related to the second research question, including that reflection and conversation helped change beliefs, that beliefs shifted differently based on experience, and that Tamarack School District lacked a systemic approach to the appointment and intentional development needed to shift teacher leaders' beliefs about tracking practices. Finally, I discuss

implications for policy, practice, and future research before offering recommendations based on the findings.

Ultimately, this research aims to guide systems-level leaders in creating system-wide professional development that shifts teacher leaders' beliefs about the school schedule and about the enrollment of students of color and from working class families within their school's schedule. Too often, the school schedule is seen solely as a technical process and not as a lever to advance equity within schools. Furthermore, teacher leaders who support the development of the school schedule aren't given the necessary tools in order to see the system through an equity lens and effectively move systems change forward.

Finally, as a practitioner, I hope that this research serves as an analysis of how systems-level leaders can utilize distributed leadership and intentional professional development for teacher leaders to open up access to rigorous course offerings for students of color and low-income students while minimizing the harmful impacts tracking has on student outcomes.

## Chapter Two: Literature Review

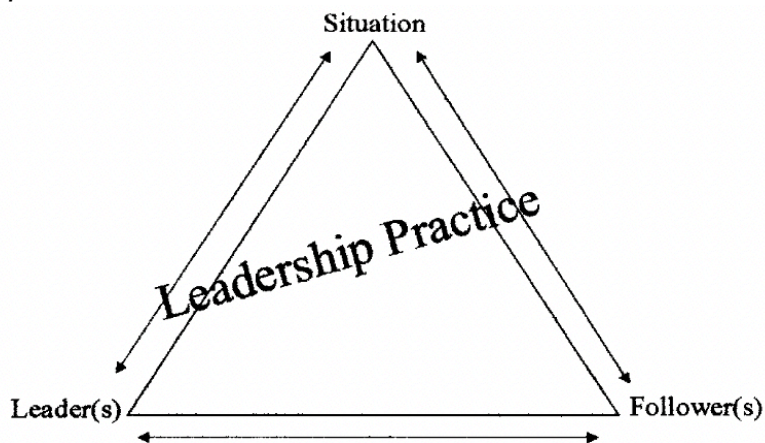
In this chapter, I review two conceptual frameworks including the Dimensions of Change Framework (Oakes, 1992) and Distributed Leadership (Spillane et al., 2004) undergirding my research and discuss how they help in illuminating the complex nature of leadership and the systems-change process. From there, I review the literature on teacher leadership, its influence on systems change, and the requisite professional development and support needed for teacher leaders to be effective. Finally, I review the literature on professional development and its impact on changing beliefs and highlight the need for further research on professional development focused on shifting the beliefs of teacher leaders who are critical to the systems-change process.

### Theoretical Frameworks

The first theoretical framework that serves in helping us better understand the role teacher leaders play in systems change is James Spillane's distributed leadership framework. This framework is helpful for the study of leadership, as the unit of analysis is leadership practice rather than an individual leader (Spillane et al., 2004), which much of leadership research has focused on (Harris, 2003). Spillane et al. argue that leadership practice consists of leaders and followers within a specific context, as illustrated by Figure 2. Other related terms include delegated leadership, dispersed leadership, and democratic leadership (Aypay & Akyurek, 2021). Although there are similarities among these terms in that they all require leadership to be shared, the distributed leadership framework takes this further, highlighting that leadership practice takes place within the interactions among leaders, followers, and the context.

### Figure 2

*Distributed Leadership Framework*



*Note.* From "Towards a Theory of Leadership Practice: A Distributed Perspective," by J. P. Spillane, R. Halverson, R., & J. B. Diamond, 2004, *Journal of Curriculum Studies*, 36(1), pp. 3–34, <https://doi.org/10.1080/0022027032000106726>.

In this model, there can be multiple leaders and multiple followers, which lends it to the study of teacher leadership. Alma Harris (2003) argues that teacher leadership is

an important starting point for understanding how distributed leadership practice actually works. Within the context of the current study, the framework will allow for a more complex understanding of how teacher leaders, teachers, counselors, principals, and other constituents both lead and follow as the context changes. For instance, there may be formal leadership held by a department head, while other teachers within the department who lack the formal title may have more influence over their colleagues. This complex interaction among formal leaders, informal leaders, the followers within the department, and the contextual conversation they have around course offerings, access, and teaching assignments is a good fit for the distributed leadership framework, as it highlights the full breadth of leadership complexities within the systems-change process. Furthermore, the framework highlights that although leaders have influence on followers, that relationship isn't a one-way street. In fact, followers often influence how leaders act within a given context (Spillane et al., 2004).

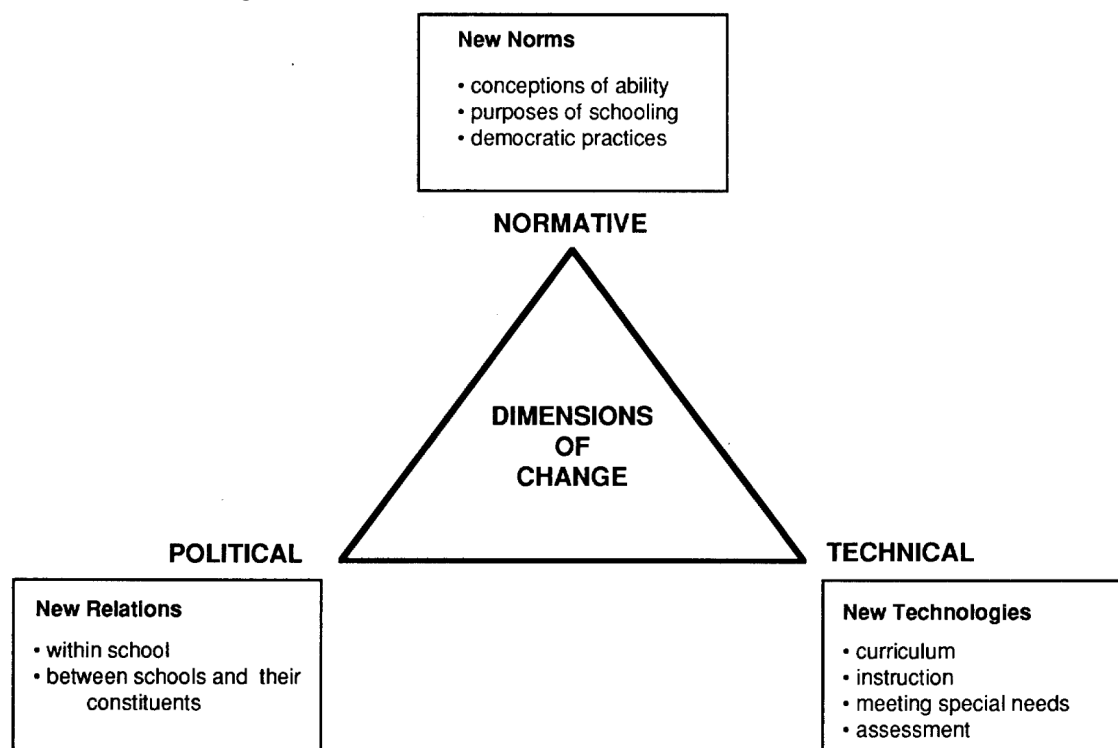
Although systems-level leaders and principals are factors within this framework, distributed leadership also requires that formal leaders relinquish authority (Harris, 2003) in order to fully realize its potential. Rather than simple delegation, distributed leadership in action requires that political power in the form of decision-making be an interdependent, collective process (Harris, 2003) where leaders and followers interact within the context. In essence, effective leadership is not situated with a singular leader but rather is dispersed within and across a school (Muijs & Harris, 2003; Spillane et al., 2004), helping to distribute the actions necessary to impact school change. In order for distributed leadership to work in practice, the work needs to be significant enough for multiple leaders to be warranted (Nasir et al., 2014) and detracking a school schedule is an example of a substantial enough change effort to require distributed leadership. Each school has its own unique, complex culture that influences the interactions between leaders and followers. It is this flow of ideas among constituents that helps us better understand leadership practice in action.

As leadership is distributed across a school and systems change for equity begins to take shape, it's important to understand not only the complexities of distributed leadership, but also the intricacies and dynamics of systems change.

To this end, the second theoretical framework underlying my analysis is Jeannie Oakes's Dimensions of Change framework from her 1992 article, *Can Tracking Research Inform Practice?* Oakes developed this framework after years of studying the impacts of tracking, including her study of three demographically different high schools using both qualitative and quantitative case-study methods. In this study, Oakes and Guiton (1995) analyzed student handbooks, school schedules, student transcripts, course descriptions, enrollment processes, and course offerings and conducted extensive interviews and observations at each of the three schools. Their research found, among other things, that a school's views or beliefs about student achievement are fixed, and, for many educators, race, ethnicity, and social class signal a student's ability and motivation. Additionally, they found that school structures constrain adaptations to curriculum and that high-achieving students are continually advantaged through placement in more rigorous courses (Oakes & Guiton, 1995). This research set the stage for Oakes to develop her Dimensions of Change framework, as seen in Figure 3, in which she argued that the idea that you can "just stop tracking" oversimplifies the complex nature of tracking and fails to recognize the normative, political, and technical

elements that serve as the foundation for tracking in schools (Oakes, 1992; Oakes & Lipton, 1992; Oakes et al., 1997). Each of these dimensions of change is critical in the school change process, particularly when dealing with changes that are so closely tied to beliefs and behaviors, such as those surrounding the detracking of schools.

**Figure 3**  
*Dimensions of Change Framework*



*Note.* From “Can Tracking Research Inform Practice? Technical, Normative, and Political Considerations,” by J. Oakes, 1992, *Educational Researcher*, 21(4), pp. 12–21.

Technical changes are often the ones that come to mind first, as they seem easiest to enact (Heifetz & Linsky, 2002). Oakes defined this dimension as encompassing “the organizational, curricular, and pedagogical strategies required to provide diverse groups of students with access to a common body of knowledge” (Oakes, 1992, p. 17). Examples of technical changes as they relate to detracking would be reducing the number of honors classes at the freshman and sophomore levels, giving professional development to teachers regarding collaborative learning strategies and differentiation, or simply building heterogeneous classes in the school schedule. Logistically, these changes can be enacted with relative ease in the school schedule and are an important element of a comprehensive approach to detracking schools. However, solely focusing on the technical elements of change while neglecting to pay close attention to the normative and political dimensions can leave detracking efforts to falter (Oakes, 1992).

In isolation, these technical changes would be easy; however, teachers, parents, students, and school administrators have strongly held beliefs about how students

should be organized within the school and which students are capable of engaging in courses that consist of higher levels of rigor (Oakes, 1992). Those belief systems about achievement, structure, and access form the foundation of the normative dimension of change, which Oakes argued must be confronted in order to dismantle the racist and classist ideals that undergird many of these long-standing beliefs about student achievement and access (Oakes, 1992). Examples of beliefs that fall under the normative dimension of the framework include beliefs about how students should be sorted within a school, which students should have access to advanced placement courses, and—potentially most insidious—the American ideals of competition and individualism (Oakes, 1992). These beliefs about students are a social construction that perpetuate misconceptions about Black, Latino, and low-income students and their ability to achieve at high levels (Oakes & Lipton, 1992, Oakes et al., 1997).

Finally, policymakers and educators must pay close attention to the political dimension of the detracking process, where permission is given, coalitions are built, and power may be redistributed (Oakes, 1992). These political interests are typically shaped by the norms discussed earlier. For instance, there may be a coalition of parents of privilege who believe that opening access to AP courses to Black, Latino, and low-income students will diminish the rigor of those classes, or that access for their own children may be jeopardized in some way. A coalition such as this may request that the principal reduce access to these courses by creating artificial barriers such as summer homework or other prerequisites. They may even try to gain access to the superintendent to lobby for continued exclusivity within these courses. This pressure from parents has implications for future job security for the superintendent or reelection campaigns of Board members.

In all, the Dimensions of Change framework (Oakes, 1992) is an important conceptual tool in understanding to what extent teacher leaders play a role in the detracking of the school schedule. The framework allows for a broad view of how teacher leaders can shape technical structures within the school schedule, how their beliefs and norms shift conversations around tracking, and how they may build coalitions or influence the decision-making processes that lead to tracking. For those same reasons, the Dimensions of Change framework lends itself well to the case-study model, as it helps researchers understand the full context of the change process rather than a specific portion of the process.

Taken together, the Dimensions of Change framework and the distributed leadership model aid in better understanding to what extent teacher leaders have influence over the school schedule and how professional development may influence the beliefs of teacher leaders tasked with engaging in systems change. Both of the frameworks help in making meaning from the complex interactions among teachers, counselors, principals, district office staff, and other normative and political factors influencing tracking decisions. In the following section, I go deeper into what the research says about teacher leadership, the types of support that help teacher leaders effectively lead systems change, and the elements of high-quality professional development that lead to changes in beliefs.



## Teacher Leadership

Teacher leaders are seen as essential to the school improvement process and ensuring change toward students' success in schools (Bellibaş et al., 2020; Vernon-Dotson & Floyd, 2012). A growing number of school districts (e.g. New York City public schools) are using teacher leaders intentionally as a way to distribute leadership throughout their schools. Such initiatives seek to increase capacity for decision-making from within the teaching ranks and for teachers to lead systems change, including initiatives to detrack the master schedule. Although teacher leadership was introduced in the research in the 1980s, the variety of roles and titles for teacher leaders has been expanding (Smylie & Eckert, 2018).

The following section of the literature review aims to give an overview of the current research on teacher leadership by defining teacher leadership, situated within a distributed leadership framework, and establishing the importance of teacher leadership for effective systems change. From there, I discuss what impact teacher leaders have on the schools and systems change in addition to how teacher leaders are developed and supported.

Spillane and colleagues found that teacher leaders “often assume leadership roles from a perspective that is distinct from that of positional leaders, and the character and structure of these interactions are vital to understanding leadership practice” (Spillane et al., 2004, p. 6). The distinct difference in role from formal leadership positions, such as the principal, along with the varying roles teachers take when practicing leadership make it hard to clearly define what it means to be a teacher leader (Wenner & Campbell, 2017). Simpler definitions such as teacher leaders being teachers who work both within and beyond the classroom, contribute to the school community, and influence teachers' practices (Murphy, 2005) serve to start the conversation around the role. Other definitions of teacher leadership further illustrate the importance of building community toward a common goal of improving outcomes for students while engaging all staff in the improvement of school culture (Vernon-Dotson & Floyd, 2012). Additionally, the role is defined as facilitating teachers taking on roles beyond the classroom including supporting professional development, influencing policy decisions, and targeting student learning (Wenner & Campbell, 2017). However, using a framework to more clearly define the role of teacher leaders can help bring clarity to an otherwise loosely defined role (Cheung et al., 2018). Cheung et al. (2018) have established a clear framework that supports a more nuanced understanding of what teacher leaders do in their practice as leaders. They highlighted that teacher leaders facilitate the deepening of collaboration, support teachers with securing resources, model effective teaching practices, and advocate for effective instruction. Muijs and Harris (2003) added that teacher leaders help to translate the principles of school change into practice in the classroom, support teachers in being invested in change efforts, act as sources of information and expertise, and develop strong relationships through collective learning. Teacher leaders should also be the lead learners at their schools and have a bias toward reflection and learning over perfection (Margolis & Doring, 2012). Given the breadth of definitions of teacher leadership, it is critically important that roles and responsibilities are clearly defined, yet this can only be done within the context of individual school culture (Harris, 2003).

Teacher leadership is an increasingly important aspect of school change efforts but is not a straightforward process. School leaders must clearly define the roles of teacher leaders and the scope of their responsibility in order to set them up for success. It is important for school leaders to keep in mind that teacher leaders experience challenges associated with their positionality and to put the necessary supports in place to ensure teacher leader–supported change efforts are effectively implemented.

By definition, teacher leaders lack the formal authority that principals have; they make up for this with their colleagues by means of moral authority and expertise (Hess, 2015). The impacts of teacher leadership on student achievement is an area needing more study (Wenner & Campbell, 2017); however, it has been shown that teacher leadership is an important element to school change efforts and has the potential to influence the direction of a school (Flores, 2018; Smylie & Eckert, 2018). Teacher leaders also have the potential to improve schools through encouraging professional learning, spreading best practices, increasing teacher collaboration, and offering direct support (Wenner & Campbell, 2017). Teacher leaders have the potential to develop trust within their leadership teams (Vernon-Dotson & Floyd, 2012), but that trust is not always extended to members outside the teacher-leadership teams and throughout the school, likely as a result of the egalitarian nature of the teaching profession (Cheung et al., 2018). In addition, teachers of color are often overlooked for leadership roles, and when they are sought after, they are not valued for the important funds of knowledge they bring to the leadership practice, although they are often able to identify systemic inequities more easily (Kohli et al., 2020) than their colleagues.

There are a number of other areas where teacher leaders have an impact outside of their classrooms. The most common form of teacher leadership, the department chair, has the ability to create a culture of innovation, diversity of thought, and collegial support (Little, 1995) within their department. Their leadership has the potential to set a culture of tracking or detracking within the department's course offerings and even promote democracy within the school (Angelle & DeHart, 2011). Effective teacher leaders also have the capacity to improve professional development; when professional development comes from within the teacher ranks (Berry, 2019; Vernon-Dotson & Floyd, 2012), it increases collective teacher efficacy (Vernon-Dotson & Floyd, 2012), increases teacher leaders' self-esteem, and ensures that school change initiatives are accomplished through the interaction of multiple stakeholders (Muijs & Harris, 2003). These results are in line with both the Dimensions of Change framework and the distributed leadership framework. Teachers are also more likely to engage in instructional shifts when indirectly exposed to ideas through collegial interaction (Berry, 2019). In order to realize their full potential, teacher leaders must work to impact policy by using their voices with people in positions of power, such as principals, superintendents, and policymakers, while using the same level of savvy and intellect they often employ within their own classrooms (Hess, 2015).

The impacts of teacher leadership aren't always positive. As teacher leaders begin to develop their skills and experience success in their roles, many teacher leaders move out of the classroom and to more formalized leadership positions (Vernon-Dotson & Floyd, 2012), as teacher leadership often serves as a career ladder for teachers (Wenner & Campbell, 2017). Teacher leaders can also take on more stress from their new positions, and the relationships they have with their colleagues may change (Muijs

& Harris, 2003; Wenner & Campbell, 2017). In fact, initial enthusiasm from teacher leaders can often turn into long-term career disappointment, especially when their roles require a shift in their colleagues' deeply held beliefs (Little & Bartlett, 2002). Troen and Boles (1992) found that female teacher leaders often become disconnected from their colleagues while assuming positions of leadership, likely due to the egalitarian nature of the teaching profession (Bird & Little, 1986; Cheung et al., 2018; Little 1995). Time is another factor complexifying the work of teacher leaders, particularly for those still working in the classroom; balancing their time between responsibilities within the classroom and responsibilities throughout the school can prove to be difficult (Vernon-Dotson & Floyd, 2012). The adverse effects of being a teacher leader can be daunting, leading to frustration and even frustration or burnout within their career (Little & Bartlett, 2002), furthering the argument that teacher leaders deserve thoughtful professional development and support structures in order to engage in the challenging work of systems change for equity. In particular, teacher leaders need support from school-site principals, as they mediate district policy at the site and can help keep messaging congruent between district policy and teacher practice (Coburn & Russell, 2008)

### **Elements of Effective Professional Development**

There is a clear need for more research into how professional development impacts the beliefs of teacher leaders, as they play such an integral role in the systems-change process and have the potential to influence the technical, normative, and political elements of school systems that perpetuate inequities for Black, Latino, and low-income students. Given the complexity that exists within the role of teacher leader, high-quality professional development that nurtures the skills and attends to the deeply held beliefs needed to create a culture of detracking is critical. In fact, professional development is a cornerstone of school change efforts (Desimone et al., 2002; Trust et al., 2016). However, professional development writ large is often ineffective (Opfer & Pedder, 2011). When offered as a patchwork including formal, informal, mandatory, voluntary, planned, and random opportunities, professional development leads to incoherence within schools and districts (Wilson & Berne, 1999). With many professional development opportunities coming in the form of one-day workshops disconnected from the daily work of teachers, it can have limited impacts on teacher practice. The professional development sessions that many teachers experience focus on individual teacher behaviors and practice as opposed to a more collaborative approach to learning (Putnam & Borko, 2000). Making matters more challenging, most school districts put minimal resources into the development of their teachers (Darling-Hammond, 1996) making the implementation of job-embedded, ongoing professional development difficult. With a growing shortage of highly qualified teachers, districts need to spend more on professional development (Darling-Hammond, 1996) as a way to support the retention and development of teachers entering the profession.

Professional development for teacher leaders includes some of the same challenges as professional development for classroom teachers as a whole, including that most teacher leaders don't see themselves as leaders within their school (Angelle & DeHart, 2011). Professional development for teacher leaders comes in a wide range of

settings, including conferences, formal master's degree programs, and within-district programs, but is on the rise in many areas of the country (Smylie & Eckert, 2018; Wenner & Campbell, 2017). Many of the ways in which teachers find themselves in roles involving leadership do not include any substantive formal leadership training (Smylie & Eckert, 2018), highlighting both the need for intentionally designed professional development to support the unique needs and challenges that teacher leaders encounter and the need for more research on how professional development impacts teacher leaders and their beliefs.

One way in which teacher leadership is developed is through teacher participation on leadership teams within the school or district (Vernon-Dotson & Floyd, 2012), where teacher leaders have access to decision-making structures and collaborative cultures. In order to fully realize the power of distributed leadership within the teaching corps, it is important for teacher-leadership programs to focus on three distinct development areas. These programs should focus efforts on the development of leadership skills, effective classroom pedagogy, and content knowledge in order for teacher leaders to be successful (Wenner & Campbell, 2017). Leveraging teacher expertise in these areas is another way to bolster the quality of professional development, as much of the classroom expertise in these spaces is held by teachers themselves (Snyder & Bristol, 2015). Additionally, programs created for teacher leaders should avoid the single-session professional development style that is often ineffective and be structured instead in a way that allows for a series of experiences and processes that lead to their development (Coburn & Russell, 2008; Smylie & Eckert, 2018).

Another key strategy in employing teacher leaders in systems change is to allow time for teachers to discuss their beliefs about teaching and their role in systems change (Flores, 2018). Effective teacher leadership does not develop in isolation (Smylie & Eckert, 2018), and learning communities have the potential to be efficacy-forming experiences (White et al., 2022). Coburn and Russell (2008) built on this in their finding that teachers with strong professional communities and time, such as weekly meetings, are more likely to impact instructional change. Having time for this level of collaboration is essential for teacher leaders to reach their full potential in the systems-change process (Angelle & DeHart, 2011). This would be particularly important in a systems-change effort, such as detracking, in which it is necessary to address the normative elements of the change process that are largely built on the beliefs of teachers, staff, parents, and students.

Outside of specific leadership-development programs and activities, principals play an important role in the development and support of teacher leaders (Wenner & Campbell, 2017). To start, it is important for principals to set clear job responsibilities for the teacher leaders within the unique context of their school in order to increase their effectiveness (Wenner & Campbell, 2017). Selection and training of instructional coaches is critical in the success of these teacher leaders, and teacher leaders have the content knowledge that principals often lack (Woulfin & Rigby, 2017). Attention should also be paid to the way teacher leaders are selected because the selection process can often be based on convenience or familiarity for the site principals (Angelle & DeHart, 2011). As principals begin to establish a professional culture that centers teaching and learning along with collaboration, teacher practice will improve (Berry, 2019). School

climate also plays an integral role in the effectiveness of a teacher leader's work. When principals spend time creating a culture that focuses on teachers' participation in the decision-making process while keeping teaching and learning at the center of the work, teachers have a higher sense of agency in the change process (Bellibaş et al., 2020). It is important that teacher leaders have strong working relationships with their principals and are given the control to make decisions that impact systems change for equity (Angelle & DeHart, 2011), effectively building distributed leadership structures within the school. In order to effectively improve the depth of collaborative interaction between teachers, principals can also thoughtfully allocate coaching resources in alignment with district priorities (Coburn & Russell, 2008). Principals can also have a negative impact on teacher leaders if they fail to practice distributed leadership and employ a top-down managerial style (Muijs & Harris, 2003).

Although there is limited research on how superintendents can support teacher leaders, it is clear that they play an important role in setting the vision for teachers' leadership while working with unions to solve problems that may arise (Wells et al., 2010). Superintendents can also help to garner buy-in from principals in regards to plans for curriculum or policy changes, helping to build stronger ties between policy at the district level and implementation in the classroom, deepening tie strength between policy and practice within a given improvement strategy (Coburn & Russell, 2008). Additionally, Wells and colleagues (2010), in a study of how superintendents can support teacher leaders, found that principals want the support of their superintendent when it comes to building out structures to support teacher leadership.

With teacher leadership as a key factor in the improvement of schools, it is important to spend more resources in the form of time and money on professional development (Darling-Hammond, 1996) and to rethink school schedules as a way to create time for more collaboration (Berry, 2019). By employing these strategies, systems leaders and school leaders can ensure teacher leaders are prepared for the challenges of the position. In the next section, I go deeper into the nuances of high-quality professional development and its potential to shift teachers' beliefs about students and the inequitable structure that disproportionately impacts Black, Latino, and low-income students.

### **Professional Development Shifting Teacher Beliefs**

Although there is limited research on professional development for teacher leaders, one of the important ways professional development can influence school change for equity is by shifting teacher beliefs about the students they teach and how they teach them within a particular school context. The beliefs teachers hold form the foundation of teachers' actions and inform the thousands of decisions they make in the classroom each day (Basturkmen, 2012; Luft & Roehrig, 2007; Pajares, 1992). Teacher beliefs also include beliefs about their ability to impact student learning (White et al., 2022). Many of these decisions happen automatically and are informed by the unexamined beliefs of teachers developed through their lived experience (Basturkmen, 2012). Furthermore, these decisions inform the organizational knowledge and culture of schools that teachers are situated within, as they build on one another (Horenczyk & Moshe, 2002; Pajares, 1992). To the extent that these unexamined beliefs that drive

decision-making include implicit bias, they can ultimately uphold systemic barriers for students such as tracking.

Defining teacher beliefs is a difficult practice, and often teacher beliefs go by other names in the literature, such as values, axioms, attitudes, perspectives, or perceptions (Pajares, 1992). Narrowing the discussion by differentiating between knowledge and beliefs can be helpful, as beliefs are more closely aligned with values and affect (Nespor, 1987) as compared to discrete knowledge. However, a thorough review of psychological and educational research on teacher beliefs, Frank Pajares defined teacher beliefs as “teachers’ attitudes about education—about schooling, teaching, learning, and students” (Pajares, 1992, p. 316).

Because of the uncomfortable nature of shifting one’s beliefs, teacher beliefs are difficult to change, and at times teachers are reluctant to hear other perspectives than their own (Pajares, 1992; Wheatley, 2002). To make these shifts more difficult, beliefs are often developed early in a teacher’s career and self-perpetuate over time (Pajares, 1992). Teacher beliefs also don’t always align with classroom practice (Basturkmen, 2012), as a teacher may hold an espoused belief about students while their pedagogy may represent an entirely different enacted belief in practice.

Although changing teacher beliefs is difficult, it can be accomplished through high-quality professional development (Borg, 2011; Gorter & Arocena, 2020; Lorenz et al., 2021; Luft & Roehrig, 2007; McKeown et al., 2016). This professional development must be rooted in best practices (McKeown et al., 2016) in order for deep-seated beliefs to change. One of the critical elements in ensuring professional development leads to shifts in teacher beliefs is the inclusion of extended opportunities for teachers to reflect on their classroom practice and deeply held beliefs about others along with ongoing support (Borg, 2011; Lorenz et al., 2021; Wheatley, 2002). Reflective professional development such as this allows for dialogue focused on the structures, policies, and practice that centers participants’ political visions of how schools should work (Kohli et al., 2020). Teachers can have a difficult time examining their own beliefs due to a lack of experience with self-examination (Borg, 2011), which makes having dedicated time and subsequent support even more important if professional development opportunities are to have the intended impact. In that process, if professional development is aimed at shifting beliefs around bias, it must foreground issues of injustice and race (White, et al., 2022).

In order for districts to fully support their teacher leaders with comprehensive professional development that has the potential to shift beliefs, they must thoughtfully design opportunities that include the following best practices. To start, teachers learn in similar ways to their students (Lieberman, 1995, Wilson & Berne, 1999) so professional development should mirror some of the same effective teaching practices we hope to see in classrooms. These include a foundation of collective inquiry (Lieberman, 1995), opportunities for reflection and feedback (Putnam & Borko, 2000), and sharing experiences (Snyder & Bristol, 2015) that are well connected to the content teachers interact with on a daily basis, in this case, teacher leadership. Horn and Little observed that some teachers were more equipped to use problems of practice as sources for learning (Horn & Little, 2010) and professional development has the opportunity to equip teachers with those skills.. Professional development must be situated in context, while being social and distributed across a range of staff members (Putnam & Borko,

2000). Staff should collaborate in the designing and delivering of professional development (Lieberman, 1995), and it can take place within the school day or outside the bounds of the school (Darling-Hammond, 1996; Lieberman, 1995).

Beyond being collaborative and connected to the praxis of teachers, professional development needs to focus on content, be designed for active learning, and be coherent to other school initiatives, in addition to being frequent and over time (Garet et al., 2001; Desimone et al., 2002; Wilson & Berne, 1999). After teachers engage in professional development opportunities, there should be follow-up activities that include long-term support, coaching, and additional interactions with their colleagues (Wilson & Berne, 1999). Furthermore, as a way to support systems change, teachers should have opportunities for leadership roles beyond their classrooms (Desimone et al., 2002). When professional development is collectively designed, focused on teacher praxis, is social in nature, and includes follow-up activities and support, it has the potential to impact teacher practice, beliefs, and systems change. It is important, however, to ensure that any professional development opportunities within schools avoid being exclusively technical; the norms and beliefs of the community they are situated within need to be taken into consideration (Oakes, 2007) if substantive change for equity is to be realized.

One way to realize many of the components listed above is to engage teachers in collective learning communities, as school reform without mutual support and in-depth interaction are unlikely to yield results (Horn & Little, 2010). Kohli et al. (2020) argued that collaborative approaches to learning and visioning racial justice within schools are at the heart of school change. White et al. (2022) built on this by highlighting that learning communities can be efficacy-forming experiences that create space for dialogue and collective interests. By engaging teachers, and in particular teachers of color, in culturally sustaining communities and working groups, teachers of color can be valued for their funds of knowledge and given the opportunity to clearly identify racial inequality, including tracking, within their schools (Kohli et al., 2020). These learning communities should involve shared core values and the deprivatization of teacher practice, all while focusing on student learning (Horn & Little, 2010) and structured reflection (Barnett & O'Mahony, 2006).

Once employed, high-quality professional development focused on teacher beliefs leads to higher levels of self-efficacy related to serving the diverse needs of students and to long-term changes in beliefs teachers have about their own pedagogy (McKeown et al., 2016). When teachers engage in effective professional development opportunities focused on shifting beliefs about their students, they also show deeper awareness and cultural sensitivity toward their students (Lorenz et al., 2021).

However, high-quality professional development is not the only input that influences teachers' beliefs about their students. Lived experience also plays a factor, with a majority-White teaching corps having spent much of their time in White neighborhoods and attending majority-White schools (Gomez, 1994). In today's classrooms, there is a striking cultural and socioeconomic gap between teachers and the students they teach (Athanasas & Martin, 2006; Gomez, 1994), meaning that the mental models teachers have about their students may be divergent from the lived experiences of the students they teach. In order to support shifts in teacher beliefs, school leaders ought to employ multifaceted approaches to professional development

that include the local community, K–12 schools, and universities (Athanases & Martin, 2006; Gomez, 1994), which can help White teachers gain a more broader worldview and deeper understanding of their students.

In a study of science teachers' beliefs, Luft and Roehrig found that newer teachers were more willing to change their beliefs about the pedagogies they employed in the classroom than teachers with more classroom experience (Luft & Roehrig, 2007). Capitalizing on the malleability of early-career teacher mindsets, there is a move to include more equity-centered coursework in pre-service teacher education programs (Kaur, 2012), which can help shift teacher mindset about the students they work with. With the understanding that more senior teachers struggle with changing their deep-seated beliefs (Luft & Roehrig, 2007) and the fact that teacher leaders often have more years of experience, districts must find opportunities to engage teacher leaders in the type of professional development that shifts their beliefs about Black, Latino, and low-income students. As is the case with any high-quality professional development for teachers, having ongoing support, coaching, and mentorship for teachers has a positive impact on shifting teacher mindsets for equity (Athanases & Martin, 2006). In fact, spaces created for teachers of color to engage in this work within spaces that affirm and empower the funds of knowledge they bring to the work can be “sources of efficacy formation” (White et al., 2022). With beliefs undergirding the myriad actions teachers take at every turn in the classroom (Basturkmen, 2012; Luft & Roehrig, 2007; Pajares, 1992) and the widening racial, cultural, and socioeconomic gap between teachers and the students they teach (Gomez, 1994; Egalite, 2024), it is imperative that teachers are given the opportunity to reflect on and change the beliefs they hold about students. The multifaceted approaches and cross-sector solutions in support of shifting equity mindsets for teachers must be done in a distributed fashion. No single leader has the potential to solve these complex challenges (Wheatley, 2002); therefore, pre-service programs, site-based professional development, school leaders, and teacher leaders must align practices in order to shift the deeply held beliefs that undergird the thousands of actions and decisions that occur in classrooms and within school systems every day. Professional development that has culture, equity, and language content woven throughout the program is more helpful in shifting beliefs in pre-service programs than professional development without this integration (Athanases & Martin, 2006), and may have a similar impact on more veteran teacher leaders. Ultimately, students are more likely to reach ambitious academic outcomes when school systems are built to support the learning of children, students, and the entire system (Snyder & Bristol, 2015), including the veteran teachers often tasked with the important work of teacher leadership.

## **Summary**

If districts charge teacher leaders with the significant responsibility of leading systems change but neglect to illuminate and reframe the implicit bias they have and the challenges associated with their roles through professional development, those districts risk deepening the tracking practices that segregate students and leave them with unequal educational opportunities. There is a clear need for more research into how professional development impacts the beliefs of teacher leaders specifically, as they play such an integral role in the systems-change process and have the potential to



influence the technical, normative, and political elements of school systems that perpetuate inequities for Black, Latino, and low-income students.

## Chapter Three: Research Design and Methods

For the purpose of this research study, I used an embedded single case-study approach. The case-study approach is a strong fit for this particular study because it involves the study of a case within a real-life context (Yin, 2014) and includes multiple sources of information (Creswell & Poth, 2018). This particular case centers on teacher leaders' influence on the tracking or detracking of the school schedule. The embedded analysis within the case centers on how teacher leaders' beliefs change through professional development around detracking practices.

Developing an in-depth understanding of the full case requires an analysis of the context in which teacher leaders are situated. By using multiple sources of data, I have been able to more fully understand how interactions with colleagues, supervisors, and other stakeholders influence tracking practices and how the technical, normative, and political elements of the context interact with teacher leaders' beliefs.

Through this embedded case study, I investigate the following two research questions: 1) To what extent do teacher leaders have influence on the detracking of the school schedule?

2) What influences teacher beliefs around tracking and how does professional development shift those beliefs? Below is a description of the site context, participants, data collection process, and analysis.

### Site Selection

For the purpose of this study, I selected the two traditional high schools within the Tamarack School District. Both sites had teacher leaders participate in the grant-funded professional development hosted by an institute of higher learning within the geographic area. Additionally, both school sites are working to align practices under many of the initiatives within the strategic plan. Having the two traditional high schools participate also served as an opportunity to compare and contrast the policies, practices, and systems within the schools to better understand how teacher leadership influences decisions around detracking, what other pressures may be present within the schools, and how distributed leadership influences decisions around the school schedule.

### Purposive Sampling

I used purposive sampling to identify participants who would be most informative to the specific research questions at hand. From the principals who help lead the scheduling process to department chairs who draft department schedules, this sampling technique helped me reach a broader understanding of the complexity of the scheduling process and to what extent teacher leaders have influence over the detracking of the school schedule. Department chairs and other teacher leaders engaged in the Leadership Team for Teachers at Tamarack School District participated in the study so that I could better understand distributive leadership practice (Spillane et al., 2004) associated with the schedule-building process. Both of the school principals were selected for their intimate knowledge of the scheduling process within their school context. The designer of the professional development series was selected for a semi-structured interview to more clearly understand the decisions she made in order to influence the teacher leaders' beliefs. In addition to conducting these semi-structured

interviews, I sent a questionnaire to all teacher leaders throughout the district, most of whom did not participate in the professional development series. For the purpose of this study, I defined a teacher leader as anyone who was a current department chair, a member of the union leadership, an instructional coach, a member of a site Instructional Leadership Team, or a member of the district's Leadership Team for Teacher. Through the questionnaire, I aimed to get a better understanding of how teacher leaders perceived their ability to influence change within the school schedule and to what extent their department has engaged in detracking.

### Key Analytic Unit

The key analytic unit for this study comprises the four teachers who engaged in a professional development series on equity-centered master scheduling during the spring of 2023 led by a local institute of higher education. These four teachers participated in five sessions of professional development over 13 hours via Zoom to better understand how tracking shows up in the school schedule, what alternatives may be present within their schools, and how they may influence these changes. All four of these participants were in the same sessions together along with six other participants from other school districts in the surrounding geographic area.

The participation in this study by these four teachers from Tamarack School District, two from Wallace High School and two from Mission High School, illuminated how professional development has shifted their beliefs about tracking within their department, especially relative to other teacher leaders within the same teaching context. For a more full description of the participants, see Table 1.

**Table 1**  
*Participant Description Matrix*

<b>Participant</b>	<b>Race/Gender</b>	<b>Details</b>
Mission High: Principal	Latino, Male	He is in his second year in the district and third year as principal, with 5 years of school scheduling experience as a principal and an assistant principal in a total of three different school districts.
Wallace High: Principal	White, Female	She is a veteran principal with nine years experience as the principal at Wallace High School and another five as assistant principal. She was also assistant principal at a school outside the district for 10 years, giving her a total of 24 years experience with school scheduling.
*Mission High: English Co-Department Chair	White, Female	Teacher with 10 years experience as a high school English teacher, five of which have been at this school. This is her second year as the Co-Department chair of the English Department at Mission High School.
*Wallace High:	Latino,	Teacher with 14 years experience. Teaches social

Special Education Teacher, Teacher Leader Team Member	Male	studies to students with special education needs. He is a member of the Leadership Team for Teachers but not a current department chair. He has previously been a department chair at another school and district.
*Mission High: English Teacher, Union Lead	White, Female	Teacher with 28 years experience and former union representative. She is not currently in a teacher leadership role but has been in the past and has engaged in detracking conversations in past roles including as a teacher and within her master's degree.
*Wallace High: World Language/ELD Teacher, Leadership Team for Teachers Member	White, Male	Teacher with 19 years experience and a member of the Leadership Team for Teachers. He is also a member of union leadership (secretary). He has been a department chair in the past but is not now. However, he has significant experience engaging in conversations around course offerings and tracking from his prior experience in another school district.
Professional Development Designer	White, Female	The professional development designer works for UC Berkeley and has designed the 21CSLA professional development on equitable master scheduling for the last three years. The designer also has experience as a high school principal and assistant principal and has been designing professional development on and off in various roles for the past 14 years.
19 Teacher Leaders	Various	This questionnaire was offered to all department chairs, members of the Leadership Team for Teachers, union leadership, members of site Instructional Leadership Teams, and instructional coaches to gauge the influence that teacher leaders have on the scheduling process. In total, 19 teacher leaders responded to the survey.

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*Note. \* Indicates teacher leaders who participated in the professional development.*

### **Data Collection Methods**

In order to fully understand the case, interviews, questionnaires, and analysis of relevant documents have been completed. These varied data collection procedures ensured a full understanding of the case, how teacher leaders inform the school schedule, what their beliefs are about the school schedule, and if those beliefs are enacted in the formal documents of student enrollment patterns and the school schedule. Table 2 contains a description of the semi-structured interviews that took place in addition to the document analysis.

**Table 2**  
*Data Collection Sources Table*

<b>Research Questions</b>	<b>Data Collection Sources</b>
To what extent do teacher leaders have influence on the detracking of the school schedule?	<ul style="list-style-type: none"> <li>● Semi-structured interviews with principals</li> <li>● Questionnaire of teacher leaders, particularly department chairs, union leadership, members of the Leadership Team for Teachers, and instructional coaches</li> <li>● Analysis of the master scheduling process (including the Collective Bargaining Agreement)</li> <li>● School schedule analysis (3 years)</li> <li>● Student enrollment patterns (3 years)</li> </ul>
What influences teacher beliefs around tracking and how does professional development shift those beliefs?	<ul style="list-style-type: none"> <li>● Semi-structured interviews with teacher leaders who participated in the professional development in the Spring of 2023</li> <li>● Semi-structured interviews with principals</li> <li>● Semi-structured interview with developer of the professional development series</li> <li>● School schedule analysis (3 years)</li> </ul>

### ***Semi-Structured Interviews***

I engaged two high school principals in semi-structured interviews in order to understand the extent to which teacher leaders have influence over the school scheduling process and how the principals create or limit space for distributed leadership within these decision-making processes. Each interview took approximately one hour. To understand how teacher leaders' beliefs change and what influences shifts in their thinking, I conducted semi-structured interviews with the four teachers who took the professional development sessions in the spring of 2023. In these interviews, in the fall of 2023, we discussed how their beliefs have changed as a result of the professional development, what changes they have supported within the school schedule related to detracking, and to what extent they see themselves or other teacher leaders as having influence over course offerings or detracking initiatives. Each of these four interviews took between 45 minutes and one hour. Finally, I interviewed the designer of the grant-funded professional development opportunity provided by an institute of higher learning in one semi-structured interview to better understand their design choices related to changing teacher leaders' beliefs about equitable school scheduling. This interview took about 45 minutes. Table 3 highlights some of the questions I asked during the semi-structured interviews.

**Table 3**  
*Sample Interview Questions*

<i>Participant</i>	<i>Sample Questions</i>
Teacher Leader, PD Participant	<ul style="list-style-type: none"> <li>● Help me understand the various pressures or influences that may influence tracking in your department.</li> <li>● Describe the impacts of tracking on students? Teachers? The school community?</li> <li>● Describe the type of student who is successful in AP classes? Who belongs there? Who typically doesn't do well?</li> <li>● Describe the role of the teacher in an advanced placement class.</li> <li>● What would need to be in place for heterogeneous classrooms to be successful?</li> <li>● Do you have new beliefs about tracking since engaging in the professional development series? If so, what are they?</li> <li>● What elements of the professional development series helped to shift your beliefs about tracking?</li> <li>● In what ways have you continued to think about how tracking shows up in your department since engaging in professional development?</li> </ul>
Principal	<ul style="list-style-type: none"> <li>● Who at your school is responsible for building the school schedule?</li> <li>● How do the department heads and leadership positions get filled at your school?</li> <li>● What are some of the components of the scheduling process?</li> <li>● How are decisions around course offerings made? How are teachers assigned to teach classes?</li> <li>● Where are there successful examples of detracking happening at your school? What helped spur that change in practice?</li> <li>● Where in the school schedule is it more difficult to detrack? Why?</li> <li>● Help me understand the various pressures or influences that may influence tracking at your school.</li> <li>● What beliefs undergird the decisions to detrack the school schedule? What beliefs uphold tracking at your school?</li> <li>● Do you engage your teacher leaders in professional development? If so, what does that professional development focus on?</li> <li>● What are your expectations (formal and informal) about the role of department heads?</li> </ul>

Professional  
Development  
Designer

- What were your goals in designing the equity-centered-scheduling professional development series?
  - What activities within the professional development series were particularly effective in revealing teachers' beliefs or shifting teachers' beliefs?
  - How were teachers' beliefs evident throughout the workshop? What did teachers do or say that gave you a sense of their beliefs?
  - Can you share an example of a teacher you may have seen change their beliefs?
  - What do you think leads to these belief changes?
  - What would you do differently to influence teacher beliefs about the school schedule?
  - What have you learned in your work that might support systems leaders in supporting teacher leaders?
- 

### ***Teacher Leader Questionnaire***

Additionally, department heads, members of the Leadership Team for Teachers, union leadership, and instructional coaches took part in a questionnaire to gauge their beliefs about tracking within their department and understand to what extent they believe they have influence over the school schedule. The questionnaire was sent to their work email and three reminders were sent in order to gather as many responses as possible.

### ***Document Analysis***

As a way to add clarity to the semi-structured interviews and questionnaire, I also engaged in a variety of document reviews. The first documents I reviewed were the two high school schedules. This analysis included examining the courses offered and the enrollment trends for low-income students and students of color over the 2021–2022, 2022–2023, and 2023–2024 school years to understand where there may be detracking practices happening and where tracking is most persistent. This analysis provided initial insight into understanding how departmental cultures and beliefs influence tracking/detracking practices and how colleague interactions influence teacher leaders' beliefs. I also reviewed the collective bargaining agreement with the union to understand the mandated processes associated with scheduling and the checks and balances present.

### **Data Analysis Methods**

In order to effectively analyze the data within this case study, I created initial inductive codes from the research questions and the theoretical frameworks used within this study. I chose codes such as Political—Teacher Influence, Technical—Teacher Influence, Normative—Teacher Influence, and Distributed Leadership in order to understand some of the influences on the building of the school schedule; I chose codes such as Other Experiences and Readings to identify where teacher leaders had their beliefs changed through the professional development they engaged in. After I created these inductive codes, I reviewed the transcribed interviews, questionnaires,

and documents twice. The initial review was used to refine the initial codes and establish expanded codes in order to establish more granular analytic frames before the documents were read a second time using the new refined and expanded codes. From there, the final coded transcriptions and documents were organized in a variety of data visualizations to begin establishing patterns that demonstrated the extent to which teacher leaders have influence on the school schedule and how their beliefs about the school schedule changed through professional development. After the data visualizations were created and patterns were established, I made generalizations about this specific case and benchmarked those generalizations against the existing literature (Creswell & Poth, 2018), including literature about distributed leadership, teacher leadership, and teacher-leader professional development.

### **Role of the Researcher**

My personal experience plays a significant role in this research. As a senior in high school, I lived in Texas while my mother lived in California and my father lived in Indiana, leaving me dependent on the school system when selecting the courses I needed to graduate and gain access to selective universities. In a large comprehensive high school of over 3,000 students in the late 90s, there were limited academic counseling resources. As a result, I had to make decisions about course enrollment based on handouts I received from counselors highlighting graduation requirements. I did not have guidance in determining which courses might support a college application to more selective schools or encouragement to take AP courses, which led me to select classes solely on graduation requirements. Now, as the Executive Director of Secondary Education at Tamarack School District, I find it increasingly important to create systems and structures that support students furthest from access and privilege so that they have the information they need to achieve their full potential. By engaging teacher leaders, counselors, principals, and assistant principals through a distributed model of leadership, principals and site equity teams are currently working to increase access to academic counseling services, increase information about course offerings, reduce barriers to AP courses, and minimize tracking as a way to begin chipping away at the systemic inequities present in our schools. This lived experience and day-to-day work drives my inquiry at the nexus of teacher-leader beliefs and the detracking process.

Throughout this research, I have made it clear to all research participants that our conversations are squarely within the bounds of the research and will not influence the day-to-day work I engage in with them. Although the separation of my role as Executive Director and that of researcher on this project has the potential to include bias, all measures were taken to select data collection methods that minimized any bias and all participants in this study have been kept anonymous.

### **Bias and Validity**

Throughout the data collection and analysis process I took measures to ensure validity was upheld. After creating codes and ultimately a descriptive code book (Appendix E), I consulted with other students and professors to ensure that the codes were clear and accurate. Furthermore, as I began to establish trends from the data, those trends were shared with other researchers to identify any bias within the analysis.



In addition to the consultation with other students and professors, I triangulated transcript data with the document review and teacher-leader questionnaire to ensure that any trends that were emerging were valid across multiple data sources.

There is a risk of bias within the study, however, due to the nature of my role within the district studied. As a cabinet-level administrator, there was potential for participants to mediate their honesty due to my positionality within the district. However, throughout all interactions, I did everything possible to clearly delineate this research work from my role within the district; moreover, I believe that the relationships I've created over the past four years with the participants allowed for trust and honesty in the conversations that were held.

### **Summary**

Oakes suggests that case studies “can be useful if they reveal how the detracking process becomes entwined with the other factors in the school community and culture” (Oakes, 1992). In essence, this embedded case study aims to follow that path by bringing clarity to how teacher leaders' beliefs are changed through professional development, by engaging them in semi-structured interviews, while keeping the broader context of the school cultures and context in focus. This context is illuminated by understanding how other teacher leaders who did not participate in the professional development see the scope of their influence through the questionnaire along with semi-structured interviews with the two high school principals. From there, the review of relevant district documents and triangulation of data sources helped to bring all factors of teacher beliefs related to the school schedule into focus. This study highlights the complex context that conversations of detracking sit within and how the norms and politics of a school and district may influence teacher leaders' beliefs about course access for low-income, Black, and Latino students.

## Chapter Four: Findings

With tracking impacting everything from negative peer effects (Strello et. al, 2021; Zimmer, 2003), resources in the classroom such as materials and teacher quality (Oakes, 1992; Turner & Spain, 2016), along with reduced academic outcomes for students in the lowest tracks (Leung et al., 2020; Oakes, 1992) it is important to ensure that school and school systems pay close attention to the ways in which students are tracked within their schools. By analyzing the detracking process through a distributed leadership (Spillane et al., 2004) lens while paying attention to the dimensions of change that Jeannie Oakes (1992) highlighted, one can see the myriad influences on school scheduling and the dynamic nature of the change process. These frameworks help to fully illuminate the themes that emerged throughout this embedded case study where I collected data from semi-structured interviews, document reviews, and a questionnaire focused on teacher leaders throughout the school district in order to establish key themes from each of my two research questions:

- 1) How and to what extent do teacher leaders have influence on the detracking of the school schedule?
- 2) What influences teacher beliefs around tracking and how does professional development shift those beliefs?

My goal in answering these questions was to gain a better understanding of the influence teacher leaders have on the school schedule and how professional development for teacher leaders may influence their beliefs about tracking all while filtering the data through the Dimension of Change Framework (Oakes, 1992) and the Distributed Leadership (Spillane et al., 2004) framework.

Through the data, six distinct themes emerged that help answer the research questions guiding this study. The themes that emerged under the first research question aim to highlight the influence teacher leaders have on the school schedule and the second research question sought to clarify what influences teacher leaders beliefs and how professional development influences those beliefs. The themes that emerged from the data can be found in Table 4 along with the corresponding research question they help to answer. This chapter then takes an in-depth look at each of the six themes that emerged through the data.

**Table 4**  
*Research Themes*

<b>Research Question</b>	<b>Theme</b>	<b>Data Sources</b>
How and to what extent do teacher leaders have influence on the detracking of the school schedule?	Leadership and School Structures Shape Teacher Agency	Principals, PD Designer, Memoing
	Teacher Leaders Focused on Technical Aspects of the School Schedule	PD Participants, Principals, Document Review, Teacher Leader Questionnaire, Memoing
	When Departments Identified Normative Issues of Interest, they Influenced Course Offerings and Access Points	Principals, PD Participants, Teacher Leader Questionnaire, Memoing
What influences teacher beliefs around tracking and how does professional development shift those beliefs?	Reflection and Conversations Shifted Teacher Leader Beliefs	PD Participants, Teacher Leader Questionnaire, Memoing
	Beliefs Changed Based on Teacher Leaders' Experience and Training	PD Participants, Teacher Leader Questionnaire
	Department Chairs Lacked Opportunities for Professional Development	Principals, Memoing

### **Theme 1: Site Leadership and School Structures Moderate Teacher Leaders' Agency**

The first research question aimed to better understand the extent to which teacher leaders have influence over the school schedule. In analyzing the data it became clear that the structures within the school, including the appointment process for department chairs, who sits on school leadership teams, the process by which the school schedule is built, and the collective bargaining agreement with the union, had an impact on the amount of influence teacher leaders, in particular department chairs, have on the school schedule.

To foreground the conversation around structures, it is important to note that the principal of Wallace High School was under the impression that the collective bargaining agreement with the union articulated that, "department heads get filled by the traditional way, because it's in the contract, where essentially, they get to pick amongst themselves and discuss it each year." The principal of Mission High School in their second year as

principal was operating under the same impression. However, after reviewing the collective bargaining agreement, there was no evidence of such language, leaving the appointment of department chairs up to the site principals.

This misunderstanding by the two high school principals has led to structures that minimize the influence of the department chairs due to the perceived political influence that department members have on the appointment of department chairs. The Wallace High School principal articulates this position when they say,

We've (the assistant principal and principal) stripped them of most duties so that the job is not really a leadership job and it's ordering supplies, and showing up to a meeting to communicate nuts and bolts. Because of the fact that it's self appointed within departments, you can't ever get all of your best people doing it. (Wallace High Principal, Interview 1, 10/4/23)

Although this misperception was also held by the Mission High School principal, they had aspirations of changing the structure to allow for more thoughtful distributed leadership in the future and changing the content of the department meetings to be focused on school policies and change efforts.

Right now our department chair meetings are opportunities for them to share gripes or issues that they're having within their department, I'd like for it to be more decision based. I want them to have a stake in the direction that we're going as a campus once more of our policies, and our goals are centered in my vision, so I think we'll be able to move towards that direction when we complete this WASC cycle. (Mission High Principal, Interview 1, 10/16/23)

However, there are still opportunities for teacher leaders to exert political influence on the school schedule. At Mission High School, the assistant principal, head counselor, and registrar play a significant role in the schedule-building process. Throughout this process, they invite department chairs into the room to help articulate the needs of each department. As the schedule build is happening, the principal is not in attendance, leaving an opportunity for more significant input from department chairs to be brought to the table as highlighted by one department chair at Mission High School,

Yeah, I felt like, I mean, honestly, our principal wasn't in there. So like, I actually helped make important decisions. And it felt good. It felt like I was representative of my department and even outside of my department, like I had a voice. (Mission High English Co-Department Chair, Interview 1, 10/16/23)

This misunderstanding of the collective bargaining agreement and how department chairs are appointed is not the only way site leaders struggle to see processes in new and different ways. The professional development designer who led the teacher leader series also highlighted that many school leaders struggle to see the scheduling process in any other way than the way they have experienced it.

I think the classic example of that is several people who have come through the offering even vice principals who were nominally in charge of scheduling, but actually their counselor was the one in charge of scheduling, and their counselor would gather the department head's schedules for their department. So the classic example would be like a vice principal in one of the offerings saying, I've never even thought I could question the thing that was turned into me. (Professional Development Designer, Interview 1, 10/13/23)

This quote highlights the role that department chairs play in the development of the school schedule and how, without intentional expectations set for a collaborative approach to the schedule built, past practice can perpetuate over years.

However, there is reason to believe that the Mission High School principal has plans to change structures to allow for more distributed leadership within their department chairs and set clear expectations around the conversations needed to establish new norms for how teachers are selected to teach specific courses.

I would love to have a retreat, where it's shared and collaborated on what I expect from teacher leaders, talk to them about how to have tough conversations with teachers in the department, and share data with them so they can determine how their individual staff members are performing with their students. And so then maybe even set goals as the department, which helped determine who teaches what versus it being a seniority driven or rotational driven practice. (Mission High Principal, Interview 2, 10/19/23)

On the other hand, the Wallace High School principal has created other structures that allow for teacher leader influence, avoiding the political influence of the current process for appointing department chairs and distributing leadership opportunities to instructional coaches who they have personally hired and appointed. Outside of the formal department chair position, however, some teacher leaders such as union leadership or instructional coaches may feel less empowered to influence change within the school schedule. An English teacher at Mission High School remarked that, "I don't really feel like I have much [influence] at all. So I did get to say what I was interested in teaching" (Mission High English Co-Department Chair, Interview 1, 10/16/23), highlighting the limited influence some teachers may have and the technical aspects of that influence.

The data collected from the semi-structured interviews highlights how technical structures, perceived or real, concentrate political influence on the school schedule-building process as seen at both sites. Additionally, 63% of questionnaire respondents reported the most significant influence on course offerings within the school is the department as a collective, highlighting the importance and impact of teacher leaders and their colleagues on the schedule-building process. In the case of Wallace High School, the department chair position is minimized and at Mission High School department chairs are in the room while the schedule is being built. These technical, or unintentional structures of the scheduling process allow for political influence to be distributed between different leaders and followers within the school.

## **Theme 2: Teacher Leaders Focused on and Exerted Influence over the Technical Aspects of the School Schedule**

In answering the first research question, the data suggests that teachers often exert influence on the more technical elements of the schedule-building process. This focus may be due to the way in which the collective bargaining agreement foregrounds the technical elements of the scheduling process without considering any of the other factors influencing the schedule-building process. The collective bargaining agreement lacks an explicit acknowledgement of equity focused training for department chairs or clear communication around where teacher leader influence is valued and where it stops.

The collective bargaining agreement sets a clear tone for the schedule-building process and highlights a few key technical elements that constrain how the schedule is built.

While building the Master Schedule during May and June, best efforts will be made by site administration to achieve the target of not exceeding 160 students, to achieve the target of three or fewer preps, and to meet with affected teachers and their department chairs to explore alternatives and troubleshoot solutions.  
(Collective Bargaining Agreement)

Additionally, the contract highlights the following technical outcomes that the schedule-building process must adhere to. These elements are highlighted in Table 5.

With the collective bargaining agreement setting a clear technical tone for the schedule-building process, it is no surprise that all four participants within the semi-structured interviews mentioned the technical elements of the process being important to consider, mentioning technical elements 44 times throughout the interviews. One such comment from a teacher leader highlights the technical area of focus that leads many of these discussions when she said, “so again, I think it's just going down to look at the board and who needs what, when” (Mission High English Teacher, Interview 1, 10/13/23) and another said, “I know that we didn't have a lot of seventh period classes, and a lot of teachers did not want to teach seventh period” (Wallace High Special Education Teacher, Interview 1, 10/13/23). Both of these comments show that teachers are clearly thinking about the technical nature of the scheduling process, when students need their classes, and which periods teachers would like to teach.

**Table 5**  
*Technical Outcomes Within the Union Contract*

<b>Technical Element</b>	<b>Collective Bargaining Agreement Language</b>
Off Period	4.2.10 Assignment to both the first and last period everyday, if needed, shall be agreed to by the individual teacher or determined by consensus in each department. If consensus cannot be reached, the assignment shall be done by rotation. Teachers assigned to teach in both the first and last period every day may leave campus during their duty-free period provided they notify the principal or designee.
Student Caseload	10.4.1 The parties agree to the following targets: 1) a maximum teaching load of 160 students for all full time teachers, and adjusted proportionally for part-time and overtime teachers. The maximum teaching load is increased by 12 students for each PE section taught by the teacher.
Number of Planning Periods	10.4.1 A maximum total number of three “preps” for teachers in the following core academic subjects at the comprehensive high schools: English, Math, Social Studies, and Science.
Class Size	10.1.1 Our agreed upon goal is to have an average of 30 students in all classes except PE, with none exceeding 32 students, and an average of 43 students in PE classes with none exceeding 46.

Much of what teachers mentioned in the semi-structured interviews centered around the technical elements of the schedule-building process and there were clear opportunities for distributed leadership between the administration, department chairs, and teachers. The collective bargaining agreement even asks for distributed leadership explicitly when it articulates:

The parties agree that they will review the process in October of each year in order to assess the effectiveness and agree on modifications based on outcomes and best practice. The parties also agree to further review as necessary.  
 (Collective Bargaining Agreement)

This distribution of leadership allows for conversations between teachers, department chairs, and administrators to guide the schedule-building process and review the outcomes of the process on an annual basis.

The principals at Wallace and Mission High Schools both agreed that department chairs are asked to make decisions around who teaches which classes, how sections are allocated within the department, and how many preps individual teachers might have, which also highlights some of the technical outcomes within the collective

bargaining agreement. Furthermore, this structure actually asks teachers to focus on the technical elements of the scheduling process such as how many preps each teacher gets and who teaches which class, rather than the more normative elements associated with class offerings including teacher assignments and student access points to courses. The principal of Wallace High School describes how she works with her staff to implement these technical elements of the schedule build.

Then what happens is, the beginning part is very procedural, where essentially the data analyst is just working with the counselors, opening up the classes, and kids are signing up. What we do is, you know, most of the courses, you'll look at like your freshman, sophomore year, we just pre populate them (Wallace High Principal, Interview 1, 10/4/23)

In essence, the principals are distributing the technical elements of leadership to the department chairs. The principal of Mission High School describes why they make this decision when they say,

So largely, you allow department chairs to make final decisions around who teaches what. That's because it's impossible for any administrator to know exactly every single need of each department. I fell into this my first master schedule, because I wanted to make some decisions around who's going to teach which science courses or how many to offer. But then the science department chair came and said, we can't do this and he gave me a laundry list of reasons that only he would know about his specific teachers and his specific room needs, because he has a lab class. And you realize, okay, I can't micromanage the individual departments' decisions on this (Mission High Principal, Interview 1, 10/16/23)

Teachers also expressed, at both high schools, that specialized programs tended to drive the school schedule and created more limitations when making efforts to detrack the school schedule. Programs such as AVID, career and technical education pathways, special education needs, classes for emergent bilinguals, and other specialized programs within the school all added further complexity to the schedule-building process, intensifying the focus of many teacher leaders on the technical elements of the schedule-building process. Throughout the interviews, there was no mention of the scheduling process being one that has the potential to embody the values of the school, further equitable outcomes for students, or center any clearly articulated norms that the schools or departments espoused. As Oakes (1992) suggests, in order to detrack schedules, schools need to build a culture of detracking that suits the individual school culture. In this case, the culture of the two schools is more focused on the needs of teachers including number of preps, off periods, and class assignments rather than course diversity and access.

Due to the collective bargaining agreement priorities, the elements of the process that principals distribute to department chairs, and the desires of teachers to have particular prep periods and "off periods", the focus of the schedule building process is significantly more technical than normative or political in nature. The special education



teacher at Wallace High School highlights this by saying,

I get the sense that teachers really make it clear as far as what periods, they will not teach a class. I think that makes scheduling really challenging. When you try to appease everybody as far as what they like in their schedule. (Wallace High Special Education Teacher, Interview 1, 10/13/23)

The focus on technical elements of the school schedule without examining the norms and beliefs that undergird those elements along with the political pressures influencing the schedule build makes it difficult to fully consider or implement a detracking agenda. Additionally, without targeted equity centered professional development for department chairs, it is difficult to imagine distributing significant decision making power and expecting a different focus during the building of the school schedule.

### **Theme 3: When Departments Identified Normative Issues of Interest, They Influenced Course Offerings and Access Points**

Although the focus of the school schedule-building process at Tamarack School District was predominantly focused on the technical elements of the schedule and structures for meaningful teacher leader input into the schedule are limited, there were instances of departments identifying normative issues that were important to them and influencing change toward equity. However, this influence was not spread equally between departments. The Humanities departments seemed more open to detracking than STEM departments at both of the schools within Tamarack School District. In the past few years, the English and History departments at Wallace High School have spent considerable time reducing tracking at the 9th and 10th grade levels by eliminating differentiated course offerings and have opened access to AP classes by eliminating prerequisites and Summer homework. Meanwhile, the English department at Mission High School is working to integrate two homogeneous courses they offered to allow for more heterogeneous course offerings next school year. On the other hand, the principal at Mission High commented that Math is more difficult to detrack because

we judge students based on prerequisite knowledge and assume that if they haven't received it, it's harder to get them caught up. I mean, I was a math teacher and I agree, it is difficult to have too wide of a range of abilities within one room. (Mission High Principal, Interview 1, 10/16/23)

At Wallace High School the principal noted that oftentimes, when departments bring ideas for new courses or course sequences, the focus is typically on students who are struggling in their classes which leads to classes that perpetuate tracking in the schedule and lowered expectations. The Wallace High principal shares their perspective by saying, "I'll be honest, I find that happens more with low classes. It's like kids aren't doing well with this." She went on to describe an instance where the Math department at Wallace wanted to support struggling students in Algebra 1 by providing a remediation class to be taken concurrently with Algebra 1, further tracking students into homogeneous groupings. In this particular instance, the principal mentioned they did not

want to use political capital to stop the remedial class from happening but allowed the change to happen and created space for the department chair to reflect on its effectiveness before the next schedule was built. After looking at student grades, it became clear that the remedial class was ineffective and it was no longer offered within the schedule. This anecdote clearly highlights the political pressures at play during the schedule build, normative beliefs about student achievement, and serves as another example of the complex interplay between leaders and followers within a given situation.

This sentiment was confirmed at Mission High School when the English department recently identified “apathy” within their college placement (CP) English 10 course due to a high number of students taking the honors version of the course. This led to significant tracking in the form of homogeneous groupings and limited access to grade level peers with varying levels of course content knowledge. The co-department chair notes that

. . . post COVID, we noticed that almost 50% of our students were signing up for honors, either traditional honors or Get Reel honors and 50%, were in the CP classes, and they were languishing. There wasn’t that model of rigor. The teachers didn’t feel like the sort of baseline academic skills were there. (Mission High English Co-Department Chair, Interview 1, 10/16/23)

Although the department in this case noticed a group of struggling students, like the Wallace principal asserts above, rather than lowering expectations and creating a remedial course for the CP English 10 students, the department decided to integrate the Honors and CP courses to create heterogeneous courses and expose struggling students to more academic rigor and peers who already have the executive functioning and academic skills they want all students to have. This particular department had two members, one of which was the co-department chair, who attended the professional development session focused on equitable school scheduling. This participation in the professional development may have had an influence on how the team discussed supporting the group of struggling students; the principal of Mission High School mentioned, “I feel English has made a huge shift and I want to say that was a result of the professional development that one of the department chairs went to” (Mission High Principal, Interview 2, 10/16/23).

The co-department chair highlighted that this normative change was fueled by teachers by saying, “That was a teacher-led idea and we went to admin and told them why we want to do it, how we were going to do it and they sort of agreed to it” (Mission High English Co-Department Chair, Interview 1, 10/16/23). This was not the only example of teacher-led change impacting the school schedule. That same department was also concerned with a study skills class that was being pushed by the Mission High principal to support struggling 9th graders. The English department was concerned that if these classes were put in particular sections of the school schedule that it would have unintended consequences for the make up of other English 9 classes, creating homogeneous groupings and defacto tracking.

And I was particularly trying to protect ninth grade from the study skills tracking. It

was going in first and fourth (periods) and so my brain was focused on not having very many sections of English during the first and fourth periods so these classes would end up being exclusively non study skills students. Ultimately, I was able to help and kind of organize the classes even outside of my own department, just because of my willingness to be there. (Mission High English Co-Department Chair, Interview 1, 10/16/23)

Not only is this an example of an individual teacher and department influencing scheduling decisions based on normative beliefs about tracking, it also highlights how the structures of the school allow or disallow teacher leader influence. In this case, the co-department chair was able to be in the room during the schedule-building process. This allowed her the opportunity to watch what was happening, share insights, and ultimately re-direct decisions that would have led to unintended tracking of students. Although this particular case highlighted a positive example of a teacher leader exerting influence towards equity on the school schedule, I would argue that this was a result of an individual teacher's passion, rather than an intentional structure that allowed for normative conversations between administrators and teacher leaders.

In other departments, the normative beliefs of teachers also have an influence on the schedule-building process. The Spanish department at Wallace High School uses grades as the sole indicator of access to honors classes. One teacher leader noted that,

The Spanish department believes that student performance dictates achievement, and should solely determine placement. So they have a policy that a student has to have a 95% average on all exams in order to progress into the next honors class. (Wallace High World Language Teacher, Interview 1, 10/20/23)

This particular policy was largely driven by the Spanish department chair who had been leading the department for over ten years and held significant political capital within the department and throughout the school due to her leadership style, which was shared to be more top down within the department. The Math departments also used normative beliefs about course access and content knowledge to maintain strict course progressions (Oakes, 1992). In the teacher leader questionnaire, one math department member noted,

In a sequential program, students need to master (or at least be comfortable with) prerequisite knowledge before they can advance to more challenging topics. This reality appears to be in conflict with the idea of open access for all courses. (Teacher Leader Questionnaire)

These normative beliefs help drive change in the school schedule and teacher leaders play an important role in bringing these ideas to the table for administrators to consider. In the questionnaire of teacher leaders, 53% of respondents believed that some level of tracking was inevitable in their departments. Unless otherwise redirected or stopped by a principal, many of these changes are actually enacted and have the potential to maintain or disrupt tracking practices within a department. The principal of

Wallace High School confirmed the significance of this influence by saying,

I think in the end, while a principal can have a lot of influence on that (changing the school schedule), you're going to have old guard teachers, and you know, teachers with influence like... a teacher leader. Yeah, they have a lot of influence when you're trying to significantly shift courses. (Wallace High Principal, Interview 1, 10/4/23)

The data clearly highlights the influence teachers can have on the school schedule and how their normative beliefs influence whether their departments perpetuate or disrupt systems of tracking within the school schedule. Nasir et al. (2014) highlight that in the case of Railside High School, the math department who was successful in detracking its offerings had a sense of collective responsibility and recognized the entrenched practices that needed to be changed, further highlighting the power and influence teachers leaders have when they identify normative issues needing to be addressed within their department.

The data also highlights that principals offer little resistance to these teacher-led changes due to political pressures present within the system. Without significant equity training and support, teacher leaders rely on the normative conversations within their department to drive change efforts, which have the potential to maintain harmful tracking practices. However, in the example above, the co-department chair of the Mission High School English department participated in a professional development opportunity focused on equitable school scheduling. This experience may have influenced the way they led conversations at their department and ultimately led to a more de-tracked course sequence within the department as mentioned by the Mission High School principal earlier.

#### **Theme 4: Reflection and Conversations Shifted Teacher Leader Beliefs**

If, as highlighted above, teachers leaders have the political influence to shift school scheduling practices, it is important to expose them to the appropriate professional development that allows them to develop the normative beliefs about student achievement and course access which supports the detracking of the school schedule.

The key analytic unit for this embedded case study was a professional development series hosted by an institution of higher education in the regional area. This series included five sessions for a total of 13 hours of professional development focused on equitable school scheduling practices. Four of the teacher leaders from Tamarack School District participated in this series and their reflections serve to establish the following three themes.

During the semi-structured interviews with professional development participants, it became clear that conversations with other teacher leaders, particularly ones with different perspectives, had an influence on shifting teacher leaders beliefs. Three of the four participants described hearing others' perspectives within professional development as an influence on their thinking about equitable school scheduling. Table 6 highlights some of the participant quotes that illuminated that conversations among colleagues with differing backgrounds had an influence on their beliefs.

**Table 6**  
*Shifts in Beliefs about School Scheduling*

<i>Participant</i>	<i>Participant Quotes</i>
Mission High: English Teacher, Union Lead	“Probably talking to other teachers”
Wallace High: World Language/ELD Teacher, Leadership Team for Teachers Member	<p>“I loved hearing her perspectives, because she's done a lot of different roles.”</p> <p>“A lot of it was talking with teachers from different schools, having the opportunity to have those little breakout rooms”</p> <p>“And we had some good conversations that I think we learned a lot from each other and I think we often get a little stagnant in our own buildings, you know.”</p>
Mission High: English Co-Department Chair	<p>“I think it was a combination of things and like the perfect storm when I took this professional development, but going every week, and talking to like minded people, made me see how important that work is.”</p> <p>“Also talking to my colleagues who were miserable with their 10 CP classes”</p>

The facilitator of the professional development intentionally designed the series to include significant opportunities for participants to have discussions about their local context and share ideas with other participants. The designer calls this out explicitly by saying, “I think the offering would give them permission to think about how things are done in other places that they had not even thought of before” (Professional Development Designer, Interview 1, 10/13/23). This sentiment is clearly reflected in Table 8 by the participant quotes in response to what shifted their beliefs about school scheduling. Furthermore, the professional development designer has led this series a number of times and they said they, “remember distinctly having people in the offering say, I never even thought about this before” (Professional Development Designer, Interview 1, 10/13/23), indicating that by creating the space for teacher leaders to reflect on and share their insights, experiences, and thoughts they have the potential to shift the beliefs of other teachers towards equity. Nasir et al. (2014), deepens this argument when they highlight that the math department, successful in detracking their department, required time for discourse and reflection around authentic problems of practice in order to generate professional learning.

Although the data suggested that conversations among other teachers was the predominant way teachers shifted their beliefs during the professional development series, reading also emerged as a way teacher leaders shifted their beliefs. One participant from Mission High School said that, “the reading we did helped inform my opinion of tracking and scheduling” (Mission High English Co-Department Chair,

Interview 1, 10/16/23). The professional development designer further highlights the importance of the readings within the session by saying,

. . . often the feedback from that session would be, thank you so much for that reading. And I was a little surprised, because I didn't necessarily expect people to come in so eager for that kind of literature and discussion about that literature. (Professional Development Designer, Interview 1, 10/13/23)

However, the questionnaire respondents, most of whom did not participate in the professional development series, highlighted other key areas that informed their beliefs about tracking. The first influence on their beliefs was their own teaching related to differentiation, with 74% of respondents identifying experience as the main influence on their beliefs. Then conversations within their department (58%), student performance (53%), and professional development (32%) were the other influences most often identified with influencing teacher leaders' beliefs about school scheduling and tracking.

This data highlights the importance of conversations among colleagues as a key feature of professional development aimed at shifting teacher leaders' beliefs about tracking. Additionally, the data suggests that reading research on the topic, specifically *Creating Middle Schools: Technical, Normative, and Political Considerations* (Oakes et al., 1993), may play a role in teacher leaders reflecting on their own practice or creating a frame for teacher leaders to continue their conversations around tracking.

### **Theme 5: Beliefs Changed Based on Teacher Leaders' Experience and Training**

Although conversations between teacher leaders have the potential to shift beliefs about course access towards equity, the impact of the professional development in this study may have had discrepant impacts on belief changes based on the experience level of the teachers who participated. Within the participants of this study, there were clear indications that the lived experience and teaching experience of the participants had an impact on how readily they changed their beliefs about equity centered scheduling practices. The co-department chair of Mission High School's English department stated,

That was perfect timing in my career. Although I will say, if I did that training again now I might get something totally new and equally as important because now I'm in the work, right? Like, I'm knee deep in this detracking mission and yeah, I mean, I think coming in as kind of a novice to what we were talking about, and never having, made the time or had the time professionally to think about my influence over scheduling. And then being in a new, unique position to be a part of the entire master schedule build, which I didn't know was going to happen. It just kind of worked out that way. Also, the timing of the training itself was so close to sitting and watching these classes go up on the board. (Mission High English Co-Department Chair, Interview 1, 10/16/23)

The unique timing for this teacher made the impacts of the professional development series more relevant and impactful. The timing of the professional development series being right before the schedule-building process at Mission High

along with the teacher never having thought about the influence they had on the schedule created a ripe opportunity for her to exercise the political influence she had on the schedule-building process. Without the equity centered professional development series she may not have noticed the influence she had or the normative beliefs about detracking in order to influence the process toward equitable outcomes for students.

The Special Education teacher at Wallace High School, with 14 years experience, similarly had some shifts in his beliefs about tracking, although it seemed to be more nuanced than transformational. He shared that, “I think we need to see more data, when we're doing student schedules, not just put the name and the grade they got in that class. But we need to attach data to that” (Wallace High Special Education Teacher, Interview 1, 10/13/23), where his initial approach to scheduling had been without the use of data or intention for detracking. His major takeaway from the professional development was that a source of the tracking at his school was related to class placements that lacked a deeper look into the data they have on each student. He was arguing that if the departments took a closer look at the data they have, they would be able to more accurately place students into the appropriate classes and minimize some of the tracking that he sees within his department.

On the contrary, a teacher leader with 28 years of teaching experience who participated in the series had a different experience. Although she appreciated the conversations among the professional development participants, she mentioned having been exposed to many of the ideas covered in the series when they said,

The PD didn't have any influence on my practice because it was already there based on reading Jeannie Oakes, based on teaching at [a local school known for its diverse population], based on my master teacher, based on teaching here, based on making a choice to go to [the continuation high school]. (Mission High English Teacher, Interview 1, 10/13/23)

Throughout the interview, it was clear that this teacher had very firmly established beliefs about tracking due to mentors she had worked with as a new teacher, reading that had been done as part of a masters program, and extensive experience she had within multiple schools serving diverse student needs, which led to minimal changes in her beliefs because her beliefs were already aligned with the professional development series within this study.

The Wallace High School World Language teacher, with 19 years experience, had a similar response to the professional development, mentioning that, “I think I have stronger beliefs. I don't think my beliefs changed” (Wallace High Special Education Teacher, Interview 1, 10/13/23). Within the interview, this teacher expressed deep appreciation for the conversations that were had within the professional development and went on to share his experience at the first school he taught at as a key influence on his current beliefs about course offering and course tracking. The school he mentioned had made concerted efforts to expose all students to a high level of rigor through an International Baccalaureate program that all students were asked to participate in at some level.

What these data highlight is that the lived experiences of teacher leaders influenced the way they think about tracking and the extent to which professional

development sessions impacted their beliefs. Some teacher leaders had experience with tracking in their prior roles, while others were relatively new to the concept and therefore there was more room for them to shift their beliefs after engaging in professional development. As Garmon (2004) suggests, teachers with positive presuppositions for diverse students or a strong sense of social justice are more likely to change their beliefs. This would suggest that teachers who have positive experiences with detracking efforts may shift their beliefs more readily and support detracking efforts across the school.

### **Theme 6: Department Chairs Led without Site of District Level Development Opportunities**

Although the participants of the professional development identified reflective conversations as a way to shift their beliefs about equitable scheduling, without this series there was no evidence of intentional professional development for department chairs within the school district or their individual school sites. The majority of questionnaire respondents reported that within the last five years they had spent less than 15 hours engaged in professional development focused on issues of equity, including 26% who spent less than 5 hours and 37% had spent between 6 and 15 hours engaged in this professional development. Furthermore, 74% of questionnaire respondents reported spending less than five hours in the last five years engaging in professional development focused on issues of tracking. The two high school principals both highlighted that they did not have intentional systems in place to support the development of their department heads ability to implement equitable scheduling practices. The Wallace High School principal mentioned that, “the PD is like when you're doing it together” (Wallace High Principal, Interview 1, 10/4/23) and when asked about professional development for teacher leaders, the Mission High School principal said, “No, not yet. So I haven't really spent a whole lot of time really figuring out how I want to frame or use my department chairs just yet. Last year was just about me kind of learning to see what their default was” (Mission High Principal, Interview 2, 10/19/23). Neither school has a systemic approach to developing its department chairs or exposing them to equitable scheduling practices, although teacher leaders have significant influence on the school scheduling at both sites. The Wallace High School principal gave the following reasoning for not providing professional development for department chairs, “I don't get to pick the talent, and then provide the PD” (Wallace High Principal, Interview 1, 10/4/23), highlighting the importance of the technical structures that allow for the appointment of the department chairs.

To note, there was a clear misconception about how department chairs were appointed. Both principals deferred to the departments themselves to elect a department chair and mentioned that the collective bargaining agreement reinforced this practice. Upon review of the documentation, there was no evidence that the collective bargaining agreement set forth any rules related to the appointment of department chairs. Highlighting this misconception and its pervasiveness, the Mission High School principal said,

But when I was talking to each of the department chairs last year to ask them how it's done, some do it by an election in their department, some just sent me



an email saying so and so is going to join me as department chair next year, and some are just saying nobody wants it... so we rotate it every couple of years. So I just think I need to do some culture shifts around school leadership before I can get to what I was talking about. (Mission High Principal, Interview 2, 10/19/23)

However, when asking about the concept in more detail during the interviews, both principals expressed interest in the idea of more formalized structures to support department chairs in the scheduling process. The Wallace High School principal noted a positive experience with scheduling professional development in the past by saying,

The County did one, probably about seven years ago and they brought in a master schedule guy, and he was so good. I contracted with them to have him work with us to just kind of learn more. (Wallace High Principal, Interview 1, 10/4/23)

And the Mission High School principal highlighted past experience with other school districts when regarding the role of department chairs by saying, "At previous schools, I've shared almost a job description and some professional agreements around what a department chair should do. I did not do that with this staff yet. I would like to get to that point" (Mission High Principal, Interview 2, 10/19/23).

The principal of Mission High School also shared aspirations for changing the way department chairs are appointed and supported, articulating,

Ideally, yes, I would love to have a retreat, where it's shared and collaborated on what I expect from teacher leaders, to teach them how to have tough conversations with their teachers in the department, share data with them so they can determine how their individual staff members are performing with their students, and so then maybe even set goals as the department, which helped determine who teaches what versus it being a seniority driven or rotational driven practice. (Mission High Principal, Interview 2, 10/19/23)

Although there were no current practices to support department chairs in equitable school scheduling at the site level, participants noted that having systems level leaders engaged in this work was of value. To note, one of the teacher leaders mentioned that they

. . . came out of (the PD) with the understanding that, the district thinks that it's important and is passionate about detracking, and making things more equitable for all students. So feeling that systemic support, made me feel empowered to do it here. (Mission High English Co-Department Chair, Interview 1, 10/16/23)

Additionally, the designer of the professional development has had experience leading the series with school and district groups that include system level leaders. They note that they think,

It would be a pretty amazing thing if there were systems leaders saying, hey,

principals, as you schedule for next year, here are some equity focused questions I want you to be asking, of your scheduling team or of yourself, if you're helping, helping or part of the scheduling. (Professional Development Designer, Interview 1, 10/13/23)

Ultimately, without systems for support and intentional professional development at the site or systems level, teacher leaders are left alone to develop their beliefs about equitable school scheduling. With limited knowledge and potentially few opportunities to discuss these normative issues with colleagues, equitable school scheduling and detracking efforts would be left to chance. As Kohli (2021) asserts, a collective approach to learning is central to school change. When teacher leaders are given the time, space, and tools to discuss issues of detracking within their department or school, their beliefs and practices may support changes in tracking practices. Furthermore, as Nasir et al. (2014) have shown, department chairs have the potential to “maintain the group’s ethos of professional learning” (p. 174), without significant support and training for department chairs, leadership at that level is unlikely to take root.

## **Summary**

Through analysis of the semi-structured interviews, teacher leaders questionnaire, and document review there were six themes that emerged from the data. In answering the first research question focused on how and to what extent teacher leaders have influence on the school schedule I found that, 1) How and to what extent do teacher leaders have influence on the detracking of the school schedule? and 2) What influences teacher beliefs around tracking and how does professional development shift those beliefs? Drawing from semi-structured interviews, document review, and a questionnaire of teacher leaders this embedded case study revealed six initial findings including, 1) leadership and school structures shape teacher agency, 2) teacher leaders focused on technical aspects of the school schedule, 3) when departments identified normative issues of interest, they influenced course offerings and access points, 4) reflection and conversation shifted teacher leader beliefs, 5) beliefs changed based on teacher leaders’ experience and training, and 6) department chairs lacked opportunities for professional development. In the following chapter, I will use these themes to identify implications for policy, practice, and future research.

## Chapter Five: Discussion and Recommendations

With the research suggesting that the process for detracking is context specific and that successful detracking is often predicated on establishing a culture of detracking (Oakes & Lipton, 1992), as well as that teacher leaders are essential to school change initiatives (Vernon-Dotson & Floyd, 2012), I was interested in the unique role that teacher leaders play in equitable school scheduling. This dissertation sought to answer the following two research questions: 1) How and to what extent do teacher leaders have influence on the detracking of the school schedule? and 2) What influences teacher beliefs around tracking and how does professional development shift those beliefs? Drawing from semi-structured interviews, document review, and a questionnaire of teacher leaders, this embedded case study revealed six initial findings, including 1) leadership and school structures shape teacher agency, 2) teacher leaders focused on technical aspects of the school schedule, 3) when departments identified normative issues of interest, they influenced course offerings and access points, 4) reflection and conversation shifted teacher leader beliefs, 5) beliefs changed based on teacher leaders' experience and training, and 6) department chairs lacked opportunities for professional development.

This chapter covers the implications and recommendations that are a result of the six themes that emerged in the study. The recommendations address the actions that system-level leaders and school site leaders can take to create the conditions for an equitable school schedule, one that dismantles inequitable practices that perpetuate tracking. I begin the chapter by connecting the research to the two theoretical frameworks that have been used throughout the study. From there I cover the limitations of this study before discussing the implications for policy, practice, and future research. The chapter concludes with recommendations for practitioners who are seeking to engage in detracking practices in collaboration with teacher leaders.

### **Theoretical Framework Connection**

In this section, I will describe the two theoretical frameworks that undergird this study and serve as frameworks to make sense of the themes that emerged in chapter four. The section briefly describes Jeannie Oakes's (1993) Dimensions of Change Framework and the Distributed Leadership framework put forth by Spillane et al. (2004). These two frameworks will be used later in the chapter to make sense of what this study uncovered and to frame the recommendations for systems level leaders.

### ***Dimensions of Change Framework***

The Dimensions of Change framework (Oakes, 1993) serves as a useful tool when analyzing the data in this study by allowing for the issues to be seen from normative, technical, and political perspectives. Oakes said of the Dimension of Change framework that "each of these perspectives is like a lens that magnifies one dimension of a particular practice while temporarily filtering out the others" (Oakes et al., 1993, p. 463). By seeing the complexity of detracking practices through these lenses, educators can better understand not only the technical elements of the change process but the norms and politics that influence the direction of these reform efforts. When I analyzed the findings through this lens, I could better understand the nature of what was

happening within the detracking efforts and where change efforts may have stagnated. For instance, one of the interview participants shared that the department chair they worked with held significant political power within the department and school. The department chair's normative beliefs about students within the department were such that if students did not receive an A in the previous class, they were not able to matriculate to the subsequent AP course. This particular department chair clearly had "the power to grant or limit change" (p. 472), as Oakes stated of the political frame, and has limiting beliefs about student success and the "cultural regularities" (p. 468) of the department. This anecdote highlights the value of analyzing the data through the Dimensions of Change framework. Oakes et al. summarized this by saying that the "technical, normative, and political perspectives allow us to examine traditional school practices in the context of the beliefs, values, relationships, and power allocations that keep them in place" (p. 463). Without those all three perspectives of the Dimensions of Change framework, the data has the potential to fall out of context of the larger picture of the school change initiative and potentially become biased as only a portion of the full picture is analyzed.

### ***Distributed Leadership***

When I examined the themes through the lens of the Distributed Leadership framework, I was better able to see the complex interactions among members of the school community and how the dynamics of those interactions changed depending on the context of the department or school. Spillane et al. (2004) remarked that with "a distributed perspective on leadership, we move beyond acknowledging leadership practice as an organizational property in order to investigate how leadership might be conceptualized as a distributed practice, stretched over the social and situational contexts of the school" (p. 5). In essence, they argued for a study of leadership practice rather than individual leadership, such as the principals or department chairs in this study. Spillane et al. went on to say that "in this view leadership activity involves three essential constituting elements—leaders, followers, and situation" (p. 10). This framework highlights the key ways the school schedule is built within Tamarack School District, when at Wallace High School the principal explicitly distributes decision-making to department chairs in regard to some of the technical elements of the schedule-building process. In practice, this situates the department chair as a leader within the department and puts the department members and even the principal in a position to follow the department chair's recommendations. What the principal is and is not delegating to the department clearly shapes what department chairs are able to do within a particular school. Alma Harris (2003, p. 318) reaffirmed the utility of this framework when studying issues of teacher leadership: "Teacher leadership provides an important starting point in understanding and illuminating how distributed leadership actually works in schools." The Distributed Leadership framework illuminates how a variety of leaders, including teacher leaders, and followers emerge given a particular context or school change initiative.

### **Discussion**

This study provides insight into the extent to which teacher leaders have influence over the creation of the school schedule and how professional development

may shift teacher leaders' beliefs about tracking practices and course access. An embedded case study design included semi-structured interviews, document review, and a questionnaire of teacher leaders. While the teacher-leader questionnaire and document review were designed to reveal the extent to which teacher leaders have influence over the school schedule, the semi-structured interviews of four professional development participants were designed to discover how beliefs about tracking change through thoughtfully designed professional development. The findings are too limited to essentialize or generalize to all school district contexts, but rather can help educators understand the unique context of the Tamarack School District, and may facilitate practitioners in other districts using similar tools to understand their own unique contexts.

Findings in this study suggest that, within the Tamarack School District, technical elements such as the collective bargaining agreement, who is in the room during the schedule-building process, and who is selected as a department chair have influence over the school schedule. Leadership decisions such as which teacher is teaching which class, what classes are offered, and when teachers have periods off are all distributed to department chairs rather than being decided by administrators. However, these technical elements of the schedule-building process are interwoven with the normative beliefs of teachers and teacher leaders. There were two specific instances where departments identified normative issues and implemented changes to the department schedule based on the needs of students.

Data in this study also supports that, within Tamarack School District, there were limited opportunities for teacher leaders to engage in thoughtfully designed professional development that centered leadership development and equity-focused scheduling practices. Despite the lack of professional development for teacher leaders, the participants who engaged in the professional development series noted that time for reflection and discussion across context allowed for shifts in beliefs. Although participants in the study identified beliefs shifting, the shifts differed based on the number of years of experience a teacher had and the prior training they had engaged in.

In the following sections, I discuss the implications of these findings and make recommendations for the school district.

### ***Clarity for the Teacher Leader Appointment Process***

One of the more common forms of teacher leaders in high schools today is the department chair. Department chairs help to set the culture of the departments they lead (Little, 1995). In the case of Tamarack School District, they are also delegated meaningful leadership responsibilities such as making the final decisions around who teaches what, what prep periods teachers have, and what classes are offered within the department. Knowing that teacher leadership is essential to school improvement efforts (Vernon-Dotson & Floyd, 2012), particularly when engaged in the complexities of detracking efforts, and because the roles of teacher leaders are often unclear (Angelle & DeHart, 2011; Cheung et al., 2018), it is important that site and systems-level leaders take the time to thoughtfully select and appoint department chairs to their positions.

This study found a lack of clarity around the process for the appointment of department chairs within the Tamarack School District. Both principals had the misconception that departments had full autonomy in selecting the department chairs, a

normative belief that has been in place for years at both high schools. One principal went as far as saying, “We’ve stripped them of most duties so that the job is not really a leadership job and it’s ordering supplies, and showing up to a meeting to communicate nuts and bolts” (Wallace High Principal, Interview 1, 10/4/23) while the other said, “Right now our department chair meetings are opportunities for them to share gripes or issues that they’re having within their department” (Mission High Principal, Interview 1, 10/16/23). However, upon reviewing the collective bargaining agreement, there was no evidence of a formal procedure for selecting the department chairs. This leaves an opportunity to more clearly define the role and explicitly put a technical procedure in place to allow for a process that centers equity and distributed leadership to the department chairs.

A new process for selecting and appointing department chairs has the opportunity to foreground the normative beliefs about student achievement, course access, and equity that are prerequisites to the detracking process. As Oakes and Lipton (1992) described, a culture of detracking is more important than any single technical decision a department or school can make, and with department chairs setting the culture for their department, it is critical that the process for selection and appointment keep the desired norms in focus while interviewing candidates.

The principal of Mission High School expressed discontent with the current practice around the department chair appointment and shared a vision for what they would like to see in the future.

I would love to have a retreat, where it’s shared and collaborated on what I expect from teacher leaders, talk to them about how to have tough conversations with teachers in the department, and share data with them so they can determine how their individual staff members are performing with their students. (Mission High Principal, Interview 2, 10/19/23)

This vision for selecting, training, and utilizing department chairs would help to distribute leadership away from the principal and toward teacher leaders. Additionally, a retreat to support the development and shared vision of the teacher leaders could allow for multiple leaders and multiple followers to establish a shared vision for what department chairs will be working on throughout the year and potentially how they set a reform agenda around detracking. This increased training and efficacy could lead to more stability within the department as department chairs “anticipate, negotiate, and proactively protect” (Nasir et al., 2014, p. 227) the learning communities they help build.

Without incentives or requirements from the state level to offer specific credentials or micro credentials for teacher leaders or department chairs, there may not be enough pressure for individual school districts to establish requirements for teacher leadership positions. Establishing career ladders that include credentials for teacher leaders and require the type of professional development that prioritizes time for ongoing reflection and dialogue between teacher leaders across different contexts may allow individual districts to make more thoughtful decisions around the appointment and selection of teacher leaders or department chairs.

### ***Political Pressure From Systems Leaders***

Even though many of the decisions for the school schedule are being made at the department level as to who teaches which classes, what periods teachers have off, and what courses will be offered, there is still significant room for site administrators to have influence on the school schedule. In this study, the only influence that principals identified the district as having was around the allocation of resources to build the school schedule. The Mission High principal said, “The district leadership play an important role as we’re advocating or asking for or receiving funding for FTE” (Mission High Principal, Interview 2, 10/19/23), and the Wallace High principal confirmed this by saying, “I would say the district also has a pretty minimal (influence), with the exception of the CBO can have a pretty big influence” (Wallace High Principal, Interview 1, 10/4/23), again referring to the allocation of resources to create the school schedules.

While there is limited influence from the central office during the schedule-building process, there are nevertheless opportunities for tighter coupling (Weick, 1976) between the values of the district office and the implementation of district initiatives within the school schedule. Additionally, this increased support and alignment from the district could have an impact on teacher leaders’ beliefs regarding the initiatives being implemented. One teacher leader said, “I came out of it [the professional development] with the understanding that, like, the district thinks that it’s important and is passionate about detracking, and making things more equitable for all students” (Mission High English Co-Department Chair, Interview 1, 10/16/23). This recognition of support from the district office has the potential to center the normative beliefs of the organization, such as detracking as an important equity issue, and tighten the coupling (Weick, 1976) between the district office and school site practices.

The designer of the professional development series also mentioned how systems-level leaders may actually impede progress toward more equitable systems:

I think one of the biggest issues I’ve seen arise, that involves the systems administrators, is then if the systems administrators are not on board with that change [detracking], and are not willing to help those site administrators hold the line when parents are unhappy with the change, the change falls apart. (Professional Development Designer, Interview 1, 10/13/23)

On the contrary, the designer suggested that systems-level leaders may influence the school schedule by exerting political pressure: “Hey, principals, as you scheduled for next year, here are some equity-focused questions I want you to be asking, of your scheduling team or of yourself” (Professional Development Designer, Interview 1, 10/13/23). Wells (2010) also saw the potential impact of systems-level leaders helping set the vision for the district by communicating values.

### ***Cross-Context Conversations Informed Normative Beliefs***

Through the data, it was clear that very little professional development had been provided for teacher leaders within the school district and little intentionality had been used in the appointment of department chairs. Smylie and Eckert (2018) found that this is often the case, where teachers come into leadership roles that do not involve intentional development. If meaningful leadership is to be distributed to teacher leaders

in the detracking process, it is critically important that they receive the professional development and support they need to reflect on and develop the normative beliefs they have of students and course access along with an understanding of the political landscape they need to navigate in order to effectively implement reform efforts.

Of the four professional development participants interviewed for this study, three of them remarked that having opportunities for professional conversations with colleagues from different settings was a key way they shifted or deepened their normative beliefs about tracking within the school schedule. Furthermore, the professional development designer also mentioned, “I think the offering would give them permission to think about how things are done in other places that they had not even thought of before” (Professional Development Designer, Interview 1, 10/13/23). That time, as Flores (2018) confirmed, allows teachers to discuss their beliefs, which can influence a shift in those beliefs. These conversations allow for the development of normative beliefs about how the school schedule should be designed and what shared values need to be centered in the decision-making process. In essence, these conversations act as teacher learning communities that have the ability to act as “efficacy-forming experiences” (White et al., 2022).

In short, thoughtfully designed professional development that allows time for reading, reflection, and discussion across contexts allows teachers the time and space to change their beliefs. Borg (2011) also argued that teachers should be given ample opportunity to reflect on their beliefs but are not always accustomed to doing so. By giving teacher leaders the time for ongoing reflective conversations, they may be able to continue shifting their beliefs to be in more alignment with equity initiatives within the district such as detracking. As Rita Kohli (2021) so effectively articulated, “Collaborative learning and visioning racial justice are at the heart of school change.”

### ***Normative Beliefs and Early-Career Teacher Leaders***

This study also highlighted the discrepant impacts of professional development aimed at changing teachers’ beliefs based on experience levels. In this study, the two teachers with less than 14 years experience seemed to have a larger change in beliefs, while the 19-year-veteran world language teacher reported their beliefs being cemented by the professional development series, and the most senior teacher, with 28 years experience, reported, “The PD didn’t have any influence on my practice because it was already there,” largely because they already held strong beliefs about detracking. These discrepant impacts are in line with the research Luft and Roehrig (2007) presented about teachers’ pedagogical beliefs about science teaching, arguing that teachers with less experience are more likely to change their beliefs and that beliefs are subject to varying levels of change depending on where teachers are within their career. In this particular study, the teacher leader with the most experience identified her beliefs as the same before and after the professional development, since her training and experience had already cemented her beliefs about tracking.

Of note, the teacher who was most influenced by the professional development series in this study shared that it “was perfect timing in my career” (Mission High English Co-Department Chair, Interview 1, 10/16/23). With ten years of experience and a new role as co-department chair, she felt empowered to make change within her department and influence change during the school scheduling process. The nexus between



experience in the classroom and the new experience of having leadership potential seemed to be a ripe opportunity for her to not only shift her normative beliefs about tracking within her department but also to act on that shift. She specifically called out that “going every week [to professional development], and talking to like-minded people, made me see how important that work [detracking] is” (Mission High English Co-Department Chair, Interview 1, 10/16/23). With newfound political influence as a co-department chair, she was also able to enter into the room where the schedule was being built, watch what was happening, and advocate for change based on her new beliefs that were formed in the professional development series.

By identifying potential future department chairs at an earlier stage in their career, site and systems leaders have the potential to align the normative beliefs of teacher leaders with the values of the district’s detracking policies and more effectively distribute leadership activity to teachers and the departments they lead. Additionally, beliefs are particularly difficult to change (Pajares, 1992; Wheatley, 2002), and when they do change, they do not always tie closely with practice (Basturkmen, 2012; Lorenz et al., 2021), so any practical move a systems-level leader might implement to make beliefs easier to change toward equity would only make the work of systems change for equity easier.

### ***Future Research***

This study starts a conversation around teacher leaders’ beliefs, as the majority of studies on beliefs are focused on teachers and their teaching practice. The themes that emerged from the data give future researchers starting points to delve deeper into the way beliefs change through high-quality professional development and how systems-level leaders can create the context to ensure that all teachers in leadership positions have the mindset and skills necessary to lead complex systems change for equity. The study also extends existing literature on how beliefs change based on experience level and what professional development strategies begin to shape new beliefs for teachers.

Due to the scope of this research, generalizations across settings are difficult to identify. Further research should be focused on teacher leaders’ beliefs across multiple schools and districts. By broadening the number of participants in the study, researchers will be able to expose more teacher leaders to a diversity of experience and thought around school scheduling practices and better understand how these cross-context conversations shape teacher leaders beliefs. Furthermore, there is an opportunity to focus the research on professional development over a longer period of time. A longitudinal study over multiple years could give researchers the opportunity to better understand the nature of changing beliefs for teacher leaders and how the cross-context conversations along with implementation and reflection exercises may change the way beliefs shift over time.

With only four participants and their beliefs about school scheduling as the key analytic unit for this study, there was minimal opportunity to understand how race and lived experience influenced initial beliefs about equitable school scheduling and how and to what extent beliefs were shifted from that initial baseline. Future studies that utilize larger sample sizes may be able to draw conclusions about belief changes

related to racial backgrounds and what impact having more teacher leaders of color may have on a detracking agenda.

### **Recommendations for Practice**

The main recommendations of this study are to create a clear, equity-centered process for the selection and appointment of teacher leaders, to engage teacher leaders in ongoing professional development, and for systems-level leaders to coach, support, and develop site leaders' ability to distribute leadership when implementing systems change at the site level.

### ***Technical Processes for the Appointment of Teacher Leaders***

Teacher leaders and, in the case of this research, department chairs have the potential to lead their colleagues through significant reform efforts, yet infrequently go through a formal process to be appointed to their position. Site and systems leaders should work together to create a formal process by which teachers and administrators collectively select department chairs or other teacher leaders for the formal roles they hold. The selection process should start with a clear job description that defines and outlines the role to which the teacher is applying. The process for appointment should include questions or activities that illuminate the teacher's ability to lead, their equity stance on various reform issues within the district, and the normative beliefs they hold, which will play an important role in shaping the culture of the department they lead.

If no formal process has been outlined for the selection and appointment of department chairs, systems-level leaders should either clearly articulate the process in district policy or formally agree upon the process with the union and have it added to the collective bargaining agreement. As this process is implemented, there should be opportunities for reflection on the process and a mechanism for changes to the process to be implemented to ensure that teacher leaders who are being appointed to these roles are supporting and leading the change for equity needed within the district.

Additionally, site and systems leaders should identify early-career teachers who are showing leadership potential and engage them in equity-centered professional development as early as possible to allow for potential normative beliefs to be shifted toward the district's vision for equitable course access. This would allow site and systems-level leaders to identify teachers who may be a good fit for the role of department chair and effectively distribute leadership in a way that would facilitate the implementation of equity-centered school scheduling. The math department described by Nasir et al. (2014, p. 182) in *Mathematics for Equity* approached the hiring of new teachers in a similar way: "The entire department worked to identify what it was looking for in new colleagues, and what question to ask that would spark revealing conversations with potential candidates." By having a clear process for the selection and appointment of teacher leaders and identifying some of them at earlier stages in their careers, systems-level leaders can more effectively distribute meaningful leadership opportunities to the department chairs who set the culture and normative beliefs of their departments.

### ***Reflective Professional Development to Inform Normative Beliefs***

Systems leaders should create the time, space, and structure to allow for teacher leaders, particularly department chairs, to reflect on their work and address questions of equity within the school schedule. After department chairs are appointed to their positions, there should be ongoing opportunities for teacher leaders to examine best practices for school scheduling, analyze course enrollment data, and have collective discussions with other department chairs from within the school and across the district in order to further shift beliefs toward equity as part of their professional development. White et al. (2022) suggested that efficacy-developing experiences such as these “allow for mastery, vicarious experience, and social persuasion.” Professional development that supports the growth of department chairs should foster mastery around schedule-building while learning from others by engaging in ongoing conversations focused on equitable scheduling. As was seen in this study and within the border research landscape, exposing teacher leaders to new ideas, contexts, and ways of seeing the school schedule has the potential to shift normative beliefs about what is best for students.

Of note, the professional development should allow for time to reflect on individual practice through journaling, expose teacher leaders to the research on detracking efforts through reading articles, focus on a specific problem of practice (Horn & Little, 2010), and allow for significant collective sense-making through cross-school discussions on problems of practice regarding the detracking of the school schedule.

### ***Political Influence from Systems Leaders***

Systems-level leaders should support the development of the school schedule through intentional resource allocation, attendance in professional development sessions, and asking questions that spur reflection and investigation into issues of equity within the school schedule. With limited resources, systems-level leaders should ensure there are adequate allocations of teaching staff to each department in order to allow for increased course access and reduced tracking. As was noted in the discussion section, teacher leaders notice when systems-level leaders are in attendance at and participate in professional development sessions and the implicit political message it sends that the work teacher leaders are engaging in matters. By attending these sessions, systems-level leaders can more closely hear the issues being discussed by teacher leaders and principals and identify ways they can best support the equity challenges being addressed. Additionally, systems-level leaders charged with supporting site leaders should spend time asking questions that spur reflection about the school schedule, how leadership is being distributed across the school, and how the normative beliefs and political pressures of the school are informing the technical elements of the detracking process. This study highlights the potential that systems leaders have when it comes to setting a policy vision for a detracking agenda in the school schedule if they are allocating the correct resources and utilizing the political influence they have within the system.

## **Limitations**

This embedded case study has several limitations worth discussion. From small sample size within a single school district to the definitions used for teacher leadership and my own positionality within the district, this study is able to highlight findings within the particular context of Tamarack School District but may have limited generalizability across settings.

First and foremost, the small sample size of the study limits any broad generalizations beyond or potentially even within the Tamarack School District. Although the key analytic unit for this study was four teacher leaders who participated in an equity-centered school-scheduling professional development series from a local research institution, there were three other interview participants, document reviews, and a teacher leader questionnaire with 19 responses. Despite the multiple sources, the sample size of the study is quite small and took place in only one school district.

By defining teacher leadership as those who are department chairs, union leadership, members of the leadership team for teachers, and instructional coaches, I explicitly left out teachers who may be leading in other ways. Teachers may have informal influence by having their voices heard in staff meetings, the teachers lounge, or other areas where important normative conversations take place. Teachers without formal leadership roles still play an important role in detracking efforts, as they may have access to political power in the local context or be able to influence normative beliefs within the school staff. By not capturing data from these teachers, there is likely some level of insight left out of the study.

Although throughout the process of the study I continued to reflect on any potential bias that may be present, my positionality within the district could have presented limitations to the study. My role within the district helped make the data collection process easier, as I knew many of the questionnaire respondents and interview participants. The participants of the study reported that they felt comfortable with the process and offered honest input regarding tracking within their schools and across the district. However, there is no guarantee that my relationship to them did not influence their responses in some way.

## **Summary of the Dissertation**

School systems continue to perpetuate inequities for students of color and low-income students through inequitable tracking practices deeply embedded in the school schedule. Oftentimes, teacher leaders, such as department heads, are charged with drafting the initial schedules for their departments. They select which teachers teach which classes, when teachers have their prep periods, and what classes the department will offer. Department chairs also set the norms and culture of their department, which can influence whether tracking practices will be perpetuated or dismantled, yet rarely have the support and training to make the most equitable decisions possible for students.

This research study aimed to better understand the extent to which teacher leaders have influence over the construction of the school schedule and how professional development may influence the beliefs of teacher leaders that undergird the actions they take related to the schedule offerings. The study found that within the

context of Tamarack School District, structures within the schools moderated the influence teacher leaders had on the school schedule, that teacher leaders tend to focus their attention on the technical aspects of the schedule build, and that when departments identified normative changes they effected change within their schedule. When it came to how professional development changed teacher leader beliefs, the study found that reflection and conversation helped change beliefs, beliefs shifted differently based on experience and training, and that Tamarack School District lacked a systemic approach to the appointment and intentional development needed to shift teacher leaders' beliefs about tracking practices.

Ultimately, in order to create a culture of detracking across a school district and accelerate student outcomes through equitable course access, this study recommends that systems-level leaders ensure that there are clearly articulated procedures and policies that support the appointment of department chairs. More importantly, site and systems-level leaders should thoughtfully design and deliver professional development that serves to shift teacher leaders' beliefs about equitable school schedules. With ample time for reflection and conversation across contexts, teacher leaders' beliefs can shift in the direction of a detracking agenda. Finally, leaders need to exert political pressures in the right places in order to guarantee that students of color and low-income students have access to the rigorous course offerings that allow them to gain entrance into highly selective universities.

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## Appendix A

### *Interview script for high school principals:*

#### ***Beginning Script:***

Hi \_\_\_\_\_ and thank you for taking the time to talk with me today. As you know, I'm researching teacher leader beliefs around the school schedule and how professional development may influence their beliefs. Through my initial research I've become increasingly interested in the beliefs that undergird the decisions made around course offerings and your insight and experience will help me to better understand the interplay between teacher leader beliefs and the course offerings in your school.

Over the course of the interview we will cover topics such as the creation of the school schedule, course offerings, tracking, the impact of course offerings on students, the professional development you participated in, and other influences on the school schedule. Do you mind if I record this before we get started?

#### ***Creation of the School Schedule:***

How many years have you worked in this school?

How many years have you been in this role?

Have you had responsibility in constructing the school schedule in the past? What role have you played?

Who at your school is responsible for building the school schedule?

How do the department heads and leadership positions get filled at your school?

What are some of the components of the scheduling process?

How are decisions around course offerings made? How are teachers assigned to teach classes?

Who has influence and input over the courses offered? What are the undergirding priorities with regard to the courses being offered?

What role do you play in the scheduling process? Where do teachers have input? Where does their influence stop?

How does the collective bargaining agreement play into the creation of the school schedule?

### ***Tracking***

Is there tracking at your school or within and of the departments at the school?

Have any efforts been made to detrack the school schedule?

Where are there successful examples of detracking happening at your school? What helped spur that change in practice?

Where in the school schedule is it more difficult to detrack? Why?

Help me understand the various pressures or influences that may influence tracking at your school.

What impacts does tracking have on students at your school?

### ***Beliefs***

Do you believe student performance influences tracking decisions at the department and school level? If so, how?

What beliefs undergird the decisions to detrack the school schedule? What beliefs uphold tracking at your school?

Do you engage your teacher leaders in professional development? If so, what does that professional development focus on?

What are your expectations (formal and informal) about the role of department heads?

Where have you seen evidence of teacher leaders changing their beliefs about tracking? What made that possible?

Is it possible to fully detrack your school schedule? If so, what would it take to get there? If not, why?

What role do parents, the Board of Education, or district office staff play in the development of the school schedule?

***Ending Script:***

Thanks again for your time, I really appreciate your perspective on this important topic. Any written analysis of this conversation will keep your identity anonymous. If you have any questions or would like to add any other thoughts before closing out, let me know.

## Appendix B

### *Interview script for the professional development designers:*

#### ***Beginning Script:***

Hi \_\_\_\_\_ and thank you for taking the time to talk with me today. As you know, I'm researching teacher leader beliefs around the school schedule and how professional development may influence their beliefs. Through my initial research I've become increasingly interested in the beliefs that undergird the decisions made around course offerings and your insight and experience will help me to better understand the interplay between teacher leader beliefs and the professional development you design and deliver.

Over the course of the interview we will cover topics such as the creation of the school schedule, course offerings, tracking, the impact of course offerings on students, the professional development you designed, and other influences on the school schedule. Do you mind if I record this before we get started?

How many years have you been designing professional development sessions?

How many times have you delivered this professional development series?

What were your goals in designing the equity centered scheduling professional development series?

What activities within the professional development series were particularly effective in revealing teachers' beliefs or shifting teachers' beliefs?

How were teachers' beliefs evident throughout the workshop? What did teachers do or say that gave you a sense of their beliefs?

Can you share an example of a teacher you may have seen change their beliefs?

What do you think leads to these belief changes?

What would you do differently to influence teacher beliefs about the school schedule?

What have you learned in your work that might support systems leaders in supporting teacher leaders?

How might systems leaders support teacher leaders in developing reflective practices?  
Shifting their beliefs about the school schedule?

Is there anything else you wish I had asked that I haven't or would like me to know  
about the professional development series?

***Ending Script:***

Thanks again for your time, I really appreciate your perspective on this important topic.  
Any written analysis of this conversation will keep your identity anonymous. If you have  
any questions or would like to add any other thoughts before closing out, let me know.



## Appendix C

### ***Interview script for teacher leaders who participated in the professional development:***

#### ***Beginning Script:***

Hi \_\_\_\_\_ and thank you for taking the time to talk with me today. As you know, I'm researching teacher leader beliefs around the school schedule and how professional development may influence their beliefs. Through my initial research I've become increasingly interested in the beliefs that undergird the decisions made around course offerings and your insight and experience will help me to better understand the interplay between teacher leader beliefs and the course offerings in your department/school.

Over the course of the interview we will cover topics such as the creation of the school schedule, course offerings, tracking, the impact of course offerings on students, the professional development you participated in, and other influences on the school schedule. Do you mind if I record this before we get started?

#### ***Creation of the School Schedule:***

How many years have you worked in education? In this school?

How many years have you been in this role?

Who has influence over the courses offered? What are the undergirding priorities when you help build the schedule?

What role do you play in the scheduling process? Where do you have input? Where does your influence stop?

You've probably had some tensions in the process of building the schedule before, could you tell me about some of them?

#### ***Tracking:***

Is there tracking at your school or within your department?

Have any efforts been made to detrack the school schedule?

What is your understanding of tracking in our high schools? Where do you see examples of tracking within your department?

Help me understand the various pressures or influences that may influence tracking in your department.

Describe the impacts of tracking on students? Teachers? The school community?

***Beliefs:***

What is the difference between the typical AP student and College Pathway student?

Describe the type of student who is successful in AP classes? Who belongs there? Who typically doesn't do well?

Describe the role of the teacher in an advanced placement class.

What would need to be in place for heterogeneous classrooms to be successful?

***Influence of Professional Development:***

In what ways did the professional development series influence your beliefs about tracking?

Do you have new beliefs about tracking since engaging in the professional development series? If so, what are they?

What elements of the professional development series helped to shift your beliefs about tracking?

In what ways have you continued to think about how tracking shows up in your department since engaging in professional development?

***(Additional questions to ask in the Spring)***

Given your experience with the professional development in the Spring of 2023, how did the scheduling process go this year? What did you notice?

Was your experience any different as a result of the professional development?

Are you seeing evidence of tracking within your department? If so, where? If not, what led to that change?

What was different about the scheduling process this year? Did it lead to any shifts in tracking?

Where did you notice teachers' beliefs influencing the schedule building process?

What would you like to see happen next year during the process?

How can your administrative team or the district office help make that happen?

***Ending Script:***

Thanks again for your time, I really appreciate your perspective on this important topic. Any written analysis of this conversation will keep your identity anonymous. If you have any questions or would like to add any other thoughts before closing out, let me know.

## Appendix D

### Teacher leader questionnaire

If you agree to participate in this research, please click the buttons to indicate that you have read the consent form and you consent to participate in the research study. Please download and/or print a copy of the above form to keep for your records.

I have read the consent form and consent to participate in the research study

I do not consent to participate in the research study

What is your name?

What is your email address?

What department do you work in?

English

Math

Science

History

World Language

Physical Education

Electives

Special Education

Career Technical Education

Other

How many years experience do you have teaching high school?

0-3

4-10

11-15

16-20

21-25

25+

What is the current teacher leadership role you hold?

Leadership Team for Teachers

Union Leader

Department Head

Instructional Coach

Instructional Leadership Team Member

How many years have you been in your current teacher leadership role?

0-2

3-5

5+

Is your department actively working to detrack course offerings?

Yes

No

I'm not sure

Where is your department in the detracking process?

The department is already fully detracked

We are actively working to detrack the offerings within the department

We are working to detrack our offerings but some level of tracking will always be present

We have not taken any steps toward detracking

NA

What has informed your beliefs about tracking?

My teaching experience relating to differentiation within the classroom

Student performance

Conversations I've had within my department

My own experience as a student

Professional development

Administrative policies regarding tracking

Other

What college or university did you get your teaching credential from?

How many years ago did you receive your teaching credential?

0-4

5-10

11-15

15+

To what extent did your teacher credentialing program focus on issues of equity and social justice within schools?

Not at all

Issues of equity and social justice were implicit in some of the coursework

There were specific classes that focused on issues of equity and social justice

The entire program was grounded in issues of equity and social justice

How many hours have you spent in the last five years engaging in professional development focused on equity issues in schools?

0 hours

1-5 hours

6-15 hours

15+ hours

Extremely professional

How many hours have you spent in the last five years engaging in professional development focused on detracking departmental offerings?

0 hours

1-5 hours

6-15 hours

15+ hours

How would you describe your department's culture related to detracking?

As a department we have little to no conversations around detracking

We have conversations around detracking from time to time

We often have conversations focused on detracking but rarely make any changes

We are constantly working to detrack the offerings we have in our department

How would you describe your departments culture related to opening access to

Advanced Placement courses for students of color and low income students

As a department we have little to no conversation around opening access to Advanced Placement courses

We have conversations around open access to Advanced Placement courses from time to time

We often have conversations focused on open access to Advanced Placement courses but rarely make any changes

We are constantly working to open access to Advanced Placement courses

Who would you say has the most influence on the creation of your department's course offerings and class levels

District administrators

Site administrators

Department chairs  
Counselors  
The department as a collective  
The Secondary Curriculum Advisory Council  
Other

How often does your department engage in reflective conversations around course offerings?

Monthly  
Quarterly  
Yearly  
Almost never

How open are you, personally, to changing the course offerings within your department?

Very open  
Somewhat open  
Neutral  
Somewhat hesitant  
Hesitant

How open are you, personally, to creating open access to Advanced Placement courses within your department?

Very open  
Somewhat open  
Neutral  
Somewhat hesitant  
Hesitant

How open are you, personally, to minimizing leveled classes within your department?

Very open  
Somewhat open  
Neutral  
Somewhat hesitant  
Hesitant

Is there anything else you would like to say about tracking or open access to Advanced Placement courses?

Which of the following types of tracked classes did you participate in as a high school student?

Advanced Placement classes

Honors classes

General Education/College Prep Classes

Remedial classes

If you took Advanced Placement classes, how many did you take?

1

2-5

More than 5

How would you describe the community you grew up in?

My community was mostly White

My community was racially diverse but predominantly White

My community was racially diverse

My community was predominantly a community of color

Thank you for participating in this research study, your insights will provide valuable information regarding teacher leader beliefs about school scheduling.

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## Appendix E

## Code Book

<b>Research Question 1:</b> <i>How and to what extent do teacher leaders have influence on the detracking of the school schedule?</i>		
<b>Code</b>	<b>Description</b>	<b>Example</b>
<b>Teacher Influences on School Schedules</b> <i>Political - Teacher Influence</i> <i>Technical - Teacher Influence</i> <i>Normative - Teacher Influence</i>	Anything that teachers do or say that potentially influences the creation of the school schedule <ul style="list-style-type: none"> <li> <b>Political - Teacher Influence:</b> Influences that have to do with decision making or power within the scheduling process related to teachers             </li> <li> <b>Technical - Teacher Influence:</b> Elements of the scheduling process that include structures, time, resources, or strategies.             </li> <li> <b>Normative - Teacher Influence:</b> The beliefs, norms, and ways of being that teachers have that influence the school schedule             </li> </ul>	<b>Political:</b> <i>“And specifically, the change that we made to 10th grade. That was a teacher led idea. And we went to admin and told them, why we want us to do it, how we were going to do it.”</i>  <b>Technical:</b> <i>“I haven’t personally experienced any tension. But I get the sense that teachers really make it clear as far as what periods, they will not teach a class.”</i>  <b>Normative:</b> <i>“But I also believe that AP classes should still be offered for juniors and seniors in English. Because they’re ready to make that decision. It’s time to start making choices about your future.”</i>
<b>Administrative Influence on School Schedules</b> <i>Distributed Leadership</i>	Influences that principals or other administrators have or decisions they make on the school schedule <ul style="list-style-type: none"> <li> <b>Distributed Leadership:</b> Components of the scheduling process that             </li> </ul>	<b>Distributed Leadership:</b> <i>“Department chairpersons, together with the school administration at each school site, will meet to</i>

<p><i>Top Down Decision Making</i></p>	<p>administrators delegate to teacher leaders or make collaboratively with teacher leaders</p> <ul style="list-style-type: none"> <li>● <b>Top Down Decision Making:</b> Decisions made by administrators without significant input from teachers or teacher leaders</li> </ul>	<p><i>develop the Master Schedule.”</i></p> <p><b>Top Down Decision Making:</b>  <i>“I want to have seven world history classes instead of six, because I want the world history to be a little bit bigger, and maybe the AP's smaller, that kind of stuff.”</i></p>
<p><b>Other influences on School Schedules</b>  <i>Political  Normative  Technical  Identified  Student Needs or Desires</i></p>	<p>This category is intended to capture other elements influencing the school schedule such as parental pressures, student needs, and the collective bargaining agreement among other influences</p> <ul style="list-style-type: none"> <li>● <b>Political:</b> Pressures on the school schedule that have to do with access, power, and decision making authority</li> <li>● <b>Normative:</b> Influences related to the beliefs, norms, or cultures of the schools or departments</li> <li>● <b>Technical:</b> Limitations on the school schedule that have limited flexibility such as the start and end times of the school day, collective bargaining agreement, or the number of prep periods a teacher may have</li> <li>● <b>Identified Student Needs or Desires:</b> Influences on the school schedule based on what students are interested in or the identified needs they may have as articulated by language proficiency or special education needs</li> </ul>	<p><b>Political:</b>  <i>“I'm keeping my hands in who's teaching which courses and working with the departments on all of that I'm very involved in the staffing like the FTE and how it's been allocated.”</i></p> <p><b>Normative:</b>  <i>“It could cause judgment among peers. And then it starts making the students feel as if they are othered, which is unfortunate.”</i></p> <p><b>Technical:</b>  <i>“AP classes are what colleges want to see.”</i></p> <p><b>Identified Student Needs/Desires:</b>  <i>“And then, even with the fluent speakers, there was, you know, Algebra A or Algebra Readiness, or the classes that they thought were better suited for those kids.”</i></p>

<b>District Support</b>	Support from district level administration to move detracking efforts forward in the form of either political, financial, or symbolic support.	<b>District Support:</b> “Well, the district leadership play an important role as we're advocating or asking for or receiving funding for FTE.”
<b>Research Question 2:</b> <i>What influences teacher beliefs around tracking and how does professional development shift those beliefs?</i>		
<b>Code</b>	<b>Description</b>	<b>Example</b>
<b>Teacher Beliefs</b> ( ) Limiting Beliefs Open Beliefs Flexible Beliefs	These are beliefs that teachers have about students, the school schedule, or the way the schedule should be constructed. <ul style="list-style-type: none"> <li>● <b>Limiting Beliefs:</b> Beliefs that teachers or administrators have that are fixed, definitive, or limiting of students' potential</li> <li>● <b>Open Beliefs:</b> Beliefs that are perceived to be open to a range of possibilities or a different way of being or doing</li> <li>● <b>Strategic Beliefs:</b> Beliefs that offer some sort of strategy to increase access to rigorous classes</li> </ul>	<b>Limiting Beliefs:</b> “AP teacher should be more, you know, this is the cliches in the world, but the the guide on the side and not the stage on the stage”  <b>Open Beliefs:</b> “I am all for opening up AP and Honors classes - AP for all, dual enrollment, or middle-college high school are all things I am interested in!”  <b>Strategic Beliefs:</b> “I think if we open access to AP courses for all students that we must also make sure to build programs that support these students in these classes”
<b>Support for Teacher Leaders</b> Centralized Support	How teacher leaders are supported in their development of their equity orientations, leadership stance, expectations, or technical elements	<b>Centralized Support:</b> “I think it would be a pretty amazing thing if there were systems

<p><i>Intentional Site Development</i></p>	<p>of the scheduling process.</p> <ul style="list-style-type: none"> <li>● <b>Centralized Support:</b> Support given to teacher leaders from the district office</li> <li>● <b>Intentional Site Development:</b> Support given to teacher leaders from the school site</li> </ul>	<p><i>leaders saying, hey, principals, as you scheduled for next year, here are some equity focused questions I want you to be asking, of your scheduling team or of yourself, if you're helping, helping or part of the scheduling”</i></p> <p><b>Intentional Site Development:</b>  <i>“At previous schools, I've shared almost a job description and some professional agreements around what a department chair should do. I did not do that with this staff yet. I would like to get to that point.”</i></p>
<p><b>Shifts in Beliefs from Professional Development</b>  <i>Conversations  Readings  Other  Experiences</i></p>	<p>The identified activities that influence the beliefs of teacher leaders either during the professional development or at some other point in their career</p> <ul style="list-style-type: none"> <li>● <b>Conversations:</b> Discussing issues related to the school schedule with other people, particularly people with different backgrounds, experiences, or contexts</li> <li>● <b>Readings:</b> Articles or books related to school scheduling or detracking</li> <li>● <b>New/Different Experiences:</b> Learning from other people, schools, or districts about their unique context, process, or experiences related to detracking or school scheduling</li> </ul>	<p><b>Conversations:</b>  <i>“A lot of it was talking with teachers from different schools, having the opportunity to have those little breakout rooms.”</i></p> <p><b>Readings:</b>  <i>“I wish we had spent more time reading but I always feel like we should spend more time reading Because I'm an English Teacher.”</i></p> <p><b>New/Different Experiences:</b>  <i>“It was nice to like to see like a different perspective, like a different role, and to kind of think about things that I think I may have known</i></p>

		<i>intuitively or, you know, implicitly but not been able to name per se."</i>
<p><b><i>Influences on Initial Beliefs</i></b>  <i>Professional Development Experiences</i></p>	<p>The elements that have informed teacher leaders' initial beliefs around scheduling, detracking, or course access</p> <ul style="list-style-type: none"> <li>● <b>Professional Development:</b> Training or workshops focused on issues of equity, detracking, or the school schedule</li> <li>● <b>Experiences:</b> Time teaching in the classroom, interactions related to the school schedule, or experiences building the school schedule itself</li> </ul>	<p><b><i>Professional Development:</i></b>  <i>"I feel English has made a huge shift and I want to say that it was a result, or that was a result of the professional development that one of the department chairs went to."</i></p> <p><b><i>Experiences:</i></b>  <i>"I am a proponent of detracking, probably detracking more things than would ever go on in this school. And I've learned that by being at El Cerrito High School."</i></p>

