

Implementation and Outcomes of the Together is Better Program, 2017-20

Key Findings

- Teachers were generally satisfied with Together is Better (TIB) professional development sessions and co-teaching coaching, and teachers especially appreciated the inclusion of structured planning time in PD sessions in the second year.
- After implementation, co-planning was more frequent, more teachers reported knowledge of differentiation in the literacy block, and more teachers reported receiving needed professional development.
- Teachers reported benefits to English Learners (ELs) in their classrooms. Both ESOL and general education teachers attributed benefits of co-teaching to the potential individualized and small-group instruction. However, teachers expressed concerns about supporting Level 1 and Level 2 ELs in a co-teaching model.
- As measured by the Protocol for Coaching Collaborative Teaching, TIB teachers improved in their use of targeted instructional and non-instructional practices in both years of the program.
- TIB schools that implemented the program for the full two years were developing plans to continue co-teaching in some form in 2020-21, while increasing the number of classrooms an ESOL teacher is assigned to.
- To ensure sustainability, participants cited a need for partnership quality and sufficient planning time.

Mark Lewis,
Associate, Strategic Analytics

Kristyn Stewart,
Senior Research Associate

Sydney Negus, Research Assistant

Office of Research and Evaluation

November 2020

Table of Contents

About Together Is Better	7
Program Model	7
Together is Better (TIB) is a School District of Philadelphia-designed pilot program that introduces a co-teaching English Learner (EL) model into three District schools	
Program Activities	7
The Together is Better model included a school-based needs assessment, ongoing profesdevelopment, collaborative planning time, and embedded coaching	
Program Partners and Funders	7
The program was funded by a grant from the William Penn Foundation and was coording the District level by the Office of Multilingual Curriculum and Programs (OMCP)	
School Selection	8
Schools had to have grades K-3 and at least one full-time ESOL teacher in order to qualif apply to implement Together is Better	
Fourteen schools initially applied, and seven schools were selected for a second round of application activities	
Comly, Sheridan, and Loesche Elementary Schools were selected to participate in Togetl Better. Sheridan and Loesche participated for all years of implementation	
Research Questions	9
Data collection and analysis	9
Surveys	9
Interviews	10
Protocol for Coaching Collaborative Teaching (PCCT)	11
Observations	11
Administrative Data	12
School characteristics and needs assessments	12
Student population and needs at Sheridan Elementary School	12
Student demographics at Sheridan	12
Pre-existing Model and Strengths at Sheridan	13
Initial Needs at Sheridan	14
Student population and needs at Loesche Elementary School	14
Student demographics at Loesche	14
Pre-existing Model and Strengths at Loesche	15

Initial Needs at Loesche10
Findings17
Research Question 1: To what extent has the TIB initiative been implemented as intended at the district, school, and classroom level and what were the primary challenges to implementation? 17
Key Findings1
1.1 To what extent did SDP provide the professional support that was needed to implement TIB, and to what extent were teachers satisfied with the support provided?1
About TIB Professional Development (PD) Sessions1
Teachers were generally satisfied with the PD sessions18
OMCP used feedback from early PD sessions to increase co-planning time at PD, which was popular among participants19
Administrators did not find the first year of TIB professional development helpful due to the initial focus on theory rather than implementation20
About TIB Embedded Coaching2
Scheduling capacity and aligning expectations were challenges in early implementation of coaching
Teachers' satisfaction with coaching they received and their relationship with the coach greatly improved by the second year of implementation22
In interviews, teachers gave positive feedback for the co-teaching coach and valued modelling and explicit support24
1.2 To what extent did teachers report co-teaching practices in the literacy block? Were there differences in reported implementation between ESOL and Gen Ed teachers?25
What is the Literacy Block?2
After implementation, co-planning was more frequent and nearly universal2
After implementation, more teachers reported knowledge of differentiation for the literacy block, and far more teachers reported receiving needed coaching and professional development
After implementation, both general education and ESOL teachers more frequently reported using the effective instructional strategies targeted by TIB coaching and professional development, such as using complex and rigorous texts with ELs
1.3 How did schools establish and support co-teaching partnerships? What did teachers and principals describe as elements of a successful partnership?28
Each school approached co-teaching with slightly different pairing models28
School leaders used multiple strategies for selecting co-teaching partners28
Participants who reported effective or satisfying partnerships described clear allocation of responsibilities and a mutual openness to feedback29

Teachers satisfied with their partnerships described clear allocation of responsibilities3	0
Without enough planning time or discussion, allocation of responsibilities defaults into unequal relationships3	30
Teachers and principals described a mutual openness to feedback as an important factor in effective or satisfying partnerships	
1.4 What did participants describe as the primary challenges to implementation?	3
Participants described challenges in using the co-teaching model to support Level 1 and Level 2 ELs	3
Almost all teachers cited insufficient planning time as a challenge to co-teaching3	34
1.5 Conclusions related to TIB implementation and challenges3	34
Research Question 2: To what extent do teachers perceive or report changes in their schools or classrooms as a result of TIB implementation?3	35
Key Findings3	35
2.1 What are the reported changes and benefits for schools, if any?3	35
After implementation, more ESOL and general education teachers reported positive views of their school's approach to teacher collaboration to meeting EL students' needs	
After implementation, most teacher responses about being valued and supported by their school did not significantly improve	86
In interviews, teachers reported positive or mixed support from administrators3	37
ESOL and general education teachers' perceptions of their school's vision for teaching ELs remained largely unchanged3	37
2.2 What are the perceived changes and benefits to teacher instruction or student learning, if any?3	88
Teachers reported gaining knowledge through their co-teaching partnership and Together Better3	
Teachers valued the relationships formed through their co-teaching partnerships3	88
Teachers widely reported benefits to EL students in their classrooms3	39
Teachers described challenges inherent in the expectations that Level 1 and Level 2 ELs would work with grade level content4	0
Teachers frequently attributed benefits of co-teaching to their greater capacity to provide individualized and small-group instruction4	0
2.3 Conclusions related to teacher reports about instructional changes4	1
Research Question 3: To what extent did teacher instruction change during implementation of the TIB initiative as measured by the Protocol for Coaching Collaborative Teaching?4	-2
Key Findings4	12

Protocol for Coaching Collaborative Teaching	42
3.1 Which practices improved the most over time? Which practices improved the least?	.44
Scores for instructional co-teaching practices increased by about half of a performance bar within each program year. Over the course of both years, scores increased by about half of performance band.	fa
Scores for non-instructional co-teaching practices increased by about half of a performance band within each program year. Over the course of both years, scores increased by about a full performance band	a
Instructional practices related to teaching both language and content improved the most	.45
Among non-instructional practices, those related to planning and reflection improved the most	.47
In 2018-19, average scores for three practices increased by only a small amount. In 2019-2 average scores for four practices increased by only a small amount	
3.2 Conclusions related to changes in teacher instruction, as measured by the PCCT	49
Research Question 4: To what extent do participants perceive the collaborative co-teaching model as sustainable?	50
Key Findings	.50
4.1 To what extent do schools plan on continuing the use of TIB and/or the collaborative coteaching model in the future?	
As of spring 2020, Loesche staff were planning for continued co-teaching, though with few joint responsibilities.	
As of spring 2020, Sheridan staff were unsure of how co-teaching would continue, but they largely attributed this uncertainty to the impact of COVID-19	
4.2 How did participants describe needed supports for sustained co-teaching?	.50
Teachers frequently described planning time, modelling, and suitable partnerships as important supports for co-teaching	.50
Teachers gave advice to future co-teachers frequently cited the importance of a positive relationship	51
4.3 Conclusions related to participants beliefs about the sustainability of co-teaching	.51
Conclusions	52
TIB implementation	52
Benefits and changes reported by teachers	52
Change in practices measured by the PCCT	54
Sustainability	54
Appendix A. Surveys used in evaluation	55

Appendix B. Protocol for Coaching Collaborative Teaching	57
Instruction	58
Assessment	63
Planning	64
Reflection	65
Appendix C. Full PCCT tables for both schools	66
Appendix D. Summarized themes and full responses from post-implementation survey questions about sustainability	

About Together Is Better

Program Model

Together is Better (TIB) is a School District of Philadelphia-designed pilot program that introduced a co-teaching English Learner (EL) model into three District schools.

In the TIB model, a General Education (Gen Ed) teacher and an English as a Second or Other Language (ESOL) teacher are paired to collaboratively teach (referred to as "co-teaching") in a classroom that includes English Learners (ELs). This practice of co-teaching provides embedded support to ELs, and ESOL-informed instruction to all students. The pilot implementation of TIB in the School District of Philadelphia was a three-year project. The first year (2017-18) was a planning year. Two years of TIB program implementation in three schools began in 2018-19. At the end of the first year of implementation, one of the three schools withdrew from the program. This report focuses primarily on the two schools who participated in the program for both implementation years.

Program Activities

The Together is Better model included a school-based needs assessment, ongoing professional development, collaborative planning time, and embedded coaching.

To support preparation for the TIB model in the planning year (2017-18), school leadership and select teachers were first supported in conducted a needs assessment of their school. Throughout the two implementation years, TIB teacher participants participated in professional development in co-teaching to support ELs, which included structured collaborative planning time. Embedded coaching supported teacher teams in their specific needs.

Program Partners and Funders

The program was funded by a grant from the William Penn Foundation and was coordinated at the District level by the Office of Multilingual Curriculum and Programs (OMCP).

The District contracted with the company SupportEd to provide professional development for participating teachers. In addition, a co-teaching coach was hired from the Children's Literacy Initiative (CLI) to provide coaching and support to participating teachers throughout program implementation. The program was evaluated by the Office of Research and Evaluation (ORE).

School Selection

Schools had to have grades K-3 and at least one full-time ESOL teacher to apply for Together is Better.

Starting in the fall of 2017, OMCP advertised TIB with a combination of face-to-face meetings with assistant superintendents and notices in the Principal's Resource Newsletter. The first application period opened on October 19 and closed on November 22, 2017. The application period was then extended to December 15. The application included open-ended questions about why the school wanted to participate, how the program would align with other initiatives at the school, and what challenges to implementing a co-teaching model they anticipated. School EL population was considered during the application process. Schools were separated into three ESOL categories (low, mid, high) based on how many ESOL instructors they had, with the goal of picking one school to represent each category.

Fourteen schools initially applied, and seven schools were selected for a second round of application activities.

The second-round application included a "Commitment Form" which had to be signed by team members, committing them to certain activities and levels of participation should their school be chosen. The seven second round applications were graded on a rubric by a team of three. The rubric was split into three categories, each with a maximum number of points: completion of application (25 points); leadership team (50 points); alignment to TIB vision (25 points). Category scores were added to give a sum score, and the three sum scores were then averaged to produce the school's final score. After each team member scored each application individually, the team discussed the results and averaged out the category and final scores. The school with the highest final score in each ESOL category was selected.

Comly, Sheridan, and Loesche Elementary Schools were selected to participate in Together is Better. Sheridan and Loesche participated for all years of implementation.

Selected schools had a final score that ranged from 79/100 (Sheridan) to 93/100 (Loesche) (Table 1). Each school's scores were within seven points of the maximum score for each category. Comly ultimately only participated in the first year of implementation.

Table 1: Average Scores on Application Rubric, Selected Schools

School	Completion of Application (Max. 25 Points)	Commitment of Leadership Team (Max. 50 Points)	Alignment to TIB Vision (Max. 25 Points)	Final Score
Comly	23	45	22	90
Sheridan	18	43	18	79
Loesche	23	46	24	93

Source: Rubric scores provided by OMCP.

Research Questions

We used a mixed methods approach to answer the following questions related to Together is Better implementation and instructional outcomes:

- 1. To what extent did SDP provide the professional support that was needed to implement TIB, and to what extent were teachers satisfied with the support provided?
- 2. To what extent did teachers perceive or report changes in their schools or classrooms as a result of TIB implementation?
- 3. To what extent did teacher instruction change during implementation of the TIB initiative as measured by the Protocol for Coaching Collaborative Teaching?
- 4. To what extent did participants perceive the collaborative co-teaching model as sustainable?
- 5. To what extent did students participating in TIB schools experience academic growth and other desirable school outcomes?¹

Data collection and analysis

ORE used a variety of data collection methods to evaluate the implementation and outcomes of the Together is Better pilot program.

Surveys

Eight **professional development surveys** were administered to measure teacher satisfaction with PD and interest in other topics for future sessions (Table 2).

 $^{^{1}}$ School closures related to COVID-19 created delays in accessing and analyzing student-level data, so a detailed analysis addressing the fifth research question is forthcoming.

Table 2. List of professional development surveys with respondent information

Survey type	Administration date	Number of respondents	Response rate
Teacher PD	May 2018	22	n/a
Teacher PD	June 2018	39	78%
Leadership PD	August 2018	17	n/a
Teacher PD	November 2018	29	71%
Leadership PD	May 2019	10	83%
Teacher PD	August 2019	28	97%
Teacher PD	November 2019	29	83%
Teacher PD	January 2020	29	98%

Implementation surveys measured teachers' self-report of instructional and collaborative practices, teachers' opinions of instruction of ELs at their school before implementation of TIB model, and self-assessments of their ability to support ELs. Three implementation surveys were administered (Table 3).

Table 3. List of implementation surveys with respondent information

Survey name	Administration date	Number of respondents	Response rate
Pre-implementation survey	August 2018	22	62%
Interim implementation survey	May 2019	14	48%
Post-implementation survey	May 2020	22	81%

Satisfaction surveys assessed teachers' experiences with coaching, co-teaching relationships, coteaching models in participating schools, and supports and resources for co-teaching (Table 4).

Table 4. List of satisfaction surveys with respondent information

Survey name	Administration date	Number of respondents	Response rate
Satisfaction survey (Year 1)	November 2018	30	61%
Satisfaction survey (Year 2)	January 2020	23	89%

Further information about surveys is available in Appendix A.

Limitations: Comly Elementary School ultimately only participated in the first year of implementation. Where possible, data from Comly was removed from the sample prior to analysis. However, due to efforts to allow teacher participants to remain anonymous, ORE was not always able to identify participants from Comly and remove their data from the sample. It will be noted throughout this report where Comly data may be included.

Interviews

During the first year of TIB's implementation, we interviewed participating principals and a sample of participating teachers for a total of 11 interviewees (Table 5). We conducted another round of interviews with a sample of participating teachers at the end of year two. The interviews were intended to gather information about teachers' and principals' satisfaction across the following

areas: experiences with coaching, co-teaching relationships, co-teaching models in participating schools, and supports and resources for co-teaching (such as professional development sessions). In year one, ORE interviewed teachers and principals of all three participating schools, and perspectives from Comly on their first year of participation are included in this analysis. Teachers were given gift cards in thanks for their participation.

Table 5: Interviews conducted with participants throughout program implementation

Interview	Interview date	Number interviewed
Year one teacher interviews	Spring 2019	8
Year one principal interviews	Spring 2019	3
Year two teacher interviews	Spring 2020	9

Protocol for Coaching Collaborative Teaching (PCCT)

To guide coaching and teacher reflection on best practices for supporting ELs through a co-teaching model, ORE, CLI, and OMCP collaborated to develop a coaching and implementation data collection tool called the Protocol for Coaching Collaborative Teaching (PCCT). The co-teaching coach visited classrooms on a regular basis and used the PCCT to focus coaching on areas for development. ORE coordinated with the co-teaching coach to collect pre- and post-co-teaching implementation data four times during the two implementation years. In 2019-2020, spring scores were based on observations in March prior to COVID-19-related school closures. Only average school scores were reviewed by OMCP and ORE staff (not individual class-specific scores).

Table 6. Number of teams observed at TIB schools in each data collection period

Data Collection Period	Loesche	Sheridan	Total
Fall 2018	13	3	16
Spring 2019	11	3	14
Fall 2019	12	3	15
Spring 2020	13	3	16

Observations

We observed initial planning meetings, needs assessments, and professional development (PD) sessions and then observed samples of on-going PDs throughout implementation. Staff from ORE also periodically attended TIB planning and professional development activities to conduct observations and take notes.

Administrative Data

OMCP shared attendance logs, schedules, and agendas from professional developments with ORE to allow ORE to determine how many teachers were receiving PD, and the topic of the PD. Additional data about student demographics and school characteristics were obtained from the District's data system, Qlik.

School characteristics and needs assessments

As indicated in the discussion of the planning process, the Together is Better pilot initially had three participating schools: Comly, Sheridan, and Loesche. At the end of the first year of implementation, Comly withdrew from the program. This report focuses primarily on the two schools who participated in the program for both implementation years.²

One full-school-day needs assessment was conducted at each school in May 2018. The needs assessment at each school included focus groups with each school's Leadership Team and participating teachers, surveys to assess current collaboration practices, classroom visits, and a debrief session with the Leadership Teams. Leadership Teams consisted of the principal, additional school-based staff members, and select teachers. The needs assessment process was intended to learn about each school's model, strengths, and current areas of need.

A representative of SupportEd and a representative from OMCP's central office staff were present each day to facilitate the assessment, and two ORE staff attended each day to observe and take extensive notes. OMCP's Multilingual Manager from each school's Learning Network also attended. At this point, the CLI co-teaching coach had not yet been hired.

Student population and needs at Sheridan Elementary School

Student demographics at Sheridan

The size of Sheridan's EL enrollment grew from 13.6% to 16.4% over the course of TIB implementation, and many other demographic characteristics remained consistent (Table 7).

² Findings from the needs assessment for Comly Elementary are available by request to the Office of Research and Evaluation.

Table 7. Demographic characteristics of Sheridan in the selection year and in the second year of implementation.

	October 2017	October 2019
Total Enrollment (K-3)	567	421
% Special Education	8.8%	10.7%
% EL	13.6%	16.4%
% Free from Tape	100.0%	100%
% Female	48.3%	53%
% Black	25%	24%
% Hispanic	62%	66%
% Multi-Racial/Other	6%	5%
% Asian	1%	1%
% White	6%	3%

Source: Qlik, accessed June 2020

Among ELs at Sheridan in the selection year (2017-18), Spanish was the majority home language other than English, with 96% of K-3 ELs reporting it as their home language. 13% of all K-3 students at Sheridan were Spanish-speaking ELs. The next two home languages most commonly reported were Mandarin Chinese and Vietnamese. These were the only reported home languages other than Spanish amongst K-3 students. Mandarin was spoken by 3% of K-3 ELs at Sheridan, and Vietnamese was spoken at home by only 1% of the same population. Teachers reported that many students not classified as ELs also speak Spanish bilingually with English.

Pre-existing Model and Strengths at Sheridan

Prior to the TIB pilot, Sheridan was already implementing co-teaching in many classrooms. Based on her experiences as a former ESOL teacher, the principal believed strongly in a co-teaching model and had already established a co-teaching model and corresponding professional development for co-teachers at her school.

In co-teaching classrooms at Sheridan prior to TIB, a general education teacher and an ESOL teacher shared a room and were paired together all day. They had shared-planning time and were both involved in lesson planning and in developing scaffolds. Co-teachers described a full team-teaching model, with both teachers team-teaching the whole class and then breaking out into smaller groups for differentiating in reading and math. For writing, teachers generally switched to parallel teaching, with ELs taught by the ESOL teacher separately. Non-ELs in need of additional support could join the ELs for writing. One teacher would usually take the lead for a lesson, but the teacher taking the lead role alternated. Staff reported that in a co-teaching classroom, you can't tell which teacher is ESOL and which is general education.

Sheridan identified a strong EL culture and a strong co-teaching culture as key strengths at their school at the start of TIB. Co-teachers spoke positively about co-teaching and many stressed the importance of an open and flexible mindset for co-teaching success. The principal explained that

she makes the expectation of co-teaching very clear when hiring, so staff come in with a co-teaching mindset and are ready to buy into the teaching model. The principal also emphasized the importance of establishing the ESOL teacher as an equal by never pulling them out to substitute teach in other classrooms.

Staff at Sheridan reported a strong EL culture, due in part to intentional school efforts and in part to the nature of the school's largely Spanish-English bilingual community. They said that everything is celebrated in both languages, all signage is bilingual, and communications with parents and the community are bilingual. If teachers don't speak Spanish, they ask the students to help them learn.

Another area of reported strength was co-teaching pairings. The principal was intentional about explaining to teachers why they were being paired together and what areas of growth she thought the pairing could improve. Content knowledge and personality were taken into account, but it was made clear to teachers that their relationship was intended to help them build their capacity and to grow as educators. Teachers said that collaboration and communication between teachers happens frequently and throughout the day.

Initial Needs at Sheridan

The main needs identified by Sheridan staff at the beginning of TIB included accommodating a shifting student population, and instruction and curriculum.

Sheridan staff described the challenge of adapting instruction to the fact that they draw students from a very transient neighborhood. Students come and go frequently throughout the year, making it difficult to achieve consistency for students and requiring effort to differentiate instruction and catch new students up. Staff expressed concern that students aren't always at Sheridan long enough to benefit from the long-term programs they are implementing. Hurricane Maria brought a particularly large group of new EL students to the school in 2017, but because they arrived at roughly the same time, staff were able to help them acclimate and catch up as a group.

Sheridan was already implementing a co-teaching model, so the main area where Together is Better could provide support was in fine-tuning co-teaching practices and taking instruction and curriculum to the next level. Teachers and leadership expressed concern over how to maintain rigor for ELs, and requested more support in planning engaging lessons that allow for authentic language use.

Student population and needs at Loesche Elementary School

Student demographics at Loesche

The size of Loesche's EL enrollment grew from 32.9% to 40.6% over the course of TIB implementation, but most other demographic characteristics remained consistent (Table 8).

Table 8: Demographic Characteristics of Loesche, in the selection year and in the second year of implementation.

	October 2017	October 2019
Total Enrollment (K-3)	566	620
% Special Education	9%	8%
% EL	33%	41%
% Free from Tape	86%	88%
% Female	48%	48%
% Black	9%	8%
% Hispanic	4%	5%
% Multi-Racial/Other	8%	3%
% Asian	18%	32%
% White	60%	52%

Source: Qlik, accessed June 2020

Among ELs at Loesche in the selection year (2017-18), the most common home language (other than English) was Russian, with 42% of K-3 ELs reporting it as their home language. Tajik was the next most commonly spoken home language, spoken by 14% of K-3 ELs. The third most common home language was Uzbek, with 13% of K-3 ELs reporting it as their home language. In 2017-18, there were 20 different home languages spoken by K-3 students at Loesche.

Pre-existing Model and Strengths at Loesche

Prior to the TIB pilot, the ESOL instructional model at Loesche was a combination of push-in for guided reading during the literacy block (grades 1-5) and pull-out for 3rd, 4th, and 5th grade students who are new to the United States. These students participated in the Newcomer Leadership Academy for two marking periods, at which point the teachers attempt to mainstream them back into regular classrooms.

Loesche was not yet implementing co-teaching beyond push-in guided reading instruction, so they did not report any co-teaching strengths during the needs analysis process. With regards to co-teaching, teachers said that in their experiences with guided reading push-in, they appreciated having someone to develop ideas with. General education teachers liked having ESOL teachers in the room to help modify assessments appropriately for ELs. Both ESOL and general education teachers said that ESOL instructional strategies were proving helpful for both ELs and non-ELs at lower reading levels. Loesche staff viewed push-in guided reading during SY 2017-18 as a "stepping stone" that they could build off of in TIB. Leadership Team members also stated that they have a diverse school with a dedicated, knowledgeable staff who are willing to learn, and noted that Loesche staff are good at communicating with parents.

Initial Needs at Loesche

The three areas of need described by Loesche staff included: instructional materials and practices, collaboration logistics, and collaboration culture.

Maintaining rigor and engagement was frequently brought up as a concern at Loesche. Teachers expressed concern that the ReadyGen curriculum and increasingly rigorous standards were not designed with ELs in mind. Some teachers reported that some texts they were supposed to use with ELs were far above their abilities, resulting in discouraged and disengaged students. Some teachers prefer to use older instructional materials that they have already adapted for ELs, but other staff members were concerned that these older materials are not nearly rigorous enough. The principal requested support from OMCP and SupportEd in developing lists of resources to use going forward.

Many teachers and staff members at Loesche talked about concerns related to the logistics of coteaching. Some teachers weren't sure how to arrange the physical classroom space to accommodate two teachers and potentially two guided-reading areas for the literacy block. Additionally, time for collaboration and co-planning was a key topic of discussion.

Partnering dynamics and the assignment of co-teachers were also common concerns. Teachers used words like "dating" and "marriage" to describe the co-teaching relationship, and expressed discomfort with the idea that they might not be able to control who they end up with or what the relationship will be like. Some teachers wanted a say in who they partnered with, but the principal and assistant principal were concerned that there will be increased tension if some teachers are sought-after partners and others are not.

The discomfort with sharing space and engaging in a teaching partnership were concerns at Loesche around collaboration culture. Some focus group participants explained that there was a "my classroom" mindset amongst some teachers, and several participants shared uncertainty and concern about how authority and classroom space would be shared between co-teachers as ESOL teachers come into spaces that used to belong solely to the general education teachers.

Findings

Research Question 1: To what extent has the TIB initiative been implemented as intended at the district, school, and classroom level and what were the primary challenges to implementation?

Key Findings

- Teachers were generally satisfied with TIB PD sessions and very enthusiastic about the inclusion of structured planning time in these sessions in the second year. (1.1)
- Teachers were generally satisfied with co-teaching coaching, especially in the second year. (1.1)
- After implementation, co-planning was more frequent and nearly universal. (1.2)
- After implementation, more teachers reported knowledge of differentiation for the literacy block, and far more teachers reported receiving needed coaching and professional development. (1.2)
- After implementation, both general education and ESOL teachers more frequently reported using effective instructional practices targeted in coaching and professional development. (1.2)
- Successful partnerships involve a mutual openness to feedback and a clear allocation of responsibilities. (1.3)
- Planning time is essential to effective co-teaching partnerships and teachers did not believe they had enough of it. (1.3)
- Teachers expressed concerns about supporting Level 1 and Level 2 ELs in a co-teaching model. (1.4)

1.1 To what extent did SDP provide the professional support that was needed to implement TIB, and to what extent were teachers satisfied with the support provided?

About TIB Professional Development (PD) Sessions

Session Overview: OMCP hosted nine PD sessions for participating co-teachers over two years, including two for school leaders. PD sessions were typically run by a member of OMCP, a representative of Support Ed, and by the co-teaching coach from CLI. PD sessions reviewed instructional strategies for ELs, reviewed effective co-teaching, supported participants to reflect on the program, and provided time for teachers to co-plan upcoming instruction.

Data Collection: ORE administered a satisfaction survey after each PD. Specific PD topics were developed by OMCP in response to feedback through PD surveys and discussions with the coteaching coach. Teachers were also asked more general questions about satisfaction with PD in the satisfaction and support surveys conducted in the middle of each implementation year.

Teachers were generally satisfied with the PD sessions

In surveys completed after each PD session,³ teachers reported general satisfaction with PD sessions. On average, almost all teachers agreed or strongly agreed with positive statements about the PD sessions, and 92% of respondents on average said the sessions were excellent or above average (Figure 1).

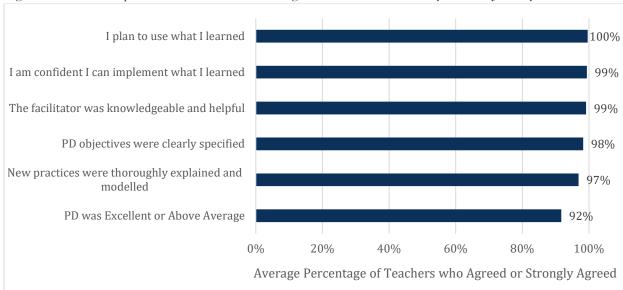


Figure 1. Teacher responses to statements about eight PD sessions from May 2018 to January 2020

Source: Professional development surveys administered May 2018, June 2018, August 2018, November 2018, May 2019, August 2019, November 2019, January 2020.

Some teachers who elaborated on their satisfaction with the PD sessions in teacher interviews said that the PD allowed them to better understand the needs of Level 1 and Level 2 ELs:

I think they were great. In one of my PD's I had a really good conversation with a coach about my science class and Level 1 to Level 2 ESL and the way I was approaching it. We were talking about it and I feel like he really opened my eyes as to what really needs to be assessed when you're talking about Level 1's and Level 2's. And I think a lot of that gets lost in translation. I think we all, as teachers, we think we understand the ESL kids, but we really don't. Because you really have to understand how much you're putting on them all day and what they're really retaining at the end of the day. I think it was a really big eye opener. (Gen Ed Teacher, Year 1 Interview)

Another general education teacher with prior co-teaching experience stated that the PD sessions on co-teaching were repetitive at first, but they came to value the conversations about co-teaching that became possible with teachers at other TIB schools as the program progressed:

The PDs were helpful because I think in the beginning... it was kind of repetitive. With anybody that hadn't done it, they had to introduce it. Then, what they did is they took us and had us up

³ Professional development surveys were administered after each of the eight PD sessions. The surveys gathered information about teachers' and school leaders' satisfaction with the PD and their suggestions for future PD topics. Response rates ranged from 71% to 98%. Complete sample information is available in Appendix A.

there talking to explain at our school how we were already co-teaching, how it was working, and put other people at ease. [...] It was good to talk to other teachers at other schools and get ideas of how they're doing things. (Gen Ed Teacher, Year 1 Interview)

Although 92% of respondents agreed or strongly agreed the TIB PD was excellent (Figure 1), when asked in the satisfaction survey (Year 2) 4 about the PD OMCP provides more generally, only about three quarters of respondents strongly agreed or agreed that OMCP provides them with PD they needed to be successful (73%) and that OMCP provides them with resources they needed to be successful (74%; see Figure 2). This may mean that participants valued the specific contributions of the TIB professional development more than other OMCP supports.

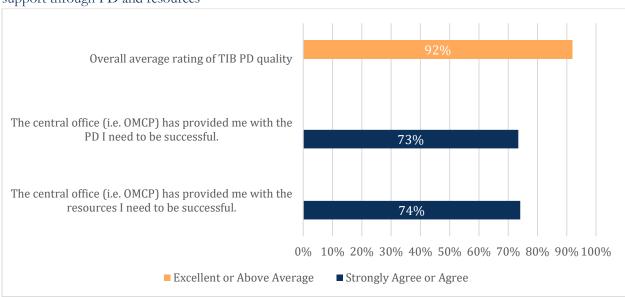


Figure 2. Overall participant rating of TIB PD quality compared with perceptions of central office (OMCP) support through PD and resources

Source: Average of eight PD surveys, satisfaction survey (year 2)

OMCP used feedback from early PD sessions to increase co-planning time at PD, which was popular among participants

In response to feedback in the first year of implementation, OMCP began scheduling time for teachers to engage in supported co-planning during each PD session. As indicated by additional comments left by teachers on the PD Surveys and comments from teachers during interviews, participants valued dedicated planning and collaboration time provided during the session. OMCP staff responded to this feedback by increasing dedicated planning and collaboration time over the course of implementation. By the end of the second year of implementation, the added planning

⁴ The satisfaction survey (Year 2) was administered January 2020 to participants at the three schools participating in TIB at the time. It gathered information on (a) teachers' experiences with coaching, (b) teacher's relationships with coteaching partners, (c) the co-teaching models in participating schools, and (d) teacher's perceptions of supports and resources for co-teaching (such as professional development sessions). Of 26 teachers who participating in TIB at the time of survey administration, 13 general education teachers and 10 ESOL teachers completed the survey for a response rate of 89%. The sample included teachers who were new to participating in TIB and those who were in their second year of participation.

time was the most popular aspect of the PDs, with six of 20 respondents citing it in response to the question "What's a support that has helped you with EL co-teaching?" on the satisfaction survey (Year 2). In addition, all interviewees cited the planning time as major contribution from the PDs, with one teacher explaining:

What helped the most was the guidance during the planning time. Having someone there during planning that would give us ideas of how to better implement the lesson and support our students (Gen Ed Teacher, Year 2 Interview).

Several teachers emphasized the planning time was especially valuable because it was uninterrupted and did not compete with other responsibilities of the regular school day. For example, one teacher explained:

Because usually when we do have planning time in a school day, you get maybe only 30 or 35 minutes after you drop the kids off, check your mailbox, go to the bathroom, all of that. Whereas this, we had a nice two-hour chunk of time, and we could get through a good couple of weeks planning things out. (ESOL Teacher, Year 2 Interview)

The popularity of the extended planning time suggests its importance for teachers' sense that collaborative teaching is feasible.

Administrators did not find the first year of TIB professional development helpful due to the initial focus on theory rather than implementation

One principal said, "There wasn't an overwhelming sense of, 'This is awesome.' I don't know. [...] The PDs were good. They weren't what we needed." Another principal described the PDs as contributing "more theory" and that "At that point in time, we needed practical knowledge." The third principal said "[The teachers] never came back saying, 'Oh, my God – this is my new learning.' I was there and I didn't get an 'Oh, my God,' moment, either." Principals did not discuss their impression of supports from OMCP outside the implementation of the professional development sessions for TIB.

Scheduling capacity and aligning expectations were challenges in early implementation of coaching

During the first year of implementation, scheduling was a challenge because the co-teaching coach was coordinating visits across all three schools. Two of the eight teachers interviewed at the end of Year 1 felt they did not receive enough contact with the coach due to logistical challenges that prevented regular visits from the coach. Overall, participant comments indicate that the co-teaching coach had a positive impact when she was able to regularly work with teachers.

About TIB Embedded Coaching

Coaching Overview: TIB teachers received support from coaches employed by the Children's Literacy Initiative (CLI). One of the coaches was an ESOL and co-teaching specialist hired specifically to support Together is Better. This (the "CLI co-teaching coach") coach visited participating schools and meets with teachers individually and in co-teaching pairs to work on strategies for different aspects of co-teaching for ELs. This coach also worked closely with OMCP in supporting participating teachers in the various areas of TIB implementation (planning, instruction, reflection, and assessment). Each school also had a literacy coach from CLI, not attached to TIB, who would have helped them with implementing the literacy block. Another role of the CLI co-teaching coach was to collect implementation data for use as actionable feedback for the teachers.⁵

Data Collection: Teachers' satisfaction with coaching was captured in the satisfaction surveys (Year 1 and Year 2),⁶ administered in the winter of each implementation year. This report focuses on evaluating co-teaching coaching, but some survey questions were designed to capture teacher feedback about other CLI coaches at their school.

In interviews conducted after the second year of implementation, all teachers who found the coteaching coaching helpful described how they brought specific questions to the coach for her input and support. Two co-teaching partners, who were interviewed separately, both described neutral or only slightly positive perceptions about the coaching and also described difficulty being able to ask for specific areas the coach could focus on supporting them in. One said, "I did enjoy speaking with them, but I would have liked them to be more forward and coming in with ideas and suggestions" (ESOL Teacher, Year 2 Interview). This experience might inform how co-teaching coaching works in schools that implement multiple interventions and programs concurrently, possibly overwhelming teachers' capacity to seek something specific. One teacher, who was able to ask for specific support from the TIB coach but still described being overwhelmed with the demands of responding to multiple avenues of feedback, said:

⁵ This data is included in our analyses to answer Research Question 3 (findings begin on page 45)

⁶ The satisfaction survey (Year 1) was administered November 2018 to participants at the three schools participating in TIB at the time. It gathered information on (a) teachers' experiences with coaching, (b) teacher's relationships with coteaching partners, (c) the co-teaching models in participating schools, and (d) teacher's perceptions of supports and resources for co-teaching (such as professional development sessions). Of 49 teachers who had attended TIB professional development sessions in August and November, 17 Gen Ed Teachers, 10 ESOL teachers, and three unidentified teachers completed the survey for a response rate of 61%.

It felt like there were too many people trying to help me. Everyone was telling me different things. [...] It's not bad feedback, but it's too much. And really the person I should be trying to please is my administration (Gen Ed teacher, Year 2 Interview).

Another teacher reported that the foundational work of the first year of coaching made it easier to ask for support in the second year of coaching:

The first year, they would need to do a lot more modelling, with new ideas. But in the second year, we already had a good idea. [...] Because we had the same person for two years. I knew her well, so I could be like, "I don't know what to do about this, Mindi!" The first year, we were kind of getting to know each other. So, you know, it was a different relationship (Gen Ed teacher, Year 2 Interview).

For the majority of TIB teachers, the co-teaching coach successfully balanced offering feedback and soliciting teacher concerns and questions, and the experiences of teachers suggests that this balance would continue to be important in any co-teaching coaching relationship.

Teachers' satisfaction with coaching they received and their relationship with the coach greatly improved by the second year of implementation

In the first year of implementation, the proportion of teachers who agreed or strongly agreed that their CLI coach(es) had been helpful in the areas of instruction, reflection, planning, and assessment ranged between one fifth (21%; see Figure 2) and one half (47%). However, by the second year of implementation, almost all teachers (from 91% to 96%) agreed or strongly agreed with those statements. The proportion of teachers agreeing or strongly agreeing that their overall relationship with their coach was positive and helpful also increased, from 59% in the first year of implementation to 92% in the second year of implementation (Figure 3).

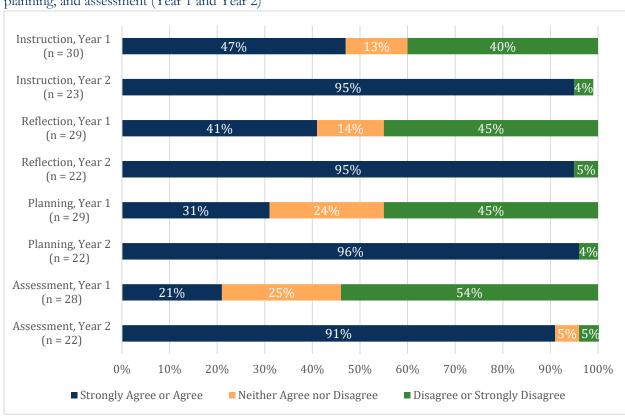


Figure 2. Teachers reporting whether they found CLI coaching helpful in areas of instruction, reflection, planning, and assessment (Year 1 and Year 2)

Source: Satisfaction survey (Year 1) administered to participating teachers in November 2018, satisfaction survey (Year 2) administered to participating teachers in January 2020.

How to read this figure: Each bar represents the percent of respondents who strongly agreed or agreed (blue), neither agreed nor disagreed (gold), or disagreed or strongly disagreed (green) that their CLI coaching was helpful in a given year and area of practice, listed on the vertical axis. For example, 47% of participants in Year 1 strongly agreed or agreed that CLI coaching was helpful in their Instruction in Year 1, but 95% did so in Year 2.

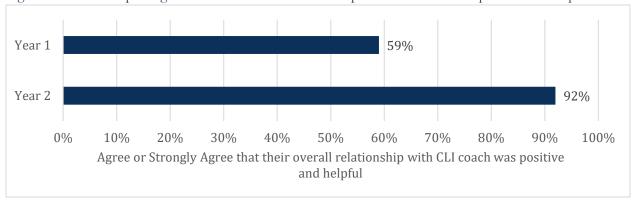


Figure 3. Teachers reporting whether their overall relationship with CLI coach was positive and helpful

Source: Satisfaction survey (Year 1) administered to participating teachers in November 2018, satisfaction survey (Year 2) administered to participating teachers in January 2020.

In interviews, teachers gave positive feedback for the co-teaching coach and valued modelling and explicit support

In Year 1 interviews, six of the eight teachers interviewed praised the contributions of the coteaching coach. Seven of the nine teachers interviewed in Year 2 did so. Example comments include:

We meet with her once a week during our prep to go over what we need support with, and then she will come in and help us out as far as—last week, she co-taught with me and modeled a lesson with a small group. She'll ask us what we need support with, and we go to her, and then we go from there. Sometimes, she'll just come in and observe and then give some suggestions as to what we could do differently, and then also what's working well. (Gen Ed Teacher, Year 1 Interview)

If I needed help, she would be there. [...] "She's always trying and advocating for us, which is deeply appreciated" [...]She always made me feel encouraged to keep practicing and keep trying. (Gen Ed Teacher, Year 2 Interview)

In teachers' feedback about the coaching they received, they valued or specifically requested further emphases on modeling. For example, an ESOL teacher described the modeling they desired from coaching:

How should this be done? Can you show us? Can you come in, and not just guided reading, but take an actual lesson and make it better? How do you make it so that when the ESL teacher is not necessarily in there, that the classroom teacher can meet all those needs? (ESOL Teacher, Year 1 Interview)

Still, some teachers interviewed were satisfied with the level of modelling they received as part of coaching, which suggests that teachers' expectations and needs in this area are especially important for co-teaching coaches to discuss.

1.2 To what extent did teachers report co-teaching practices in the literacy block? Were there differences in reported implementation between ESOL and Gen Ed teachers?

What is the Literacy Block?

Teaching in the literacy block integrates reading and writing instruction, usually in an uninterrupted 120-minute period. Major components of a typical literacy block include shared (whole group) reading, phonics instruction, writing workshop, guided (small group) reading, and read alouds. More information about the components of a literacy block as defined by the Office of Academic Supports is available here:

Comprehensive Literacy Framework for grades Pre-K to 8.

After implementation, co-planning was more frequent and nearly universal

Successful co-teaching requires collaboration and co-planning among teaching partners. On the preimplementation survey,⁷ participant responses indicated co-planning was infrequent, with only 31% of general education teachers and 45% of ESOL teachers responding that they "always" or "often" co-planned lessons with their counterparts (Table 1). Despite infrequent co-planning, higher percentages of teachers said that they nevertheless "always" or "often" taught alongside their counterparts. Of general education teachers, 40% said they "always" or "often" included an ESOL teacher in teaching the literacy block, 9 percentage points higher than those reporting frequent co-planning. As for ESOL teachers, 82% said they "always" or "often" participated in teaching the literacy block, 37 percentage points higher than those reporting frequent co-planning. Although the gaps may be small in terms of the absolute number of teachers involved, the preimplementation survey nonetheless indicates that ESOL teachers regularly teach in literacy blocks they did not help plan. (42% and 40%) teachers and ESOL teachers (and that some ESOL teachers co-taught in literacy blocks they did not help to plan (Table 9).

However, in responses to the post-implementation survey at the end of Year 2, this pattern was greatly reduced, with only a single ESOL teacher indicating they regularly teach in a literacy block they do not regularly help plan. By the end of the second year of implementation, co-planning was much more commonly reported as occurring "always" or "often," increasing from 31% to 82% among general education teachers and from 45% to 100% among ESOL teachers.

⁷ The pre-implementation survey was administered August/September 2018 to potential participants at the three schools participating in TIB at the time. It gathered teachers' (a) self-reported frequency of instructional and collaborative practices, (b) opinions of instruction of ELs at their school before implementation of TIB model, and (c) assessments of their ability to support ELs. Of 50 potential participants, 11 ESOL teachers and 31 Gen Ed teachers completed the survey for a response rate of 62%. Due to the anonymous nature of this data source, ORE was unable to remove data from Comly teachers who responded from this analysis. As a result, this source includes data from three schools in the pre-implementation survey but two schools in the post-implementation survey

Table 9. Self-reports of TIB teachers always or often engaging in collaboration practices with their Gen Ed/ESOL counterparts

	Number and percentage who responded "Always" or "Often"			
Dungsting	Gen Ed teachers' implementation survey responses		ESOL teachers'	
Practice			implementation survey responses	
	Pre (n = 31)	Post	Pre	Post
Co-plan lessons with an ESOL / Gen Ed teacher	9 of 29 (31%)	(n = 11) 9 of 11 (82%)	(n = 11) 5 of 11 (45%)	(n = 10) 10 of 10 (100%)
Include an ESOL teacher in / Participate in planning the literacy block	11 of 26 (42%)	11 of 11 (100%)	8 of 11 (73%)	9 of 10 (90%)
Include an ESOL teacher in / Participate in teaching or supporting the literacy block	10 of 25 (40%)	10 of 10 (100%)	9 of 11 (82%)	10 of 10 (100%)
Consult with an ESOL / classroom teacher on adapting tests and/or assessments	11 of 26 (42%)	11 of 11 (100%)	7 of 11 (64%)	10 of 10 (100%)

After implementation, more teachers reported knowledge of differentiation for the literacy block, and far more teachers reported receiving needed coaching and professional development

Between the pre-implementation survey administered at the beginning of year one and the post-implementation survey at the end of year two, there was a small increase in the number of teachers who agreed or strongly agreed that they knew how to differentiate the reading component of the literacy block to meet ELs' needs (Table 10). There was a small decrease in the number of teachers who agreed or strongly agreed that they knew how to differentiate the writing component of the literacy block to meet ELs' needs. At the end of the second year of implementation, more ESOL teachers than Gen Ed teachers agreed or strongly agreed with these statements.

Large majorities of respondents to the post-implementation survey (82% of general education teachers and 90% of ESOL teachers) agreed or strongly agreed that they have received the coaching and professional development they need to differentiate the literacy block for EL students. This response may point to the impact of two years of PD and coaching focused on these issues, but it is not clear what self-perceptions are indicated by the small number of teachers who agreed that their PD and coaching (on differentiating for ELs) were adequate but did not agree that they "know how to differentiate" reading and writing components of the literacy block for ELs.

Table 10. TIB teachers strongly agreeing or agreeing to statements about differentiating the literacy block for EL students

	Number and percentage who strongly agree or agree			
Statement	Gen Ed teachers' implementation survey responses		ESOL teachers' implementation survey responses	
	Pre (n = 31)	Post (n = 11)	Pre (n = 11)	Post (n = 10)
I know how to differentiate reading components of the literacy block to meet the needs of EL students.	19 of 31	7 of 11	9 of 11	10 of 10
	(61%)	(64%)	(82%)	(100%)
I know how to differentiate writing components of the literacy block to meet the needs of EL students.	19 of 31	6 of 11	10 of 11	7 of 10
	(61%)	(55%)	(91%)	(70%)
I've received the coaching or PD that I need in order to differentiate the literacy block for EL students.	10 of 31	9 of 11	5 of 11	9 of 10
	(32%)	(82%)	(45%)	(90%)

After implementation, both general education and ESOL teachers more frequently reported using the effective instructional strategies targeted by TIB coaching and professional development, such as using complex and rigorous texts with ELs

More teachers reported implementing instructional practices such as *using complex and rigorous texts with ELs, pre-teaching ELs background knowledge* for accessing grade-level texts, and *trying to match lessons and assignments to students' English proficiency levels* (Table 11). The largest shift in practices was in the much greater percentage of general education teachers always or often using complex and rigorous texts with ELs (57% at baseline and 100% after implementation). Three Gen Ed teachers reported always or often using both complex and rigorous texts as well as below grade-level and simplified texts with ELs. Teachers interviewed at the end of Year 2 generally attributed instructional changes to TIB supports and the added capacity of the co-teaching model, with one ESOL teacher saying, "This improved my skills as a teacher and helped my students learn. Without their extra support, I'm not sure we could have done it."

Table 11. Self-reports of TIB teachers always or often using various classroom texts with EL students

	Number and percentage who responded "Always" or "Often"				
		Gen Ed teachers' implementation survey responses		ESOL teachers' implementation survey responses	
	Pre (n = 31)	Post (n = 11)	Pre (n = 11)	Post (n = 10)	
Use complex and rigorous texts with ELs	17 of 30	11 of 11	10 of 11	9 of 10	
	(57%)	(100%)	(91%)	(90%)	
Use below grade-level and simplified texts with ELs	15 of 30	3 of 11	2 of 11	0 of 10	
	(50%)	(27%)	(18%)	(0%)	
Pre-teach ELs background knowledge necessary for accessing grade-level texts and for achieving grade-level content objectives	22 of 30	9 of 11	9 of 11	8 of 10	
	(73%)	(82%)	(82%)	(80%)	
Try to match lessons and assignments to students' English proficiency levels	22 of 30	8 of 11	8 of 11	10 of 10	
	(73%)	(73%)	(73%)	(100%)	

1.3 How did schools establish and support co-teaching partnerships? What did teachers and principals describe as elements of a successful partnership?

Each school approached co-teaching with slightly different pairing models

At Loesche, ESOL teachers were paired with two general education teachers and were present for the full literacy block for each teacher. At Sheridan, ESOL teachers were initially paired one-on-one with general education teachers for the entire day. At Comly, each of the two ESOL teachers had either two or three teaching partners. Administrators at Comly and Loesche reported that it could be challenging to schedule adequate co-planning time when ESOL teachers were paired with multiple general education teachers.

The teachers really didn't have the time to sit and plan. They would also be planning for two different grades so that made it really difficult for them. I think the lack of common planning time across the board was a detriment. We were able to schedule it where they would be able to meet with the first-grade teacher doing their prep but not the third-grade teacher. It would only be during the lunch and you can't force anybody to meet during lunch. (Principal, Year One Interview)

At Sheridan, the one-to-one pairing model was complicated due to staffing changes, and one ESOL teacher had to be pulled from their fourth-grade teaching pair to support second grade instead.

School leaders used multiple strategies for selecting co-teaching partners

In interviews at the end of the first implementation year, principals described several concerns and strategies related to selecting partners. One concern was related to scheduling: at a school where

ESOL teachers were paired with several teachers across several grade levels, the principal's primary concern was to assign partnerships in ways that made co-teaching feasible. At a second school where ESOL teachers were paired with two general education teachers for their literacy blocks, the principal reported attempts to balance factors of personality and expertise in their partnering assignments. This principal said that they could not rely on teachers' own stated desires about their partner assignments because doing so would mean that some teachers would not have a partner:

For example, one of the things that the teachers wanted was to be able to select their own coteachers. Given what I know, who people want to work with, don't want to work with, I couldn't do that because then there would be people that wouldn't have a partner. However, I did try to match to the best of my ability with that actually because you know who they want to work with so it's actually taking that feedback directly. (Principal, Year 1 Interview)

At this school, following a year of the partnerships, some rearrangements were planned based on partnerships that did not seem like a good fit. At a third school, where general education and ESOL teachers were paired for the entire day, the principal explained that they were very careful and deliberate with partnering decisions, describing a desire to match teachers that would complement each other in terms of personality and expertise:

Then, based on those skills, I have to find the yang – the yin and the yang – to bring together. I would not be able to have two high-strung teachers together, so. First of all, I had ESL teachers, and the ESL teachers that were here – they had already been hearing, the year before, that I wanted to do this co-teaching to give them time to leave if they wanted to – on their own. Thin it out right there, but all of them were excited about the opportunity. Then, I needed to find their co-partner. That was the discussion that I had to have the year before. It was very strategic, as in the who to pair people up with. It's important that you have both with great work ethic – one strong with content, the other strong with the strategy. (Principal, Year 1 Interview)

This principal also wanted to include at least one co-teaching partner who spoke a language that many students at that school spoke. In order to prioritize co-teaching relationships, this school's principal will include intended co-teaching partners in interviews for new teachers.

Participants who reported effective or satisfying partnerships described clear allocation of responsibilities and a mutual openness to feedback

Teachers and principals reflected on factors in a co-teaching partnership that they associated with a positive working relationship and greater satisfaction for teachers. Two factors that were consistently described were a **clear allocation of responsibilities** between general education and ESOL partners and a **mutual openness to feedback**.

These issues were discussed with school leaders in TIB professional development, in which it was recommended that co-teachers discuss them as part of early co-planning. Because all interviewed teachers report inadequate planning time, increasing structural supports for early co-planning might prepare teachers to better tackle the allocation of responsibilities and building a mutual openness to feedback, thereby positively affecting their satisfaction with their partnerships or the co-teaching model.

Teachers satisfied with their partnerships described clear allocation of responsibilities

How co-teachers allocated responsibilities was a sensitive process that did not occur in a standardized way within or across schools. All co-teaching relationships involve the allocation of responsibilities, even if it does not take place deliberately or openly. Satisfaction with co-teaching was associated with reports of clear and mutually discussed allocation of responsibilities, such as when a general education teacher interviewed in Year 2 said, "We just respected each other's ideals and neither one of us was like 'Oh, well, you do all the work.' We respected each other's responsibilities. It was 50-50. It really was." Their partner ESOL teacher also reported high satisfaction with the relationship and ended the interview by saying, "I just love it, and I think that it's great, and whoever gets to have Together is Better is very lucky."

When participants detailed how co-teachers allocated responsibilities, they addressed ways that coteaching requires a renegotiation of the distinct positions that general education and ESOL teachers occupy in traditional teaching models. When allocating specific classroom responsibilities, teachers confronted the question of how to share the ultimate responsibility for the classroom. One general education teacher described the issue of ultimate responsibility this way:

Whether there's 14 people in my room, adults in my room, it's my name. It's my name on the report card. It's my name that goes with everything. (Gen Ed Teacher, Year 1 Interview)

In contrast, one general education teacher reported difficulties in this area but stated that she was able to eventually resolve this issue with her partner:

At first it was challenging because your two teachers both are trying to get first spot. I am ultimately responsible for this classroom and then I have this other teacher joining in. [...] How do we mesh? When I kind of changed my mindset... I don't have to really feel like I am the leader and I can really see her as a partner with, you know, truly her own goals that often kind of intertwined with mine. (General education teacher, Year 1 Interview)

Co-teachers allocated broad responsibilities according to their understanding of their respective roles, but there were also many specific responsibilities regarding classroom instruction and student support to be distributed as well.

Without enough planning time or discussion, allocation of responsibilities defaults into unequal relationships

At times, teachers described allocations of responsibility that positioned the ESOL teacher as an "extra hand" or "helper." Such allocations mirror traditional views of ESOL specialists that coteaching models seek to replace, and they also appeared to be influenced by the specific implementation in two schools in which ESOL teachers were only present for a limited time during the day. One general education teacher described this relationship as "getting an assistant":

I only have [co-teaching] for an hour in the morning and an hour in the afternoon. So that's just kind of like getting an assistant. That's it. It wasn't as if I were really co-teaching. It was just having extra support. So maybe even if I had the entire morning with her, I feel like we could do a lot more. But she's in three different classes. (Gen Ed Teacher, Year 1 Interview)

An ESOL teacher reported on the perceptions of their ESOL colleagues and described this allocation negatively:

I mean it's been a struggle for some of my colleagues, because they've been assigned to teachers that they're just completely different, not compatible, different teaching styles. In some cases, they're paired up with teachers who did not want to do the co-teaching. [...] And, some teachers are happy to have you in, but kind of took advantage and see you as, "Oh, I have the helper here." (ESOL Teacher, Year 1 Interview)

These challenges are directly related to the availability of planning time:

Each teacher that I work with is totally different planning wise. One, we try to come up with plans together for some shared reading. Others, it's that I go in and I kind of know what I'm doing and she knows what she's doing, but not based on planning together. (ESOL Teacher, Year 1 Interview)

In the most extreme description of how responsibilities were or could be allocated in co-teaching, one principal interviewed at the conclusion of the first year of implementation reported that ESOL teachers at their school were concerned their jobs were "going to be replaced." In their telling, this concern was rooted in seeing new co-teaching relationships as a loss of autonomy. This principal also discussed a less successful partnership, in which the division of work remained quite rigid:

One that I thought would be a good partnership but turned out it was not was one of my first-grade teaching teams. They were very similar in characteristics, their teaching styles and all of that but did not turn out to be a good match. I think the classroom teacher felt like the ESOL teacher wasn't picking up her fair share of the caseload. The relationship started off bad and then it continued to be bad. There was no communication, no planning. They split up the case. They split up the literacy block. One would do reading. One would do writing and then they did shared reading. They had their own groups. (Principal)

Similar themes of responsibility and autonomy were raised by another principal, who felt that one success of TIB was adding legitimacy to ESOL teachers:

This is what happens if all of our ESOL teachers are going to be included in the classroom. You're both teachers and this is happening together. Some of our teachers even started signing class letters with the two of them; there's two teachers in the classroom. That was really good because that was a challenge that we faced. I think that the larger buy-in to the fact that ESL teachers are teachers was really beneficial. (Principal)

Overall, these comments indicate that how responsibilities are allocated is an important feature of successful partnerships. All partnerships involve an allocation of responsibilities, but when teachers can come to a clear and mutually agreeable arrangement, they will be more satisfied and effective partners than those who cannot. Some of the teachers interviewed evidently came to such an arrangement without specific support from administrators, but other teachers may require specific support and adequate planning time in which to discuss this issue.

Teachers and principals described a mutual openness to feedback as an important factor in effective or satisfying partnerships

In discussing the personal dimensions of a co-teaching relationship, teachers and principals described attributes of positive partnerships using a variety of terms. Across these descriptions, participants' comments highlight the value of a mutual openness to feedback among co-teaching partners. Representative descriptions include the following:

trust and grace toward each other (Principal, Year 1 Interview)

communication, flexibility, a give and take relationship where both are willing to do the work, respect, most definitely respect and professionalism. (Principal, Year 1 Interviews)

Everyone is here to learn. It's got to be a teaching facility and a learning facility for all teachers. (Principal, Year 1 Interview)

You've got to be flexible. You've got to listen to each other. You can't talk judgmentally with your partner or take things too personally. (Gen Ed Teacher, Year 2 Interview)

You have to go with the flow and really take a laidback approach because when you're working with another person you really have to give them that space to feel valued. Because, that is the only way that you are going to get really, I mean, the good ideas to flow (Gen Ed Teacher, Year 1 Interview)

Conversely, one participant description of a negative experience illustrates opposing qualities:

We had set goals in the beginning but when I tried to introduce something or anything it just was in one ear and out the other. [...] There was a lot of conflict. (Gen Ed Teacher, Year 1 Interview)

And one principal, in describing the type of teacher who would not successfully co-teach, also highlighted the importance of this quality:

Now, there are people that have no business co-teaching with anyone. They're very high-strung, not open to feedback from colleagues. They'll take feedback from me if getting observed, et cetera, but [that's it]. Their personalities are way too controlling. They do a great job for their class, but not for co-teaching. You have to have a special personality. (Principal, Year 1 Interview)

Collectively these descriptions point to the importance of a mutual openness to feedback for a successful co-teaching relationship. According to participants, this involves a willingness not only to receive feedback but also a willingness to include reflection on instruction as part of the co-teaching relationship.

1.4 What did participants describe as the primary challenges to implementation?

Participants described challenges in using the co-teaching model to support Level 1 and Level 2 ELs

Teachers discussed challenges in co-teaching in detail during end-of-year interviews. One ESOL teacher, who noted that co-teaching supported the use of more complex texts with ELs in the general education classroom, also stated her concerns that this model was not supporting her lowest level students:

To be honest, sometimes I feel like it's unrealistic for our ESLs, because I have level ones sitting in my class. They're doing the same thing that the rest of the class is doing, but even with scaffolds I still feel like they need more, and they're still struggling. [...] As far as co-teaching, it's been great. Many aspects are really great. I think many of the kids have benefited, not just the ESLs, but all the children. I do think it comes down to the Level 1's are still struggling. (ESOL Teacher, Year 1 Interview)

Another ESOL teacher expressed similar concerns and stated a desire for additional PD focused on Beginner English Learners' needs: "We've been shown some videos by Together Is Better, but those kids all have sound language skills" (ESOL Teacher, Year 1 Interview). At the same time, this same teacher said that EL students were often meeting the higher expectations that come with a coteaching model:

I think students are making progress. I will say, because we are trying to stick to grade-level material and making it more...adaptable, or more acceptable. I do think the kids are surprising us in what they can do. In a good way. They can do more than we were previously expecting them to do. Yes, I think that we at least have that realization that we need to stick to grade-level standards. (ESOL Teacher, Year 1 Interview)

A principal echoed similar concerns:

The only thing that I'd say to that is there needs to be some time for that grammar, rote, memorization types of things that ESOL Level 1 and 2 students still need that the literacy block doesn't allow because of the amount that has to be covered in that block. I think it would be nice if ESOL, at least 1s and 2s, had the opportunity to have some time with a teacher. It doesn't have to be ESOL or not but somebody to give them that extra help.

In interviews after the second year of implementation, multiple teachers said they used co-teaching arrangements that allowed Level 1 and Level 2 students to receive small-group instruction, although in some cases this was not fully endorsed by school administrator. One teacher who wanted to use co-teaching models that allowed the ESOL teacher to focus primarily on small groups of Level 1 ELs stated it was "hard to get all 28 kids engaged in one lesson" but said "our principal wasn't flexible in terms of what models we can use" (Gen Ed Teacher, Year 2 Interview).

A response on the post-implementation survey described similar frustrations about perceived conflicts between the model, the teachers' understanding of EL needs, and admin expectations:

I believe all children, no matter what ability, should be exposed to all academics in the classroom. At the same time the newcomers need more explicit instructions in addition to the

regular lessons. Our hands were tied about servicing these children (ESOL Teacher, Postimplementation survey).

While the intention of co-teaching models is that both these goals are met (all students working with grade-level content AND beginners receiving targeted language support), this teacher felt something about the implementation wasn't sufficient to do so, unlike many of their colleagues.

Almost all teachers cited insufficient planning time as a challenge to co-teaching.

In responses to open-ended questions on both the interim implementation survey and the postimplementation survey, majorities of teachers expressed a desire for additional planning time to collaborate successfully. On the interim implementation survey, six of the seven general education teachers who responded to this question and two of the four ESOL teachers who responded to this question pointed to insufficient planning time as a challenge. On surveys, teachers described some common issues that get in the way of scheduled planning time, which included teachers being pulled for coverage of other classes or testing. When planning time is scarce, it is possible for ESOL teachers to end up teaching in literacy blocks they did not help plan, which was reported more often in the first year of implementation than the second (Table 1). In interviews conducted after Year 2, teachers were asked how they might spend more planning time if they had it. One Gen Ed teacher said, "we would have done a better job implementing all the new strategies we were learning about," and another said they would have been able to give greater attention to lessons they were planning to teach together. One interviewed teacher acknowledged that planning time was an area in which administrators may have wanted to provide support: "I think they wanted to give us more planning time together, but it didn't work out with all the other things the school was focusing on" (Gen Ed Teacher, Year 2 Interview).

1.5 Conclusions related to TIB implementation and challenges

- Teachers were generally satisfied with TIB PD sessions and very enthusiastic about the inclusion of structured planning time in these sessions in the second year.
- Teachers were generally satisfied with co-teaching coaching, especially in the second year.
- Teachers said that schools provided adequate support, recognizing in some cases that other desired supports, like more planning time, were hard to provide under current constraints.
- After implementation, co-planning was more frequent and nearly universal.
- After implementation, more teachers reported knowledge of differentiation for the literacy block, and far more teachers reported receiving needed coaching and PD.
- After implementation, both Gen Ed and ESOL teachers more frequently reported using teaching practices practiced through TIB coaching and professional development.
- Successful partnerships involve mutual openness to feedback and clear allocation of responsibilities.
- Planning time is essential to effective co-teaching partnerships, and teachers didn't think they had enough of it.
- Teachers expressed concerns about supporting Level 1 and Level 2 ELs in a co-teaching model.

Research Question 2: To what extent do teachers perceive or report changes in their schools or classrooms as a result of TIB implementation?

Key Findings

- After implementation, general education teachers did not agree with descriptions of ELs' needs being met if they were not working with grade level content. At the same time, participants described tensions between supporting Level 1 and Level 2 ELs while working with grade level content. (2.1)
- Teachers reported gaining knowledge through TIB participation and valued relationships with their partners. (2.2)
- Teachers widely reported benefits to EL students in their classrooms. Both ESOL and general education teachers attribute benefits of co-teaching to the potential individualized and small-group instruction (2.2)

2.1 What are the reported changes and benefits for schools, if any?

After implementation, more ESOL and general education teachers reported positive views of their school's approach to teacher collaboration to meeting EL students' needs

Compared to the pre-implementation survey, ⁸ General Education and ESOL teachers responding to the post-implementation survey ⁹ more frequently agreed or strongly agreed with positive appraisals of their school's approach to teacher collaboration (Table 12).

⁸ The pre-implementation survey was administered August/September 2018 to potential participants at the three schools participating in TIB at the time. It gathered teachers' (a) self-reported frequency of instructional and collaborative practices, (b) opinions of instruction of ELs at their school before implementation of TIB model, and (c) assessments of their ability to support ELs. Of 50 potential participants, 11 ESOL teachers and 31 general education teachers completed the survey for a response rate of 62%.

⁹ The post-implementation survey was administered May 2020 to participating teachers at the two schools participating in TIB at the time. It gathered teachers' (a) self-reported frequency of instructional and collaborative practices, (b) opinions of instruction of ELs at their school after implementation of TIB model, (c) assessments of their ability to support ELs, (d) description of the impact of TIB, and (e) suggestions for ensuring the sustainability of a co-teaching model. Of 26 participants, 11 General education teachers and 10 ESOL teachers completed the survey, for a response rate of 81%.

Table 12. Teacher responses to statements about their school's approach to teacher collaboration on the preimplementation and post-implementation surveys

	Number and percentage who strongly agree or agree			
Statement	Gen Ed teachers' implementation survey responses		ESOL teachers' implementation survey responses	
	Pre (n = 30)	Post (n = 11)	Pre (n = 11)	Post (n = 10)
My school values teacher collaboration as a strategy to meeting EL needs.	24 of 30 (80%)	10 of 11 (91%)	6 of 11 (55%)	8 of 10 (80%)
The current system of general ed teacher/ESOL teacher collaboration at my school works well.	13 of 30 (43%)	9 of 11 (82%)	5 of 11 (45%)	6 of 10 (60%)

After implementation, most teacher responses about being valued and supported by their school did not significantly improve

As an exception, the percentage of general education teachers who agreed or strongly agreed that their school values their input increased (Table 13). The percentage of ESOL teacher respondents who agreed or strongly agreed with the same statement decreased from the pre-implementation survey to the post-implementation survey. In both surveys, at least half of both teacher roles agreed or strongly agreed that they get support needed from school leaders.

Table 13. Teacher responses to statements about being valued by and receiving support from their school on the pre-implementation survey and post-implementation survey

	Number and percentage who strongly agree or agree			
Statement	Gen Ed teachers' implementation survey responses		ESOL teachers' implementation survey responses	
	Pre (n = 30)	Post (n = 11)	Pre (n = 11)	Post (n = 10)
My school values my input and experience regarding major decisions which impact the instruction of EL students.	18 of 30 (60%)	9 of 11 (82%)	6 of 11 (55%)	3 of 10 (30%)
I get the support from school leaders that I need to effectively teach the EL students in my classroom.	19 of 30 (63%)	7 of 11 (64%)	6 of 11 (55%)	5 of 10 (50%)

Source: Pre-implementation survey administered August/September 2018 to potential participants at three TIB schools; Post-implementation survey administered May 2020 to TIB participants.

Comparing the statements and rates of agreement summarized in Table 12 and Table 13 suggests that some teachers' perceptions of having needed supports (which remained roughly constant) extend beyond perceptions of the effectiveness of teacher collaboration structures (which increased).

In interviews, teachers reported positive or mixed support from administrators

Six of the eight teachers interviewed after the first year of implementation, along with seven of the nine teachers interviewed after the second year of implementation, reported being satisfied with supports from administrators in areas such as providing time to attend relevant professional development, creating long-term planning meetings, and expressing that they valued co-teaching and Together is Better. Teachers did not cite other specific supports in areas of implementation.

ESOL and general education teachers' perceptions of their school's vision for teaching ELs remained largely unchanged

On the post-implementation survey, roughly the same proportion of ESOL teachers agreed or strongly agreed with the statements, "my school has a clearly articulated vision for teaching ELs" and "adequate time and resources are dedicated to addressing EL issues at my school" as did ESOL teachers on the pre-implementation survey (Table 14). In contrast, slightly fewer general education teachers on the post-implementation survey agreed or strongly agreed with those statements than did general education teachers on the pre-implementation survey. In addition to possibly being affected by differences in the sample surveyed, this shift could represent either a shift in school practices related to ELs, which was perceived negatively or a shift in teachers' concept of needed supports for ELs, which caused them to evaluate their school's unchanged practices slightly more negatively.

Table 14. Teacher responses to statements about their school's approach to teaching ELs on the preimplementation survey and post-implementation survey

	Number and percentage who strongly agree or agree			
Statement	Gen Ed teachers' implementation survey responses		ESOL teachers' implementation survey responses	
	Pre (n = 30)	Post (n = 11)	Pre (n = 11)	Post (n = 10)
My school values the unique contributions that EL students can bring to our school.	28 of 30	9 of 11	7 of 11	7 of 10
	(93%)	(82%)	(64%)	(70%)
My school has a clearly articulated vision for teaching ELs.	20 of 30	6 of 11	6 of 11	6 of 10
	(67%)	(55%)	(55%)	(60%)
Adequate time and resources are dedicated to addressing EL issues at my school.	10 of 30	3 of 11	5 of 11	4 of 10
	(33%)	(27%)	(45%)	(40%)

Source: Pre-implementation survey administered August/September 2018 to potential participants at three TIB schools; Post-implementation survey administered May 2020 to TIB participants.

2.2 What are the perceived changes and benefits to teacher instruction or student learning, if any?

In interviews and open-ended survey responses, participating teachers reported benefits to their instruction and student learning as they deepened knowledge about teaching ELs and built relationships with their co-teachers.

Teachers reported gaining knowledge through their co-teaching partnership and Together is Better

In interviews and in survey responses, participants said that participation in Together is Better helped them learn how to better support EL students:

I have learned new strategies to incorporate into reading such as visuals and vocabulary. (Gen Ed Teacher, interim implementation survey 10)

Together is Better has taught me to different strategies to use in the classroom and how to be a better educator. It has helped me to work with my ESL students and give me knowledge of how to build their background knowledge and experiences into the classroom. (ESOL Teacher, post-implementation survey)

Teachers often specifically described learning from their co-teacher. As one general education teacher explained:

She gives me a lot of tips on how to deal with the English language learners, because that's not my background. (General Education Teacher, Year 1 Interview)

Similarly, another general education teacher highlighted the role that the co-teaching relationship played as a source of feedback:

I think overall this model helps build the confidence of the learner and in some way the confidence of the teacher because you feel even when you're taking risks with a different teaching style or method you have someone there to either critique or give that immediate feedback. You can dialogue with each other like, "How do you think it went? What do you think we need to do? What do you think might work do better?" It builds confidence. I think maybe a stronger learning community all around. (General Education Teacher, Year 1 Interview)

Teachers valued the relationships formed through their co-teaching partnerships

Three teachers, all in general education roles, described personal and relational benefits of the coteaching structure. Examples of these comments include:

A better friendship with my co-teacher. (Gen Ed Teacher, interim implementation survey)

¹⁰ The interim-implementation survey was administered May 2019 to participating teachers at the three schools participating in TIB at the time. It gathered teachers' (a) self-reported frequency of instructional and collaborative practices, (b) opinions of instruction of ELs at their school after implementation of TIB model, (c) assessments of their ability to support ELs, and (d) description of the impact of TIB. Of 29 participants, 9 General education teachers and 5 ESOL teachers completed the survey, for a response rate of 48%.

I liked working with the ESOL teacher and appreciated the time that we spent together in the classroom. (Gen Ed Teacher, interim implementation survey)

I have learned to work with another teacher in my classroom. I love how my co teacher and I can bounce thoughts about a subject during our lessons. (General Education Teacher, Post-Implementation survey)

I think the relationship and work ethic of each teacher is very important. When two teachers are paired together who get along and respect each other the classroom culture and environment will be positive and safe for the students. (General Education Teacher, Post-Implementation Survey)

When there is a good match in personality of the classroom teacher and ESOL teacher, the students really grow. The respect and chemistry between the co-teachers radiates throughout the room and contributes to learning. The teachers are then comfortable acting things out, using gestures, taking the lead or taking a small group. More gets accomplished. (ESOL Teacher, Post-Implementation survey)

Teachers widely reported benefits to EL students in their classrooms

On the post-implementation survey, similar majorities of ESOL teachers (70%) and general education teachers (64%) agreed or strongly agreed about the academic work of EL students that ELs were learning content at the same level as their peers (Table 15). For ESOL teachers, this represents a decrease from the pre-implementation survey. For general education teachers, this represents an increase from the pre-implementation survey.

Table 15. TIB teachers strongly agreeing or agreeing to statements on EL student performance and language development, pre-implementation survey and post-implementation survey

	Number and percentage who strongly agree or agree				
Statement	Gen Ed teachers' implementation survey responses		ESOL teachers' implementation surve responses		
	Pre (n = 31)	Post (n = 11)	Pre (n = 11)	Post (n = 10)	
My EL students are positive contributors to our classroom.	27 of 31	10 of 11	10 of 11	7 of 10	
	(87%)	(91%)	(91%)	(70%)	
My ELs are just as interested and engaged in academic content as their non-EL peers.	18 of 30	10 of 11	10 of 11	5 of 10	
	(80%)	(91%)	(91%)	(50%)	
My ELs are learning content at the same level as their non-EL peers.	16 of 30	7 of 11	9 of 11	7 of 10	
	(52%)	(64%)	(82%)	(70%)	
My EL students' needs are being met.	20 of 31	7 of 11	6 of 11	5 of 10	
	(65%)	(64%)	(54%)	(50%)	

Source: Pre-implementation survey administered August/September 2018 to potential participants at three TIB schools; post-implementation survey administered May 2020 to TIB participants.

On the pre-implementation survey, a greater number of general education teachers agreed or strongly agreed that EL students' needs were being met than said ELs were learning content at the same level as their non-EL peers. This indicated that at least some participants did not agree that EL students' needs included grade level content. Results from the post-implementation survey reversed this trend, and the proportion of teachers who agreed or strongly agreed that ELs were learning grade level content was greater than or equal to the proportion of teachers who agreed or strongly agreed that EL students' needs were being met. Thus, most participating teachers reported a belief that ELs needed to be learning content at the same level as their non-EL peers for their needs to be met.

Relatedly, compared to the pre-implementation survey, ESOL teachers on the post-implementation less frequently reported that they agreed or strongly agreed that ELs were just as interested and engaged in academic content as their non-EL peers. Of the five ESOL teachers who gave a negative or neutral response to the statement about EL students' needs being met, four also gave a negative or neutral response to the statement "My ELs are just as interested and engaged in academic content as their non-EL peers."

Teachers described challenges inherent in the expectations that Level 1 and Level 2 ELs would work with grade level content

One general education teacher hesitated to say that ELs were working with grade level content but did say "they were participating" even if "they weren't comprehending *everything* that was going on." Elaborating on the specific difficulties of including Level 1 and Level 2 ELs in a writing workshop model, this teacher said, "they're not able to communicate all of their ideas yet, and we're trying to force them to do something they're not ready to do." Similarly, an ESOL teacher of an upper grade describe the tensions of supporting ELs to engage in challenging content: "Even though I know that they are not on fourth grade level, it is in our best interest their benefit that we expose them to grade level content" (ESOL teacher, Year 2 Interview). As an example, this teacher reported that their students greatly enjoyed working with nonfiction texts despite the difficult vocabulary necessary to engage. She reported that she and her co-teacher made an effort to follow that interest and support the students with scaffolding and building background knowledge: "As hard as it is, we still did it" (ESOL teacher, Year 2 Interview). Concerns about Level 1 and Level 2 ELs in the general education classroom likely underly survey responses from TIB participants, especially ESOL teachers, that concern ELs being less interested and engaged than their peers (Table 15).

Teachers frequently attributed benefits of co-teaching to their greater capacity to provide individualized and small-group instruction.

Participants were asked in interviews and open-ended responses to surveys about the benefits of co-teaching they have observed for their students. Most open-ended comments on the Interim and Post-Implementation surveys focused on benefits relating to having two teachers in the room and being able to better meet students' individual needs:

My EL students received such great individualized help that their reading and writing levels improved immensely. (Gen Ed Teacher, interim implementation survey)

Students have two teachers that can help them. Able to assist and meet the needs of more students (ESOL Teacher, interim implementation survey)

When you have so many language learners, and you have another person there, it makes such a difference because you're able to reach more students in those small groups. There are so many students who need your help, but you're able to keep them busy and have someone work with them. (Gen Ed Teacher, Year 2 Interview)

It has allowed for us to be able to service our students in smaller groups and we are able to get to see each student individually on a daily basis in both reading and math. (ESOL Teacher, Post-Implementation Survey)

2.3 Conclusions related to teacher reports about instructional changes

- The responses of general education teachers and ESOL teachers to statements about their school's approaches to ELs more closely resemble each other on the post-implementation survey than they did on the interim implementation survey. Compared to the interim implementation survey, ESOL teachers more frequently agreed with positive assessments, and general education teachers agreed less frequently. (2.1)
- On the post-implementation survey, fewer ESOL teachers agreed or strongly agreed that
 ELs were "just as interested and engaged in academic content as their non-EL peers" than
 general education teachers, but equivalent proportions of ESOL teachers and general
 education teachers agreed or strongly agreed that ELs were "learning content at the same
 level as their non-EL peers." (2.1)
- After implementation, general education teachers did not agree to descriptions of ELs' needs being met if they were not working with grade level content. At the same time, participants described tensions between supporting Level 1 and Level 2 ELs while working with grade level content. (2.1)
- Teachers reported gaining knowledge and valued relationships with their partners. (2.2)
- Teachers widely reported benefits to EL students in their classrooms. Both ESOL and general education teachers attribute benefits of co-teaching to the potential individualized and small-group instruction. (2.2)

Research Question 3: To what extent did teacher instruction change during implementation of the TIB initiative as measured by the Protocol for Coaching Collaborative Teaching?

Key Findings

- TIB teachers improved in their use of targeted instructional practices in both years of the program.
- The pattern of improvement in instructional practices was similar between both years, with the same average change and three of the four most improved practices in common.
- TIB teachers improved in their use of targeted non-instructional practices (assessment, planning, reflection) in both years of the program.
- Over the course of the two years, average scores for non-instructional practices improved by a roughly full performance band, from 1.8 (developing) to 2.7 (progressing).

Protocol for Coaching Collaborative Teaching

To guide coaching and teacher reflection on best practices for supporting ELs through a co-teaching model, ORE and CLI collaborated to develop a coaching and implementation data collection tool called the Protocol for Coaching Collaborative Teaching (PCCT).

The domains on the PCCT include: Instruction (9 practices), Assessment (1 practice), Planning (2 practices), and Reflection (2 practices) (Table 16). These domains were drawn from the collaborative instruction cycle described by Honigsfeld & Dove (2010), 11 who originated the coteaching for ELs model used in the TIB initiative. The tool is comprised of scores from 0-4, spanning No Evidence (0), Developing (1), Progressing (2), Meets Expectations (3) and Exemplary (4). Each score is an aggregate of several "look-fors" that measure the quality of implementation. Scores were determined by TIB co-teaching coach, who was employed by CLI. (The full PCCT can be found in Appendix B.)

 $^{^{11}}$ Honigsfeld, A., & Dove, M. G. (2010). Collaboration and co-teaching: Strategies for English learners. Corwin Press.

Table 16. Practices included on the Protocol for Coaching Collaborative Teaching

Teaching Phase	Practices
Instruction	 Grade-level content and language are addressed by teachers Co-teaching roles and responsibilities are shared Teachers provide purposeful questioning and corrective feedback to enhance student learning Co-teachers are familiar with and respond to the learning needs of all the students Teachers implement appropriate differentiated strategies for teaching academic grade-level language and content Co-teachers demonstrate respect and collegiality for each other throughout the lesson Teachers establish high levels of engagement and interaction All four language skills are integrated: listening, speaking, reading, and writing Students are grouped purposefully throughout the lesson
Assessment	10. Teachers utilize assessments that reflect scaffolds and strategies used in the classroom
Planning	11. Co-teachers plan lessons collaboratively12. Teachers develop content and language objectives, or an integrated objective, based on learning targets and standards
Reflection	13. Co-teachers provide feedback to one another regarding instruction and lesson delivery14. Co-teachers reflect on and provide feedback on the status of the partnership

For ease of use by teachers and the coach, the tool was designed using the same structure as the Coaching Protocol for Early Literacy (CPEL), an instrument used in District Kindergarten through third-grade classrooms to collect coaching and implementation data on the use of best literacy practices and the implementation of the 120-minute literacy block.

3.1 Which practices improved the most over time? Which practices improved the least?

Scores for instructional co-teaching practices increased by about half of a performance band within each program year. Over the course of both years, scores increased by about half of a performance band.¹²

In 2018-19, the average score of instructional practices increased from 2.7 (progressing) to 3.1 (meets expectations) (Figure 4). In 2019-20, the average score of instructional practices also increased from 2.7 (progressing) to 3.1 (meets expectations) (Figure 4). According to program staff who worked with teachers directly, these results should be interpreted in the context of participant turnover and the introduction of new pairings with first-time participants in the second year of implementation. Repeated gains in scores for instructional practices could reflect the formation of new co-teaching partnerships as well as some re-learning among two-year participants. Also, there were some practices that did not improve very much but were already above 3.0 (meets expectations) at baseline. In 2018-19, of the eight practices that started below 3.0, six improved into the next highest performance band. In 2019-20, of the seven practices that started below 3.0, four improved into the next highest performance band. Tables with average scores for each practice across the program are included in Appendix C. Tables with average scores for each practice at the two program schools are included in Appendices D and E.

Scores for non-instructional co-teaching practices increased by about half of a performance band within each program year. Over the course of both years, scores increased by about a full performance band.

In 2018-19, this average increased about half a performance band (0.4) from 1.8 (developing) to 2.2 (progressing). In 2019-20, this average increased about half a performance band (0.6), from 2.1 to 2.7 (Figure 4). Sustained gains in scores for non-instructional practices across both years could reflect adoption of school-wide practices to support co-teaching, especially scheduling for co-planning.

 $^{^{\}rm 12}$ This analysis reports average scores from the entire TIB program. School-specific tables are included in Appendix D and Appendix E.

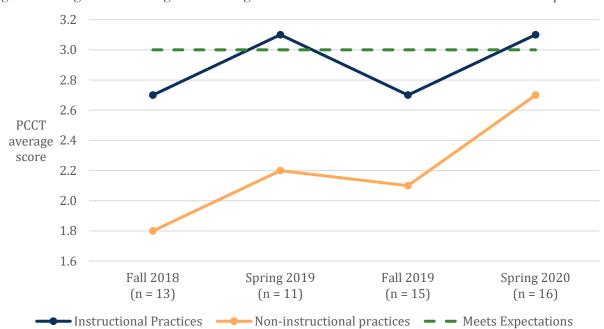


Figure 4. Change in co-teaching teams' average PCCT scores in instructional and non-instructional practices

Source: Protocol for Coaching Collaborative Teaching (PCCT) scores gathered by TIB co-teaching coach. Each practice was assessed on a scale from 0-4, spanning the ranges No Evidence (0), Developing (1), Progressing (2), Meets Expectations (3) and Exemplary (4). Each score is an aggregate of several "look-fors" that measure the quality of implementation.

How to read this table: The blue line represents the average of PCCT scores for instructional practices at four observation periods. The gold line represents the average of PCCT scores for non-instructional practices at four observation periods. The green line marks the 3.0 benchmark of "Meets Expectations" on the PCCT.

Instructional practices related to teaching both language and content improved the most

In each program year, the four instructional practices that improved the most did so by between 0.6 and 0.8 points (Table 17, Table 18). Three practices improved by large amounts in both program years: "Teachers provide purposeful questioning and corrective feedback to enhance student learning," "Grade-level content and language are addressed by teachers," and "Teachers implement appropriate differentiated strategies for teaching academic grade-level language and content."

Table 17. Four instructional practices with highest improvement, both program schools, 2018-19

Instructional practice	Fall 2018 (n = 13)	Spring 2019 (n = 11)	Change
Instructional practice	(n=13)	(H = 11)	
Teachers provide purposeful questioning and corrective	1.8	2.6	+0.8
feedback to enhance student learning	1.0	2.0	. 0.0
Grade-level content and language are addressed by teachers	2.7	3.4	+0.7
Co-teachers are familiar with and respond to the learning	2.7	2.2	.0.6
needs of all the students	2.7	3.3	+0.6
Teachers implement appropriate differentiated strategies	2.1	2.7	.0.6
for teaching academic grade-level language and content	2.1	4./	+0.6

Source: Protocol for Coaching Collaborative Teaching (PCCT) scores gathered by TIB co-teaching coach. Each practice was assessed on a scale from 0-4, spanning the ranges No Evidence (0), Developing (1), Progressing (2), Meets Expectations (3) and Exemplary (4). Each score is an aggregate of several "look-fors" that measure the quality of implementation.

Note: Scores for every instructional practice in 2018-19 are included in Appendix table C1.

Table 18. Four instructional practices with highest improvement, both program schools, 2019-20

Instructional practice	Fall 2019 (n = 15)	Spring 2020 (n = 16)	Change
Teachers implement appropriate differentiated strategies for teaching academic grade-level language and content	2.3	3.1	+0.7
Teachers establish high levels of engagement and interaction	2.3	3.0	+0.7
Grade-level content and language are addressed by teachers	2.7	3.3	+0.6
Teachers provide purposeful questioning and corrective feedback to enhance student learning	2.1	2.7	+0.6

Source: Protocol for Coaching Collaborative Teaching (PCCT) scores gathered by TIB co-teaching coach. Each practice was assessed on a scale from 0-4, spanning the ranges No Evidence (0), Developing (1), Progressing (2), Meets Expectations (3) and Exemplary (4). Each score is an aggregate of several "look-fors" that measure the quality of implementation.

Note: Scores for every instructional practice in 2019-20 are included in Appendix table C2.

Among non-instructional practices, those related to planning and reflection improved the most

In each program year, the non-instructional practices that improved by the highest and second highest amounts did so with increases between 0.5 and 1.3 (Table 19, Table 20). Two practices improved by large amounts in both program years: "Co-teachers plan lessons collaboratively," "Co-teachers reflect on and provide feedback on the status of the partnership."

Table 19. Two non-instructional instructional practices with highest improvement, both program schools, 2018-19

	Fall 2018	Spring 2019	Change
Non-instructional practice	(n = 13)	(n = 11)	
Co-teachers reflect on and provide feedback on the status of the partnership (Reflection)	1.7	2.4	+0.7
Co-teachers plan lessons collaboratively (Planning)	2.0	2.5	+0.5

Source: Protocol for Coaching Collaborative Teaching (PCCT) scores gathered by TIB co-teaching coach. Each practice was assessed on a scale from 0-4, spanning the ranges No Evidence (0), Developing (1), Progressing (2), Meets Expectations (3) and Exemplary (4). Each score is an aggregate of several "look-fors" that measure the quality of implementation.

Note: Scores for every non-instructional practice in 2018-19 are included in Appendix table C3.

Table 20. Three non-instructional instructional practices with highest improvement, both program schools, 2019-20

Non-instructional practice	Fall 2019 (n = 15)	Spring 2020 (n = 16)	Change
Teachers develop content and language objectives, or an integrated objective, based on learning targets and standards (Planning)	1.2	2.5	+1.3
Co-teachers plan lessons collaboratively (Planning)	2.5	3.1	+0.6
Co-teachers reflect on and provide feedback on the status of the partnership (Reflection)	2.1	2.7	+0.6

Source: Protocol for Coaching Collaborative Teaching (PCCT) scores gathered by TIB co-teaching coach. Each practice was assessed on a scale from 0-4, spanning the ranges No Evidence (0), Developing (1), Progressing (2), Meets Expectations (3) and Exemplary (4). Each score is an aggregate of several "look-fors" that measure the quality of implementation.

Note: Scores for every non-instructional practice in 2019-20 are included in Appendix table C4.

In 2018-19, average scores for three practices increased by only a small amount. In 2019-20, average scores for four practices increased by only a small amount.

Excluding practices already above 3.0 (Meets Expectations) at a fall observation, ¹³ the practices that improved the least were measured at between 2.0 to 2.9 (Progressing) at fall observations (Table 21). All but one least-improved practice ended at 2.9 or below at spring observations. Two practices were among the least-improved in both years: "All four language skills are integrated: listening, speaking, reading, and writing" and "Teachers utilize assessments that reflect scaffolds and strategies used in the classroom." This may indicate that these practices, compared to others measured by the PCCT, are more resistant to change by the kinds of interventions that TIB included.

Table 21. Practices that started below 3.0 (Meets Expectations) and whose scores increased by 0.3 or less in average scores across both schools, 2018-19 and 2019-20

Year	Practice	Fall score	Spring score	Change
2018-19	All four language skills are integrated: listening, speaking, reading, and writing (Instruction)	2.7	3.0	+0.3
2018-19	Students are grouped purposefully throughout the lesson (Instruction)	2.4	2.6	+0.2
2018-19	Teachers establish high levels of engagement and interaction (Instruction)	2.2	2.4	+0.1
2018-19	Teachers utilize assessments that reflect scaffolds and strategies used in the classroom (Assessment)	2.2	2.2	0.0
2019-20	Teachers utilize assessments that reflect scaffolds and strategies used in the classroom (Assessment)	2.5	2.8	+0.3
2019-20	Co-teachers provide feedback to one another regarding instruction and lesson delivery (Reflection)	2.1	2.3	+0.2
2019-20	All four language skills are integrated: listening, speaking, reading, and writing (Instruction)	2.9	2.9	0.0

Source: Protocol for Coaching Collaborative Teaching (PCCT) scores gathered by TIB co-teaching coach. Each practice was assessed on a scale from 0-4, spanning the ranges No Evidence (0), Developing (1), Progressing (2), Meets Expectations (3) and Exemplary (4). Each score is an aggregate of several "look-fors" that measure the quality of implementation.

Note: Scores for every practice across both schools are included in Appendix C.

¹³ This analysis of least-improved practices, as well as Table 21, excludes practices with increases of 0.3 or less that started above 3.0 (Meets Expectations). For example, the practice "Co-teachers demonstrate respect and collegiality for each other throughout the lesson" was observed with an average score across both schools of 3.8 in Fall 2018 and 3.8 again in Spring 2019, but this lack of change in score would not indicate an area where more support is needed. Scores for every practice across both schools are included in Appendix C. November 2020 • Office of Research and Evaluation

3.2 Conclusions related to changes in teacher instruction, as measured by the **PCCT**

- TIB teachers improved in their used of targeting instructional practices in both years of the program.
- The pattern of improvement in instructional practices was similar across both years of implementation, with the same average change and three of the four most improved practices in common.
- TIB teachers improved in their use of targeted non-instructional practices (assessment, planning, reflection) in both years of the program.
- Over the course of the two years, average scores for non-instructional practices improved by a roughly full performance band, from 1.8 (developing) to 2.7 (progressing).

Research Question 4: To what extent do participants perceive the collaborative co-teaching model as sustainable?

Key Findings

- The two TIB schools who implemented the program for the full two years were developing plans to continue co-teaching in some form in 2020-21; these plans increased the number of classrooms an ESOL teacher is assigned to. (4.1)
- When asked about sustainable co-teaching, participants most often cite needs related to partnership quality and sufficient planning time. (4.2)

4.1 To what extent do schools plan on continuing the use of TIB and/or the collaborative co-teaching model in the future?

As of spring 2020, Loesche staff were planning for continued co-teaching, though with fewer joint responsibilities.

Prior to Together is Better (TIB), the ESOL instructional model at Loesche was a combination of a "push-in" model for guided reading during the literacy block (grades 1-5), in which ESOL teachers worked with ELs in the general education classroom, and a "pull-out" model for third, fourth, and fifth graders who are new to the United States, in which ESOL teachers worked with ELs outside the general education classroom. During TIB, each ESOL teacher was paired with two General Education teachers (one lower-grade, one upper-grade). Year 2 Interviews in the spring of 2020, Loesche participants reported that current plans involved continued co-teaching but for shorter amounts of time, where ESOL teachers are present for writing and guided reading, rather than the entire literacy block. Some of the same partnerships that developed over TIB were slated to continue, which teachers who spoke on the issue were pleased about.

As of spring 2020, Sheridan staff were unsure of how co-teaching would continue, but they largely attributed this uncertainty to the impact of COVID-19.

Prior to the TIB pilot, Sheridan was already implementing co-teaching in many classrooms. Coteachers described a full team-teaching model, with both teachers team-teaching the whole class and then breaking out into smaller groups for differentiating in reading and math. Sheridan maintained a one-to-one co-teaching model throughout most of the pilot, but staff changes in the second year resulted in at least one ESOL teacher being assigned to more than one General Education teacher. At the end of the pilot, participants at Sheridan were more uncertain when asked about future plans during Year 2 Interviews and the post-implementation survey. Some participants attributed this uncertainty to the impact of COVID-19 on school planning.

4.2 How did participants describe needed supports for sustained co-teaching?

Teachers frequently described planning time, modelling, and suitable partnerships as important supports for co-teaching

Of the seven general education teachers who responded to a post-implementation survey question about what would be helpful to continue to implement co-teaching, six described needs for

additional planning time. The seven ESOL teachers who responded to this question were more varied in their responses, with three teachers describing needs for additional modelling of coteaching or a chance to observe other co-teaching teams, two teachers describing needs for more PD on Level 1 ELs, and one teacher describing needs for more planning time.

Participants were also asked what a school needs for collaborative co-teaching to succeed. They frequently responded related to how co-teaching partnerships are matched (six responses), such as calling for "teachers who are dedicated to co-teaching" (General Education Teacher) or "matching the classroom teacher's skills and personality with the ESOL teacher" (General Education Teacher). Other categories cited included needs related to school culture and admin support (five responses), teacher capacity (three responses), planning time (two responses), and student population (one response; see Appendix D for all responses). These descriptions of needed supports on the post-implementation survey were consistent with those provided in Year 2 Interviews. One ESOL teacher at Sheridan, where co-teaching partners worked together the entire day, indicated concern about plans to pair ESOL teachers with multiple classrooms. "For me, I'm worried about how to plan with both teachers. Now you're dealing with two different teaching styles."

Teachers gave advice to future co-teachers frequently cited the importance of a positive relationship

Participants on the post-implementation survey were also asked about the advice they would give to others beginning to implement collaborative co-teaching. Related to themes in discussion of sustainability needs, 11 of 17 respondents cited the importance of mutual openness to feedback and other aspects of a positive co-teaching relationship. Other response themes included planning and allocation of responsibilities (three responses), teaching models (two responses), and advocacy (one response; see Appendix D for all responses). Many interviewed participants in Year 2 elaborated on this same theme, with one ESOL teacher cautioning, "if you don't work on things, the classroom community will be affected, and the students will pick up on the tension." Another general education teacher stated, "Make sure that you get to know each other, discuss ideals on how you feel about education, how ELs should be supported and that you are both on the same page."

4.3 Conclusions related to participants beliefs about the sustainability of coteaching

- The two TIB schools who implemented for the full two years were developing plans to continue co-teaching in some form in 2020-21, but with increasing the number of classrooms an ESOL teacher is assigned to. As of October 2020, school leaders had not yet been asked how co-teaching roles will change in the context of virtual learning.
- When asked about sustainable co-teaching, participants most often cited needs related to partnership quality and sufficient planning time.

Conclusions

TIB implementation

The School District of Philadelphia generally implemented the TIB project as planned, with the exception of Comly Elementary school choosing not to participate in the second year of implementation. SDP provided professional development to TIB teachers on best practices for instruction of ELs in a co-teaching model and the co-teaching coach provided embedded support. Teachers were generally satisfied with TIB PD sessions and co-teaching coaching, and teachers especially appreciated the inclusion of structured planning time in PD sessions in the second year. Teachers were generally satisfied with co-teaching coaching, especially in the second year. After implementation, both general education and ESOL teachers more frequently reported using effective instructional practices targeted in coaching and professional development.

The quality of teaching partnerships affected co-teaching implementation in the classroom. School leaders used multiple strategies for selecting co-teaching partners, and most partnerships were ultimately successful. As described by teachers and principals, successful partnerships involve a mutual openness to feedback and a clear allocation of responsibilities. Future implementation of coteaching would likely benefit from additional explicit attention to these relationship factors. Relatedly, teachers described sufficient planning time as essential to effective co-teaching partnerships, and they generally did not believe they had enough of it.

Even with program support, systemic staffing and funding challenges posed barriers to providing sufficient time for co-planning as well as enough teachers to have one-on-one co-teaching relationships. Despite this, TIB teachers widely identified benefits for their instruction and their students learning that resulted from the elements of co-teaching that could be implemented, such as increased small-group attention and flexibility for supporting students with the highest needs. Future research should continue to explore which components of co-teaching are both feasible and beneficial to support. As part of this effort, it is recommended that further study of instructional interventions like co-teaching closely track how teacher participants define successful implementation.

Benefits and changes reported by teachers

After implementation, co-planning was more frequent, more teachers reported knowledge of differentiation in the literacy block, and more teachers reported receiving needed professional development. After implementation, more teachers reported knowledge of differentiation for the literacy block, and far more teachers reported receiving needed coaching and professional development. Teachers reported benefits to ELs in their classrooms. Both ESOL and general education teachers attributed benefits of co-teaching to the potential individualized and small-group instruction. However, teachers often expressed concerns about supporting Level 1 and Level 2 ELs in a co-teaching model.

When assessing change in how teachers view their school's support for ELs, it was not clear if changes could be attributed to the teachers' changing perspective or to a school's changing implementation. If EL instruction is an area in which professional development involves learning how to improve current practices to support students more effectively, then it may be expected for teachers new to related PD assess their school's support of ELs more negatively at first. Because there was some indication of this pattern in TIB surveys of general education teachers (Table 14, p. 34), future research on teacher professional development for EL instruction could more directly solicit teacher reports of changes in their beliefs, in addition to comparing responses about beliefs before and after implementation.

Comparing the responses of ESOL and general education teachers shows that co-teaching implementation under TIB affected these groups differently, and these differences further support the conclusion that TIB affected implementation of and perceptions about EL instruction. One notable result from implementation surveys was that the percentage of general education teachers who agreed or strongly agreed that their school values their input increased, but the percentage of ESOL teacher respondents who agreed or strongly agreed with the same statement decreased from the pre-implementation survey to the post-implementation survey (Table 13, p. 33). Although many co-teachers were able to build the **mutual openness to feedback** and **clear allocation of responsibilities** that were so important to successful partnerships, it still appears likely that ESOL teachers shifting to a co-teaching model perceive a reduction in their autonomy and "input" into their duties, in comparison to previous pull-out models. General education teachers and ESOL teachers also differed in responses to a statement about ELs learning content at the same level as their peers (Table 22, partial reproduction of Table 15, p. 36). General education teachers slightly increased in their agreement with this statement, and ESOL teachers slightly decreased. In the context of instructional changes teachers reported and described as beneficial, as well as remaining challenges they reported, this pattern of responses likely represents co-occurring changes in teacher expectations of ELs and perceptions of what comprised adequate EL instruction. Furthermore, it is important to note that general education and ESOL teacher responses to this statement more closely resemble each other on the post-implementation survey. This consensus may represent crucial groundwork for continuing to sustain effective co-teaching for ELs. Future research on co-teaching implementation should continue to explore the presence or absence of consensus about ELs' needs among both types of teachers.

Table 22. Responses to survey item about grade-level content (partial reproduction of Table 15, p. 36)

	Number and percentage who strongly agree or agree			
Statement	Gen Ed teachers' implementation survey responses Pre Post (n = 31) (n = 11)		ESOL te implementa respo	ntion survey
			Pre (n = 11)	Post (n = 10)
My ELs are learning content at the same level as their non-EL peers.	16 of 30 (52%)	7 of 11 (64%)	9 of 11 (82%)	7 of 10 (70%)

Change in practices measured by the PCCT

As measured by the Protocol for Coaching Collaborative Teaching, TIB teachers improved in their use of targeted instructional and non-instructional practices in both years of the program. Scores for **instructional** co-teaching practices increased by about half of a performance band within each program year. Over the course of both years, scores increased by about half of a performance band. According to program staff who worked with teachers directly, these results should be interpreted in the context of participant turnover and the introduction of new pairings with first-time participants in the second year of implementation. Repeated gains in scores for instructional practices could reflect the formation of new co-teaching partnerships as well as some re-learning among two-year participants. Also, there were some practices that did not improve very much but were already above 3.0 (meets expectations) at baseline. In 2018-19, of the eight practices that started below 3.0, six improved into the next highest performance band. In 2019-20, of the seven practices that started below 3.0, four improved into the next highest performance band. Scores for **non-instructional** co-teaching practices increased by about half of a performance band within each program year. Over the course of both years, scores increased by about a full performance band.

Two practices did not significantly improve in either year: "All four language skills are integrated: listening, speaking, reading, and writing" and "Teachers utilize assessments that reflect scaffolds and strategies used in the classroom." This may indicate that these practices, compared to others measured by the PCCT, are more resistant to change by the kinds of interventions that TIB included.

Sustainability

TIB schools who implemented for the full two years were developing plans to continue co-teaching in some form in 2020-21, although while increasing the number of classrooms an ESOL teacher is assigned to. Regarding sustainability, participants cited needs related to partnership quality and sufficient planning time. The lessons learned and the instruments developed during the TIB pilot can continue to be considered and used as SDP looks to scale a collaborative co-teaching model. The PCCT may prove useful for other schools interested in supporting and monitoring the development of ESOL and general education co-teaching.

Appendix A. Surveys used in evaluation

Full surveys (and interview protocols) can be accessed here: https://bit.ly/34YfDzo

Table A1. Surveys administered as part of the TIB evaluation

Survey name	Administration date(s)	Focus of the survey	Sample
Professional development surveys	May 2018, June 2018, August 2018, November 2018, May 2019, August 2019, November 2019, January 2020	Teachers' satisfaction with PD and their suggestions for future PD topics.	May 2018: n = 22, response rate n/a June 2018: n = 39, 78% response rate August 2018 (leadership): n = 17, response rate n/a November 2018: n = 29, 71% response rate May 2019 (leadership): n = 10, 83% response rate August 2019: n = 28, 97% response rate November 2019: n = 29, 83% response rate January 2020: n = 29, 98% response rate Teachers were not identified by specialty on PD surveys.
Pre-implementation survey	August-September 2018	Teachers' self-report of instructional and collaborative practices, teachers' opinions of instruction of ELs at their school before implementation of TIB model, and self-assessments of their ability to support ELs.	11 ESOL teachers and 31 Gen Ed teachers out of 50 teachers completed the survey for a response rate of 62%.
Satisfactions survey (Year 1)	November 2018	experiences with coaching, coteaching relationships, co-teaching models in participating schools, and supports and resources for coteaching (such as professional development sessions)	The survey was distributed online in November 2018 to 49 teachers who had attended TIB professional development sessions in August and November. Seventeen Gen Ed Teachers, 10 ESOL teachers, and three unidentified teachers completed the survey for a response rate of 61%.

Interim implementation survey	May-June 2019	How do teachers report their own beliefs about co-teaching and the values or beliefs of their schools? What collaboration practices do teachers report using, and how do they describe the resources and supports available for co-teaching? How do teachers describe their instructional practices and knowledge for teaching ELs?	Teachers participating in TIB were invited to complete the survey in the spring of 2019. Five ESOL teachers and nine general education teachers out of 29 invited teachers completed the survey for a response rate of 48%. Responses originated from the three schools participating in TIB at the time of survey administration. A question requesting the name of the respondent's school was optional, so it is not known precisely how responses were distributed among the three schools.
Satisfactions survey (Year 2)	January–February 2020	experiences with coaching, coteaching relationships, co-teaching models in participating schools, and supports and resources for coteaching (such as professional development sessions)	The 26 teachers participating in TIB were invited to complete the survey in the winter of 2020. Of these, 10 ESOL teachers and 13 general education teachers completed the survey for a response rate of 89%. The sample included teachers who were new to participating in TIB and those who were in their second year of participation.
Post-implementation survey	May 2020	It measured teachers' self-reported frequency of instructional and collaborative practices, teachers' opinions of instruction of ELs at their school after implementation of TIB model, self-assessments of their ability to support ELs, and suggestions for ensuring the sustainability of a co-teaching model.	Of 26 participants, 11 Gen Ed teachers and 10 ESOL teachers responded, for a response rate of 81%.

Appendix B. Protocol for Coaching Collaborative Teaching

Teaching phase	Practices
Instruction	 Grade-level content and language are addressed by teachers Co-teaching roles and responsibilities are shared Teachers provide purposeful questioning and corrective feedback to enhance student learning Co-teachers are familiar with and respond to the learning needs of all the students Teachers implement appropriate differentiated strategies for teaching academic grade-level language and content Co-teachers demonstrate respect and collegiality for each other throughout the lesson Teachers establish high levels of engagement and interaction All four language skills are integrated: listening, speaking, reading, and writing Students are grouped purposefully throughout the lesson
Assessment	10. Teachers utilize assessments that reflect scaffolds and strategies used in the classroom
Planning	11. Co-teachers plan lessons collaboratively12. Teachers develop content and language objectives, or an integrated objective, based on learning targets and standards
Reflection	13. Co-teachers provide feedback to one another regarding instruction and lesson delivery 14. Co-teachers reflect on and provide feedback on the status of the partnership

OMCP's Target Areas for Best Instructional Practices				
Grade-level instruction	Oral language	Scaffolding	Co-Teaching Practices	

Instruction

1. Grade-level content and language are addressed by teachers	4 - Exemplary	Teachers address grade-level content and language. Students do not discriminate between the ESL teacher and content teacher when asking for help.	
	3 - Meets Expectations	Teachers address grade-level content and language. Students or teachers sometimes favor the teacher for addressing their subject matter expertise.	
	2 - Progressing	Teachers occasionally attempt to address the content and language. The teacher with subject matter expertise frequently follows up with confirmation.	
	1 - Developing	The content teacher strictly addresses content, while the ESL teacher addresses language.	
	0 - No Evidence	Either grade-level content or language are not addressed.	
2. Co-teaching roles and responsibilities are shared	4 - Exemplary	Co-teachers take turns leading instruction and acting in other roles. All students respect both teachers' voices and follow their directions. Actions of teachers and students do not indicate a hierarchy between co-teachers.	
 Teachers share leadership role during lessons Teachers take on a variety of roles during lesson - techie, scribe, illustrator, etc. Teachers have equitable, not necessarily equal, roles in the lesson A variety of models are used to share responsibility 	3 - Meets Expectations	Co-teachers share leadership and other roles. Students may respond to one teacher more than the other or teachers may not be physically positioned equitably in the classroom.	
	2 - Progressing	Co-teachers try different roles and models. One teacher is usually supporting the other. Students may respond to one teacher more than the other.	
	1 - Developing	Teachers and students always defer to one teacher. The other teacher is always in a supporting role (writing for the dominant teacher, following instructions, etc.) and rarely addressing the class as a whole.	
CONT.		instructions, etc., and rarely addressing the class as a whole.	
	0 - No Evidence	Roles and responsibilities are separate and not collaborative. Teachers do not assist each other.	

3. Teachers provide purposeful questioning and corrective feedback to enhance student learning	4 - Exemplary	Teachers provide targeted corrective feedback for all students (on content/language objectives), and learner uptake is evident. Learners also successfully respond to ICQs and CCQs scaffolded throughout lessons.		
 Purposeful questioning (or ICQs and CCQs) are embedded Both teachers provide immediate, specific 	3 - Meets Expectations	Teachers provide targeted corrective feedback for all learners. ICQs and CCQs are scaffolded throughout lessons. Learner uptake is sometimes evident.		
feedback	2 - Progressing	Content/language feedback and purposeful questioning are always provided by the teacher with that subject matter expertise. Learner uptake may not be evident.		
	1 - Developing	Teacher questioning and corrective feedback may be random and unsuccessful. Learner uptake is not evident.		
	0 - No Evidence	There is no evidence of purposeful questions or targeted corrective feedback.		
4. Co-teachers are familiar with and respond to the learning needs of all the students	4 - Exemplary	Co-teachers work with all students and are able to immediately address individual students' needs as they arise. Students do not favor either teacher when requesting assistance.		
 Co-teachers work with all students There is an awareness of "in-the-moment" needs of students Teachers have established routines but have the flexibility to make adjustments in 	3 - Meets Expectations	Both teachers attempt to address the needs of all learners. Teachers can identify when they need assistance and are able to ask colleagues for help.		
	2 - Progressing	Both teachers attempt to address the needs of all learners, although it often requires the support of the teacher with subject matter expertise.		
the moment.	1 - Developing	The needs of ELs are frequently addressed only by the ESL teacher. The general education teacher may respond to ELs when the ESL teacher is occupied.		
	0 - No Evidence	The immediate needs of ELs/non-ELs are only addressed by one teacher.		

5. Teachers implement appropriate differentiated strategies for teaching academic grade-level language and content	4 - Exemplary	Teachers incorporate different instructional strategies that adapt to all learners' needs and interests. All learners can be seen participating equitably and progressing towards objectives in language and content learning activities.
 Teachers embed appropriate visual, graphic, linguistic, and interpersonal scaffolds (e.g., pictures, video, 	3 - Meets Expectations	Teachers successfully implement differentiated language and content teaching strategies. In class, most learners can be seen participating equitably.
 Academic language lessons are carefully planned and taught to align with gradelevel content needs Teachers teach academic language needed 	2 - Progressing	Teachers rely on a few language and content teaching strategies. In class, most ELs are in subordinate roles or can not be seen participating equitably.
to access a text or a content lesson All lessons integrate SWIRL (speaking,	1 - Developing	The implementation of language and content teaching strategies are random. Sometimes, ELs are not able to participate in activities.
writing, interaction, reading, listening)	0 - No Evidence	Language and content teaching is rigid and does not change. Adjustments are not made according to student needs.
6. Co-teachers demonstrate respect and collegiality for each other throughout the lesson	4 - Exemplary	A respectful and collegial culture has been established. Conflict never arises when setting roles during instruction or managing classroom behavior. Inclusive language is used.
 Teachers communicate with each other using respectful language Teachers utilize verbal or nonverbal 	3 - Meets Expectations	A respectful and collegial culture has been established. Co-teachers are able to amicably resolve communication breakdowns when they occur.
communication between themselves during lesson activities to effectively manage classroom behavior and direct	2 - Progressing	Sometimes, there is miscommunication between teachers leading to breakdown in classroom behavior management or ineffective instruction. Teachers do not always use inclusive language.
 instruction Inclusive language is used by all adults (we, us, our, etc.) Teachers serve as role models for student 	1 - Developing	Exchanges between teachers are transactional and not collegial.
interactions	0 - No Evidence	Communication is non-existent or provided in directives.

 7. Teachers establish high levels of engagement and interaction All students are engaged during shared discussion Students are on task throughout the lesson Students have sufficient opportunities to practice and produce oral language that is appropriate for their age and language proficiency level 	4 - Exemplary	All learners have ample opportunities to practice and produce oral language that is appropriate for their learner profiles. Language tasks are aligned with curriculum and standards. Learners stay engaged and on task until activity completion.
	3 - Meets Expectations	Teachers have a diverse array of engagement strategies. All learners have ample opportunities to practice and produce oral language that is appropriate for their learner profiles.
	2 - Progressing	Teachers usually rely on a few strategies or activities to engage learners. All learners have some opportunities to produce oral language appropriate for their learner profiles.
proficiency level	1 - Developing	Teachers randomly include engaging activities or engagement strategies that may not have been planned. ELs seldom have opportunities for producing oral language.
	0 - No Evidence	Learners, particularly ELs, are disengaged, distracted, or bored.

8. All four language skills are integrated: listening, speaking, reading, and writing	4 - Exemplary	In class, all four language skills are integrated into communicative (task-based/function-based/project-based/content-based) activities. Learners are aware of the targeted language skill(s) and stay focused on completing objectives.
	3 - Meets Expectations	In class, all four language skills are integrated into communicative activities. There is an appropriate balance of the four language skills.
	2 - Progressing	Teachers attempt to integrate all four language skills, but there is a strong noticeable imbalance.
	1 - Developing	Teachers attempt to target all four language skills throughout the week. However, they are not smoothly integrated into communicative activities or one skill is not practiced.
	0 - No Evidence	Teachers are not aware of which language skills are being targeted. Two or more skills are missing.

9. Students are grouped purposefully throughout the lesson	4 - Exemplary	All learners have ample opportunities to produce language during group work. All learners are aware of their assigned roles and responsibilities. They practice them dutifully.	
 Flexible grouping Students are grouped in ways that allow for opportunities to practice language 	3 - Meets Expectations	Teachers have a variety of successful grouping strategies. The roles of ELs are equitable.	
 Groupings allow opportunities for student talk, whether this be in English or their native language 	2 - Progressing	Teachers depend on a few grouping strategies or ELs do not always have equitable roles.	
native language	1 - Developing	Learners randomly engage in group work. Individual responsibilities are not assigned or are always the same.	
	0 - No Evidence	Learners never engage in group work.	

Assessment

10. Teachers utilize assessments that reflect scaffolds and strategies used in the classroom	4 - Exemplary	In between activity stages, teachers utilize assessments to ensure that all learners are on track. Both teachers are prepared in responding to assessment outcomes. Learners' needs are responded to successfully.
	3 - Meets Expectations	In between activity stages, teachers utilize assessments to track all learners' understanding. When individuals are not on track, the teacher with the subject matter expertise is often tasked with responding.
	2 - Progressing	Teachers sometimes utilize assessments to track all learners' understanding. When individuals are not on track, the teacher with the subject matter expertise is always tasked with responding.
	1 - Developing	Assessments are random or often not appropriate for ELs. The teacher with the subject matter expertise is always tasked with responding to learners' needs.
	0 - No Evidence	Teachers do not have assessments scaffolded throughout activity stages.

Planning

Co-teachers plan lessons collaboratively Co-teachers utilize a co-planning	4 - Exemplary	During regular planning meetings, co-teachers utilize tools and/or a structure for lesson planning, discuss instructional materials, and assign responsibilities for lesson stages. Roles in lesson planning are perceived as equitable and decisions are made together.			
templateEach teacher understands his/her role in the lesson	3 - Meets Expectations	During regular planning meetings, co-teachers utilize tools and/or a structure for lesson planning, discuss instructional materials, and assign responsibilities for lesson stages. Planning roles are not always equitable.			
 Teachers develop instructional materials that help make the lesson accessible to all students Teachers make decisions about the lesson 	2 - Progressing	Co-teachers meet to plan lessons, but they may not use tools and/or a structure to lesson plan, or they may not discuss instructional materials, or assign responsibilities.			
together	1 - Developing	Co-teachers informally or randomly discuss lesson planning. They may or may not be shared beforehand.			
	0 - No Evidence	Co-teachers do not discuss lesson planning.			
12. Teachers develop content and language objectives, or an integrated objective, based on learning targets and standards	4 - Exemplary	Language and content objectives are integrated, appropriate for student population (according to the school's curriculum map), and align with state standards.			
 Teachers understand all lesson objectives Teachers understand the connection 	3 - Meets Expectations	Language and content objectives are integrated and appropriate for student population.			
between content and language objectives	2 - Progressing	Content and language objectives are present, but not addressed together.			
	1 - Developing	Either content or language objectives are missing.			
	0 - No Evidence	Content and language objectives are not present.			

Reflection

13. Co-teachers provide feedback to one another regarding instruction and lesson delivery	4 - Exemplary	To improve classroom teaching, co-teachers engage in action research by consistently discussing predetermined pedagogical topics. When offering feedback, co-teachers provide evidence, and offer practical suggestions.
 Reflection meetings include objectives (i.e., action items, goals, or targets). Reflection meetings are structured and 	3 - Meets Expectations	Reflection meetings are structured and include objectives. When offering feedback, co-teachers provide evidence, and offer practical suggestions.
include important pedagogical topics (such as student development, corrective	2 - Progressing	Co-teachers occasionally reflect and provide feedback. Practical suggestions may be missing.
feedback, interactional sequencing, instruction-giving, behavior management, etc.)	1 - Developing	Co-teachers provide feedback that lack evidence or practical suggestions. Meetings are informal and unplanned.
	0 - No Evidence	Co-teachers do not provide feedback to each other, formally or informally.
14. Co-teachers reflect on and provide feedback on the status of the partnership	4 - Exemplary	Co-teachers engage in action research to reflect on their partnership. Co-teachers provide evidence when offering feedback and they develop long-term plans to tackle areas of improvement.
 Reflection meetings include objectives (i.e., action items, goals, or targets). Reflection meetings are focused on 	3 - Meets Expectations	Co-teachers regularly reflect on and provide feedback about their partnership. They provide evidence when offering feedback and offer practical suggestions.
discussing co-teachers' partnerships	2 - Progressing	Co-teachers occasionally reflect on their partnership. Feedback may lack evidence or practical suggestions may be missing.
	1 - Developing	Co-teachers randomly reflect on their partnership. Feedback lacks evidence or practical suggestions. Meetings are informal and unplanned.
	0 - No Evidence	Co-teachers do not provide feedback to each other about their partnerships, formally or informally.

Appendix C. Full PCCT tables for both schools

Table C1. Changes in average scores for instructional co-teaching practices across both schools, 2018-19

Instructional practice	Fall 2018 (n = 13)	Spring 2019 (n = 11)	Change
Teachers provide purposeful questioning and corrective feedback to enhance student learning	1.8	2.6	+0.8
Grade-level content and language are addressed by teachers	2.7	3.4	+0.7
Co-teachers are familiar with and respond to the learning needs of all the students	2.7	3.3	+0.6
Teachers implement appropriate differentiated strategies for teaching academic grade-level language and content	2.1	2.7	+0.6
Co-teaching roles and responsibilities are shared	3.5	3.9	+0.4
All four language skills are integrated: listening, speaking, reading, and writing	2.7	3.0	+0.3
Students are grouped purposefully throughout the lesson	2.4	2.6	+0.2
Teachers establish high levels of engagement and interaction	2.2	2.4	+0.1
Co-teachers demonstrate respect and collegiality for each other throughout the lesson	3.8	3.8	0.0
Average of all instructional practices	2.7	3.1	+0.4

Table C2. Changes in average scores for instructional co-teaching practices across both schools, 2019-20

	Fall 2019	Spring 2020	Change
Instructional practice	(n = 15)	(n = 16)	
Teachers implement appropriate differentiated strategies for teaching academic grade-level language and content	2.3	3.1	+0.7
Teachers establish high levels of engagement and interaction	2.3	3.0	+0.7
Grade-level content and language are addressed by teachers	2.7	3.3	+0.6
Teachers provide purposeful questioning and corrective feedback to enhance student learning	2.1	2.7	+0.6
Students are grouped purposefully throughout the lesson	2.4	2.9	+0.5
Co-teachers are familiar with and respond to the learning needs of all the students	2.9	3.3	+0.4
Co-teachers demonstrate respect and collegiality for each other throughout the lesson	3.7	3.8	+0.1
All four language skills are integrated: listening, speaking, reading, and writing	2.9	2.9	0.0
Co-teaching roles and responsibilities are shared	3.5	3.2	-0.3
Average of all instructional practices	2.7	3.1	+0.4

Table C3. Changes in average scores for non-instructional co-teaching practices across both schools, 2018-19

Non-instructional practice	Fall 2018 (n = 13)	Spring 2019 (n = 11)	Change
Co-teachers reflect on and provide feedback on the status of the partnership (Reflection)	1.7	2.4	+0.7
Co-teachers plan lessons collaboratively (Planning)	2.0	2.5	+0.5
Co-teachers provide feedback to one another regarding instruction and lesson delivery (Reflection)	1.7	2.1	+0.4
Teachers develop content and language objectives, or an integrated objective, based on learning targets and standards (Planning)	1.3	1.7	+0.4
Teachers utilize assessments that reflect scaffolds and strategies used in the classroom (Assessment)	2.2	2.2	0.0
Average of all non-instructional practices	1.8	2.2	+0.4

Table C4. Changes in average scores for non-instructional co-teaching practices across both schools, 2019-20

Non-instructional practice	Fall 2019 (n = 15)	Spring 2020 (n = 16)	Change
Teachers develop content and language objectives, or an integrated objective, based on learning targets and standards (Planning)	1.2	2.5	+1.3
Co-teachers plan lessons collaboratively (Planning)	2.5	3.1	+0.6
Co-teachers reflect on and provide feedback on the status of the partnership (Reflection)	2.1	2.7	+0.6
Teachers utilize assessments that reflect scaffolds and strategies used in the classroom (Assessment)	2.5	2.8	+0.3
Co-teachers provide feedback to one another regarding instruction and lesson delivery (Reflection)	2.1	2.3	+0.2
Average of all non-instructional practices	2.1	2.7	+0.6

Appendix D. Summarized themes and full responses from post-implementation survey questions about sustainability

Table D1. Summarized themes and full responses from teachers citing school needs for making collaborative co-teaching succeed (n = 17)

Theme	Number of	Full text of responses
Co-teaching	responses 6	Teachers who are dedicated to co-teaching. (General Education
partner matching	0	Teacher, Year 2 in TIB, new partner)
		On order to succeed, you need to carefully consider the coteaching pairs. (ESOL Teacher, Year 1 in TIB)
		Teachers that want to co-teach some teachers don't like having other adults in their room and they are hesitant to work with another teacher. (ESOL Teacher, Year 1 in TIB)
		Matching the classroom teacher's skills and personality with the ESOL teacher and give as much training during the summer so that everyone can start strong. (General Education Teacher, Year 2 in TIB, same partner)
		People who know each other, even if only a little bit, and are open minded to co-teaching. (General Education Teacher, Year 2 in TIB, same partner)
		A working schedule, flexibility, great pairs based on personality (ESOL Teacher, Year 2 in TIB, some new partners)
School organization and	5	We shouldn't be observed together. That is not fair (General Education Teacher, Year 2 in TIB, new partner)
admin support		Administrators who are open to listening to the teachers' ideas on what would be best for the students. (General Education Teacher, Year 1 in TIB)
		We need to think of our school as an ESOL school. (General Education Teacher, Year 2 in TIB, new partner)
		The continued support from administration and professional development. Also the observations are helpful to see if we are doing the right thing (ESOL Teacher, Year 2 in TIB, same partners)
		Collaboration with teachers and administrators (ESOL Teacher, Year 2 in TIB, same partners)

Teacher capacity	3	Enough ESOL teachers to spend time in each class (General Education Teacher, Year 2 in TIB, same partner) I think there needs to be enough teachers to student ratio. (ESOL Teacher, Year 1 in TIB) There needs to be enough teachers so that every ESOL student can get the services that they deserve. If there are not enough teachers, then scheduling needs to be done in a way so that ESOL teachers can service every ESOL student. (ESOL Teacher, Year 2 in TIB, some new partners)
Planning time	2	Planning time. (General Education Teacher, Year 2 in TIB, new partner) Having time to discuss and be clear about expectations. This includes co-planning time. (ESOL Teacher, Year 1 in TIB) More collaboration time as well as more autonomy to help your group based on their specific needs (General Education Teacher, Year 2 in TIB, same partner)
Student population	1	Level 3's and higher only. (ESOL Teacher, Year 2 in TIB, some new partners)

Table D2. Summarized themes and full responses from teachers giving advice to others beginning collaborative co-teaching (n = 17)

Theme	Number of responses	Full text of responses
Mutual openness to feedback and other	11	Have an open mind (General Education Teacher, Year 2 in TIB, new partner)
relationship factors		Be open to new ideas. Share your classroom fully with your coteacher. (General Education Teacher, Year 1 in TIB)
		Be flexible and open. (General Education Teacher, Year 2 in TIB, same partner)
		Be flexible and open minded and focus on the positives. (General Education Teacher, Year 2 in TIB, same partner)
		Make sure that you get to know each other, discuss ideals on how you feel about education, ELs abilities to learn, how ELs should be supported and that you are both on the same page. (General Education Teacher, Year 2 in TIB, same partner)
		I would say keep the lines of communication open. Speak freely be open to change and different perspectives. (General Education Teacher, Year 2 in TIB, same partner)

November 2020 • Office of Research and Evaluation

		Be flexible. (ESOL Teacher, Year 1 in TIB) Patience, positivity is important, work on the co-teaching relationship. (ESOL Teacher, Year 2 in TIB, some new partners)
		Be flexible, it is a learning process. (ESOL Teacher, Year 2 in TIB, same partners)
		To be patient, it does work. Don't hesitate to reach out to the coach for help. (ESOL Teacher, Year 1 in TIB)
		Communication and respect are key. (ESOL Teacher, Year 1 in TIB)
Planning and allocation of responsibilities	3	Organize what both teachers' roles are and try to keep it in routine, but don't do anything that goes against one's teaching philosophy. (ESOL Teacher, Year 1 in TIB)
		Planning together will help teaching together. Also write your questions on post it nots on the text to allow the flow of the lesson. You may also want to discuss the answers you want to share with the class prior to the lesson. Always use pictures when discussing vocabulary. (General Education Teacher, Year 2 in TIB, new partner)
		co-planning (General Education Teacher, Year 2 in TIB, new partner)
Teaching models	2	Always check with what your principals want you to do because suggestions given to us by coaches are not always shared with administrators. We are rated on observations, coaches will (ESOL Teacher, Year 2 in TIB, same partners)
		Pull newcomers from the room no matter what grade. (ESOL Teacher, Year 2 in TIB, some new partners)
Advocacy	1	Advocate for the ELs. (ESOL Teacher, Year 2 in TIB, some new partners)